

B I O L O G I A
CENTRALI-AMERICANA.

v. 46

I N S E C T A.

RHYNCHOTA.

HEMIPTERA-HETEROPTERA.

text

VOL. I.

BY

W. L. DISTANT, F.E.S.

This volume is a facsimile reproduction of
the American Museum of Natural History
Library's copy.

1880-1893.

species has not yet been received by us from Central America. The apical joint of the antennæ has the base either pale whitish or unicolorous.

13. *Dysdercus ruficeps*. (Tab. XXI. fig. 23.)

Lygæus ruficeps, Perty, Del. An. p. 172, t. 34. f. 7; H.-S. Wanz. Ins. iii. p. 95, f. 319¹.

Astemma ruficeps, Blanch. Hist. des Ins. p. 129. 3².

Dysdercus ruficeps, Stål, En. Hem. i. p. 123. 26³.

Hab. NICARAGUA, Chontales (*coll. Dist.*); PANAMA, Matachin (*Dr. Thieme, coll. Oberthür*).—COLOMBIA (*Mus. Vind. Cæs.*), Bogota³ (*coll. Dist.*); BRAZIL^{1 2 3}.

Fam. CAPSIDÆ.

Astemmites, Laporte, Ess. des Hémip. p. 36 (1835).

Capsini, Burm. Handb. Ent. ii. p. 263 (1835).

Bicelluli, Am. & Serv. Hist. des Hém. p. 275 (1843).

Phytocoridae, Fieb. Eur. Hem. p. 26 (1861).

Isometopidae, Fieb. Eur. Hem. p. 26 (1861).

Capsidæ, Westw. Intr. Class. Ins. ii. p. 479 (1840); Reut. Hem. Gymn. Eur. t. i. p. 13 (1878).

Cimicidæ, Reut. (part.) Bih. Vet.-Ak. Handl. iii : 1, p. 3 (1875).

The members of this family are readily recognized by the elongated and four-jointed antennæ, of which the second joint is frequently more or less thickened at its apex, and the two terminal joints are always more or less slender, and also, and principally, by the corium terminating in a distinctly differentiated section, called the cuneus.

If we except a very considerable knowledge of the Palæarctic Capsidæ, and a less acquaintance with those of the Nearctic Region, we may safely presume to say that those of the Ethiopian, Oriental, and Australian Regions are practically unworked and unknown. Of the Neotropical fauna the late Dr. Stål described many from Rio Janeiro; and Dr. Carl Berg has recently done the same for those of the Argentine Republic, whilst owing to the unexampled success of our collector Mr. Champion in procuring specimens of this family both in Guatemala and Panama, very much additional knowledge has been acquired. Mr. Champion's captures in Central America, the description of which forms the ground-work and speciality of the following pages, are, without doubt, the largest and most extensive contribution to our knowledge of the Capsidæ that have ever been, as yet, brought from the tropics; and from their multiplicity of generic forms, their extreme diversity of type, and their frequently extraordinary mimetic analogies with representatives of other families, they create an ardent desire to know more of the exotic members of this little-worked family.

As might be anticipated, the acquisition of so much material belonging to an unworked field has necessitated not only the description of a large number of species, but the erection of numerous new genera for their reception.

As regards their systematic arrangement, I have advanced no new method (a course impossible by the exigencies of time and the scope of an extensive faunistic work), but have followed in most essential particulars the classificatory scheme formulatéd by Dr. Reuter in 1875, which is in conformity with the views and practice of the late Dr. Stål, and thus in unison with the system adopted for the previous families.

A superficial acquaintance with American Capsidæ would lead, and has inclined excellent authorities, to the opinion that European genera are largely included in the fauna. A better acquaintance, however, supported by sufficient material, abundantly proves that the family is not peculiar in this respect, but in America possesses a distinctive faunistic character, embracing a number of well-marked and often extremely specialized genera.

Subfam. *CAPSINÆ*.

Capsina (part.), Reuter, Bih. Vet.-Ak. Handl. iii: 1, p. 4 (1875); Hem. Gymn. Eur. t. i. p. 15 (1878); Berg, Hem. Argent. p. 120 (1879).

Myridina, Berg, Hem. Argent. p. 117 (1879).

In this subfamily the ocelli, as stated by Dr. Reuter, are "*haud distinguendi*."

All comparative generalizations as to the geographical distribution of the Capsinæ are rendered for a long time hopeless by the little attention hitherto paid to their collection in tropical regions. When we reflect that the Capsinæ constitute one of the most numerous group of insects, and that collectors have been enabled, regardless of time and money, and at their own risk of health and life, to add to our knowledge of the insect world, we must deplore the circumstance that size and beauty have been the incentives to their exertions, and that it remains for another generation to deal with some of the obscure, but most numerous and instructive, families of insects.

Division *MIRARIA*.

Miraria, Reuter, Bih. Vet.-Ak. Handl. iii: 1, p. 5 (1875, incl.).

In this division I recognize the genera whose species have the head distinctly longitudinally sulcated between the eyes, and the antennæ inserted on the lateral margins of the head in front of the eyes.

I have allowed this division to embrace considerable diversity of generic form; but in dealing alone with one fauna, or rather with a portion only of one fauna, I have thought it best to avoid, as far as possible, increased divisional separation, until the family, as a whole, is generally more worked and better known.

The *Miraria* have probably an almost world-wide distribution; and in America we know that they are distributed throughout both the Nearctic and Neotropical Regions.

MIRIS.

Miris, Fabr. Syst. Rhynch. pp. ix et 253 (1803); Burm. Handb. ii. 1, p. 264 (1835); Am. & Serv. Hist. des Hém. p. 277 (1843); Kirschb. Caps. v. Nassau (1855); Walk. Cat. Het. vi. p. 48 (1873); Reuter, Bih. Vet.-Ak. Handl. iii. 1, p. 8 (1875).

Myris, Hahn, Wanz. Ins. ii. p. 73 (1834).

Lopomorphus, Dougl. & Scott, Brit. Hem. p. 293 (1865).

In this genus the posterior margin of the pronotum is truncated and the scutellum is distinctly punctate.

1. *Miris affinis*.

Miris affinis, Reuter, Öfv. Vet.-Ak. Förh. 1875, p. 59. n. 1¹.

Miris instabilis, Uhler, Bull. U.S. Geol. & Geogr. Surv. ii. p. 316².

Hab. NORTH AMERICA, Wisconsin¹, Pennsylvania¹, Colorado².—MEXICO (*coll. Dist.*).

I have felt little hesitation in identifying a single Mexican specimen as belonging to the above species; and there seems little doubt that both Dr. Reuter's and Mr. Uhler's description refer to the same insect. Both their publications bear date 1875, but I give the priority to the first as being the earliest received, at least in this country.

2. *Miris guatemalanus*, n. sp.

Allied to *M. affinis*, but larger; the colour pale ochraceous; antennæ with the basal joint finely but strongly pilose, the second joint with its apex more or less distinctly infuscated. Head obscurely pilose, the central sulcation distinct and narrow, with a longitudinal fuscous fascia on inner side of eyes, and the extreme base also more or less distinctly fuscous. Pronotum coarsely punctate, the lateral margins and a central longitudinal line levigate and pale luteous; a fuscous submarginal fascia on each side, broadest and badly defined near anterior margin; the lateral angles subprominent, subnodulose, and pale luteous. Scutellum somewhat obscurely punctate and pilose, with a central, longitudinal, levigate pale luteous line, moderately widened at base and apex, the basal angles fuscous. Corium densely but finely pilose, the lateral margins broadly pale luteous, widening on each side towards the cuneus, which is also pale luteous. Membrane pale smoky ochraceous. Body beneath and legs pale ochraceous; sternum with a submarginal fuscous line on each side; abdomen with a marginal series of small fuscous spots; intermediate and posterior femora also spotted with fuscous, the last most prominently.

Long. 8–10 millim.

Hab. GUATEMALA, Quezaltenango, Volcan de Agua (*Champion*).

3. *Miris roseus*, n. sp. (Tab. XXIII. fig. 20.)

Body above purplish red. Antennæ fuscous, the basal joint not prominently pilose. Head with a broad central longitudinal luteous fascia, and a fuscous, but narrower, fascia on inner side of eyes. Pronotum ochraceous, coarsely and darkly punctate, anterior area with two purplish rugosities on each side; the anterior and lateral margins and a central longitudinal line levigate and pale luteous. Scutellum with the basal angles fuscous, and with the apex luteous*. Corium and cuneus with the lateral margins pale luteous; the clavus punctate, with its outer margin luteous. Membrane pale smoky hyaline. Body beneath and legs ochraceous; margins of head and sternum broadly purplish; central base of head and a broad central fascia to sternum dark fuscous; abdomen with a submarginal stigmalatal purplish fascia on each side, and the base

* Owing to the scutellum being mutilated by the pin which impales it, a further description is impossible.

narrowly of the same colour. Legs pilose, femora more or less spotted with fuscous; tibiæ with their bases and apices fuscous; tarsi fuscous. Rostrum long, about reaching the second abdominal segment, its apex fuscous.

Long. 7 millim.

Hab. MEXICO, Oaxaca (*Deppe, Mus. Berol.*).

CREONTIADES, gen. nov.

Body elongate. Head moderately and obliquely deflexed before eyes, and with a distinct, narrow central longitudinal sulcation; eyes somewhat prominent, and contiguous to the anterior margin of the pronotum; antennæ about as long as the body; basal joint stoutest, considerably longer than the head, and sparingly but prominently hirsute; second joint about twice the length of the first, somewhat slender, slightly curved, and a little incrassated at apex; third joint a little shorter than the second; fourth joint about or less than half the length of the third. Pronotum subtriangular, with a distinct anterior collar, and the anterior margin about half the width of the posterior. Scutellum large, the disk somewhat longitudinally raised, and the lateral margins obliquely rounded. Corium with the costal margins subparallel. Legs long, sparingly hirsute, the tibiæ with long and prominent setæ. Rostrum reaching the posterior coxæ.

The length of the posterior legs and its general superficial appearance give this genus a considerable resemblance to those comprised in the division Phytocaria; but the central sulcation of the head and the insertion of the antennæ well in front of the eyes and at the lateral margins of the head, in my opinion clearly denote its position in the Miraria.

1. *Creontiades rubrinervus*. (*Megacælum rubrinerve*, Tab. XXIII. fig. 12.)

Megacælum rubrinerve, Stål, Stett. ent. Zeit. xxiii. p. 321. 250¹.

Hab. MEXICO¹ (*coll. Sign.* and *Mus. Holm.*); GUATEMALA, San Gerónimo, Capetillo, Volcan de Atitlan, and near the city of Guatemala (*Champion*).

Since figuring the above Mexican specimen, which was considerably mutilated, I have been enabled to examine the type (also imperfect), in the collection of Dr. Signoret and to again compare both of these with perfect specimens collected by Mr. Champion.

The legs are concolorous with the body, the posterior femora with their apical halves bright castaneous, and the apices of all the tarsi blackish.

In lettering the Plate I followed Dr. Stål in considering the species as belonging to the genus *Megacælum*, but on further examination I was compelled to form a new genus for its reception as above.

MINYTUS, gen. nov.

Body subelongate, opaque. Head long, the lateral lobes slightly but angularly produced on each side in short, obtuse spines; central sulcation long and distinct; antennæ not so long as the body, first and second joints very strongly incrassated; first joint pilose, about as long as the head, slightly curved outwardly and narrowed at base; second joint about three times as long as the first, pilose at base, its apex very slightly and globosely thickened; third and fourth joints minute, very slender, and subequal in length. Pronotum with the anterior margin truncate, the posterior margin concavely sinuate before scutellum, and from thence oblique to the lateral angles, the lateral margins concavely sinuate, the lateral angles distinctly produced in obtusely angulated, subprominent spines, the width between which is about twice

that of anterior margin. Scutellum large, slightly tumid, subtriangular, the lateral margins not straight, but convexly narrowing towards apex. Head, pronotum, and scutellum punctate. Corium with the lateral margins slightly and convexly widened towards cuneus, which is again convexly narrowed to its apex. Cuneus with its width at base about equal to its length. Legs spotted and subpunctate. Rostrum passing the posterior coxæ.

1. **Minytus argillaceus**, n. sp. (Tab. XXIV. fig. 1.)

Dull, obscure, brownish ochraceous. Antennæ with the apex of the second and the base of the fourth joint infuscated. Head with the central sulcation somewhat infuscated. Pronotum somewhat coarsely punctate, the lateral margins levigate and pale luteous, but with the apical portion black and the lateral angles of the same colour. Scutellum with a distinct narrow, fuscous, central, longitudinal line. Corium with the disk opaquely darker. Legs ochraceous, thickly spotted with brownish; apices of the tibiæ and tarsi greenish.

Long. 8-9 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

2. **Minytus amplificatus**, n. sp.

Larger and broader than the preceding species, and with the posterior margin of the pronotum much less profoundly concave. Head and pronotum dull, obscure ochraceous, the basal area of the last behind the transverse constriction paler ochraceous. Scutellum and corium dark brownish, the apex of the first and the lateral margins of the last paler; cuneus dark obscure castaneous. Membrane pale fuscous. Legs brownish. Body beneath (carded specimen) dull ochraceous. Antennæ mutilated.

Long. 9 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

This description is taken from a single and somewhat mutilated specimen sent home by Mr. Champion.

TRACHELOMIRIS.

Trachelomiris, Reuter, Öfv. Vet.-Ak. Förh. 1875, no. 9, p. 61.

This genus, founded by Dr. Reuter for the reception of a North-American species, and also to include the *Miris scenicus*, Stål, a South-Brazilian species, agrees in all its given diagnostic characters with the species which I here include in it. As I understand it, *Trachelomiris* may be easily recognized (at least from any of the genera of *Miraria* here enumerated) by the elongated body, the eyes inserted about the middle of the elongated head, the nearly conical pronotum, which is anteriorly deflexed, the antennæ longer than the body, and the long and pilose legs.

A secondary generic character appears to be afforded by a fuscous spot near the lateral angles of the pronotum, which is described as indicative of both Stål's and Reuter's species, and is also found in the one which I here describe.

1. **Trachelomiris oleosus**, n. sp. (Tab. XXIV. fig. 2.)

Body above fuscous, the colour shining and oleaginous. Head with five luteous spots—one on each side of eyes, one between antennal bases, and two contiguous behind eyes; the apex shining black; antennæ fuscous, with the first joint, excepting extreme base, ochraceous, minutely spotted with fuscous. Pronotum somewhat coarsely punctate, the anterior, posterior, and lateral margins, and a central longitudinal line pale luteous; a large, elongated, shining black spot near each lateral angle; the transverse impression at

anterior area sometimes distinctly luteous. Scutellum transversely wrinkled, with the basal angles black; two basal and subangular spots, a central longitudinal line, and apex luteous. Corium with the lateral margins pale luteous; the clavus distinctly punctate; the cuneus pale luteous, with an inner elongate fuscous spot. Membrane pale fuscous. Legs pale roddish ochraceous, the femora thickly spotted with fuscous; apices of the tarsi fuscous. Rostrum pale luteous, its apex pitchy; head beneath and sternum fuscous; apex of head, anterior margin of prosternum, coxæ, trochanters, and abdomen pale luteous.

Long. $5\frac{1}{2}$ to $6\frac{1}{2}$ millim.

Hab. GUATEMALA, Cerro Zunil, San Gerónimo, near the city (*Champion*); PANAMA, Bugaba (*Champion*).

Obtained by sweeping grasses and other low-growing plants (*Champion*).

XENETUS, gen. nov.

Body elongate, pilose, somewhat shining. Head broad, deflected before the eyes, the central longitudinal sulcation not extending beyond the basal half; eyes large, prominent, slightly directed backwardly, and contiguous to the anterior margin of the pronotum; antennæ not quite so long as the body; basal joint about as long as the head or longer, second joint three times the length of the first, with its apical half more or less incrassated; third and fourth joints slender, the third about half the length, or nearly as long as the second, and more than twice the length of the fourth. Pronotum elongate, subglobose, constricted about the centre; before this constriction the lateral margins are convex, and behind the same they obliquely widen to lateral angles which are non-prominent; posterior margin concavely sinuate at area of scutellum; anterior margin truncate. Scutellum with the basal third depressed, remainder somewhat tumid, the apex distinctly carinate. Corium with the margin concavely sinuate, widening towards cuneus, which is longer than broad. Legs finely, but longly setiform, the tibiæ prominently so. Rostrum just passing the intermediate, or reaching the posterior coxæ.

a. *Basal joint of antennæ about the length of the head; third joint about half the length of the second.*

1. *Xenetus lanuginosus*, n. sp. (Tab. XXIV. fig. 3.)

Body above fuscous and finely pilose. Antennæ with the first joint ochraceous, its base pale luteous and its apex slightly infuscated; second joint ochraceous, its apical half fuscous; third joint very pale fuscous, with the apical half darker and its base very pale; fourth joint fuscous, with the base pale luteous. Pronotum very finely rugulose, the basal margin ochraceous. Scutellum with the apical half more or less obscurely castaneous. Corium with the claval area, a large central patch, and a large irregular apical spot very dark fuscous, the central patch containing a transverse subtriangular ochraceous spot. Cuneus ochraceous, inner base fuscous, inner apical area castaneous. Legs ochraceous, apices of the posterior femora dull castaneous. Body beneath fuscous, with the acetabula apparently ochraceous (*carded specimen*). Rostrum ochraceous, the apical portion pitchy.

Variety (sexual or otherwise?). Pronotum with the disk longitudinally more or less ochraceous, scutellum sometimes wholly ochraceous, corium with the ground-colour either pale fuscous or brownish ochraceous; legs variable in hue, sometimes altogether fuscous.

Note. In this apparently variable species the size and the transverse subtriangular pale central spot to the corium seem to be indicative of its identity in all its protean forms.

Long. 7–8 millim.

Hab. GUATEMALA, San Isidro, Zapote, San Juan in Vera Paz (*Champion*).

2. *Xenetus ambiguus*, n. sp. or var. ?

Constantly larger than the preceding species, and paler in hue than typical forms of that species. Corium with

no trace of the dark claval area; central dark patch either entirely obsolete or only faintly indicated, with its central transverse spot minute.

Long. 9 millim.

Hab. PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

b. *Basal joint of antennæ longer than head; third joint almost as long as the second.*

3. *Xenetus bracteatus*, n. sp. (Tab. XXIV. fig. 4.)

Head brownish ochraceous, the eyes fuscous. Antennæ ochraceous, basal joint sparingly and minutely spotted with fuscous, second joint with the apex fuscous, apical joint (excluding base and apex) fuscous. Pronotum ochraceous, the lateral margins fuscous, most broadly so at lateral angles. Scutellum ochraceous, the basal angles fuscous, the apical third brownish or castaneous. Corium reddish brown, finely and palely pilose, with a central, irregular, transverse ochraceous spot on lateral margins and a transverse linear dark spot at base of cuneus, which is ochraceous, with the apical half reddish, or altogether pale reddish. Legs ochraceous, pilose, sparingly and minutely spotted with fuscous, apices of posterior femora broadly reddish brown. Sternum more or less spotted with fuscous (*carded specimen*). Rostrum ochraceous, with the apex pitchy and reaching the posterior coxæ. Cellular veins of the membrane reddish.

Long. 8½ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

4. *Xenetus chryselectrus*, n. sp.

Allied to the preceding species, but smaller, golden ochraceous above and unicolorous. Pronotum with the lateral margins narrowly and obscurely fuscous. Scutellum with the extreme apex black. Corium finely and thickly pubescent, with a transverse, minute, dark linear spot at base of cuneus, which is more or less concolorous with corium. Other characters as in *X. bracteatus*, but the apex of the second joint of antennæ more distinctly clavate, the pronotum less elongate, &c.

Long. 7 millim.

Hab. GUATEMALA, Pantaleon (*Champion*).

ZACORUS, gen. nov.

Allied to *Herdonius*, Stål, but differing from that genus in not having the antennæ as long as the body, and the scutellum spined on disk and not at apex. Body elongate, and moderately pilose. Head large, subtriangular, anteriorly obliquely deflexed, lateral margins channelled and subfoliaceous, eyes contiguous to the anterior margin of the pronotum, and with a narrow central longitudinal sulcation. Antennæ with the basal joint not quite as long as the head and moderately robust; second joint considerably more than twice the length of the first, its apical half globosely incrassated but narrowing at apex; third and fourth joints slender, the third half as long again as the fourth. Pronotum deeply constricted and narrowed at centre; the anterior portion obliquely deflexed and narrowed from anterior margin to constriction, with its surface irregular; the posterior portion or lobe convexly globose and widening to the lateral angles; the posterior margin concavely sinuate before the scutellum, the anterior margin subtruncate or very slightly emarginate. Scutellum obliquely depressed at the base, armed about the centre with a long suberect spine, from which there is a distinct central carination to the apex. Corium with the lateral margins concave. Cuneus longer than broad, its outer margin convex. Legs finely but prominently setose. Rostrum about reaching to the intermediate coxæ.

1. *Zacorus staphyliniformis*, n. sp. (Tab. XXIV. fig. 5.)

Head and pronotum black, with the posterior margin of the last ochraceous. Antennæ dull brownish; first joint with the basal portion black and its extreme base ochraceous, the third with the base ochraceous. Anterior lobe of pronotum with an obscure central longitudinal carination, on each side of which are two

oblique linear incisions, the two posterior almost united by two rounded foveæ, the posterior lobe somewhat thickly clothed with ochraceous pilosity. Scutellum with the basal area black, remainder brownish, clothed with long ochraceous hairs, and with the central spine pale ochraceous, suberect, and very slightly directed forwardly. Corium dark chocolate-brown, palely pilose; extreme outer basal margin ochraceous, with a central transverse greyish spot followed by a patch of richer dark chocolate-brown; the apex broadly black and opaque, with a small greyish spot near inner base of membrano. Cuneus greyish white, more or less shaded with pale fuscous. Membrane very pale fuscous, its outer margin paler. Legs very dark chocolate-brown, clothed with long greyish setæ or hairs; extreme apices of femora and base of tibiæ pale luteous; apical halves of tibiæ more or less ochraceous. Body beneath (*imperfectly examined owing to the specimen being cavited*) dark shining fuscous; marginal and basal fasciæ to head, acclabula, and two marginal spots to abdomen (one near centre and one about apex) ochraceous. Rostrum brownish ochraceous, with the apex pitchy.

Long. 10 millim.

Hab. GUATEMALA, Senahu (*Champion*).

One specimen only of this extremely interesting and, in many respects, remarkable insect has been obtained.

2. *Zacorus curvicornis*, n. sp.

Closely allied to the preceding species in markings and coloration, but differing by its smaller size, the scutellar spine strongly curved backwards, the anterior lobe of the pronotum quite distinct, having an interior transverse globose ridge with a distinct obtuse spine near each anterior angle, and wanting the incised markings of the preceding species. The antennæ are also much paler in hue, the anterior portion of the head more or less brownish ochraceous; the legs pale ochraceous, femora more or less irregularly suffused with brownish, and tibiæ (excluding base and apical half) also brownish.

Long. 6-7 millim.

Hab. PANAMA, Bugaba (*Champion*).

ZOSIPPUS, gen. nov.

Allied to *Zacorus*, but differing in the pronotum, which is constricted nearer the anterior margin, and has both lobes semiglobose; its posterior margin is also truncate, and the anterior margin slightly convex. The head is somewhat vertically deflected beyond the eyes; antennæ with the first joint about the length of the head, second joint about or a little more than twice the length of the first, its apical portion only moderately incrassated (remaining joints mutilated). Scutellum much as in the preceding genus, but with a broad, central, conical obtuse spine. Other characters generally as in *Zacorus*.

1. *Zosippus inhonestus*, n. sp. (Tab. XXIV. fig. 6.)

Subelongate, finely and palely pilose. Head and pronotum black, the posterior margin of the last narrowly and obscurely ochraceous. Head with the antennal bases and lateral margins in front of eyes ochraceous; antennæ fuscous, basal portion of first joint distinctly luteous (third and fourth joints wanting). Scutellum dark shining fuscous. Corium fuscous, with a central transverse greyish spot followed by a very dark fuscous patch and a large apical ochraceous spot; a small rounded ochraceous spot at inner base of membrane, and the inner claval area at margins of scutellum very dark fuscous. Cuneus fuscous, thickly covered with ochraceous pile. Membrane obscure fuscous. Legs very dark castaneous, clothed with long pale setæ or hairs. Body beneath dark fuscous, the coxæ ochraceous (*imperfectly examined owing to the specimen being carded*).

Long. 5 millim.

Hab. PANAMA, Tolé (*Champion*).

BIOL. CENTR.-AMER., Rhynch., November 1883.

LYGDUS, gen. nov.

Body depressed and subovate. Head porrect, slightly but obliquely deflexed before eyes, and narrowly and longitudinally sulcate; antennæ very thickly and strongly hirsute, the basal joint stoutest, much longer than the head, the second about half as long again as the first, third and fourth slender. Eyes prominent and distinctly separated from the anterior margin of the pronotum. Pronotum with the lateral margins suberectly amplified, somewhat lobately amplified near anterior margin; a distinct anterior collar, the anterior margin about half the width of the posterior, which is truncate at base of scutellum, and then oblique to lateral angles, which are non-prominent. Scutellum subtriangular and moderately convex. Corium with the costal margins sinuated near the base, and then convexly widened, the extreme margin distinctly compressed and amplified. Cuneus longer than broad, the notch profound. Legs long and thickly hirsute. Rostrum reaching the intermediate coxæ.

The general appearance and colour of this extraordinary genus is typical of the Lygæidæ rather than of the Capsidæ.

1. *Lygdus simulans*, n. sp. (Tab. XXIV. fig. 16.)

Body above black; lateral margins of the pronotum, costal margins and the basal half of the corium, apical half of the clavus excluding the apex, and cuneus ochraceous; body beneath and legs black. Long. 10 millim.

Hab. PANAMA, Volcan de Chiriqui 4000 to 6000 feet (*Champion*).

Division VALDASARIA.

In this division I propose the arrangement of a series of genera in which, like those of the preceding division, the head is always, though frequently obscurely, sulcated, and sometimes more correctly to be described as excavated; the antennæ are inserted well in front, but on a level with the inner margin of the eyes.

The species thus comprised are of a more robust character than those of the Miraria, and the colouring is bright and handsome, thus approximating towards the next division.

PIASUS, gen. nov.

Body elongate, widest at base of pronotum. Head moderately long and porrect, somewhat deflexed towards apex and with a distinct and somewhat broad central longitudinal sulcation on disk, which is distinctly moderately gibbous; eyes large and prominent, slightly directed backwards and well separated from the anterior margin of pronotum. Antennæ with the basal joint stoutest and much longer than the head; second joint about half as long again as the first, but more slender, gradually thickened towards apex and finely pilose; third and fourth joints short and slender. Pronotum with the posterior margin slightly convex and more than twice as wide as the anterior margin, which is distinctly raised, the lateral margins sinuate; the lateral angles subprominent; transversely constricted before the middle, between which constriction and the anterior margin it is distinctly nodulose, and between the same and the posterior margin it is coarsely punctate. Scutellum subconvex and coarsely punctate. Corium with the lateral margins subparallel. Cuneus a little longer than broad. Rostrum reaching the intermediate coxæ.

1. *Piasus illuminatus*, n. sp. (Tab. XXIV. fig. 17.)

Pale ochraceous, the eyes, apex of head, two discal longitudinal but broken fasciæ and the lateral angles to pronotum, basal angles and a central broad longitudinal fascia to scutellum, inner and outer claval

margins, a broad central macular fascia and lateral margins (gradually widening from base) to corium, and disk of cuneus, either dark brown or blackish. Antennæ black, the base of first joint and the apex of the second ochraceous, the second obscurely annulated with castaneous near base. Legs pale ochraceous, anterior femora longitudinally streaked above and the intermediate and posterior femora somewhat obscurely annulated with fuscous near apices; tibiæ with basal, central, and apical fuscous annulations; tarsi fuscous, the claws ochraceous. Membrane pale fuscous, the cellular areas and a subapical spot and apical margins dark fuscous. Body beneath apparently (*carded specimen*) ochraceous with some brownish markings.

Long. 7 millim.

Hab. PANAMA, Volcan de Chiriqui 4000 to 6000 feet (*Champion*).

VALDASUS.

Valdasus, Stål, Rio Jan. Hem. i. p. 56 (1858); Walk. Cat. Het. vi. p. 47 (1873).

This peculiar and well-marked genus is easily recognized by the vertically deflexed head in front of the eyes, which are very prominent, obliquely suberect, and contiguous to the anterior margin of the pronotum.

Valdasus appears to be quite confined to the Neotropical Region. Only two species have hitherto been described, one from South Brazil and the other from Mexico. Of these the last is found in our fauna, and seven other new species are here described. There is therefore every probability that this will eventually be found to be a most extensive genus.

These insects were found by Mr. Champion on black fungi (to which they assimilated in colour) attached to fallen trees. They were of particularly active habits, both flying and running, thus making their capture somewhat difficult.

1. *Valdasus famularis*. (Tab. XXIV. fig. 7.)

Valdasus famularis, Stål, Stett. ent. Zeit. xxiii. p. 321. 251¹.

Hab. MEXICO¹.

The type in the collection of Dr. Signoret is here figured.

2. *Valdasus stellatus*, n. sp.

Closely allied to *V. famularis*, but differing by its darker colour above; pronotum with three linear, longitudinal, pale ochraceous lines, one central and two submarginal; femora much darker than in Stål's species, and not doubly annulated, but with a single upper ochraceous spot. It structurally differs by having the lateral pronotal angles distinctly subnodulose, and narrowly ochraceous at their apices.

Long. 6-7 millim.

Hab. GUATEMALA, San Juan in Vera Paz and Cubilguitz (*Champion*).

Two specimens, one from each of the above localities, were collected by Mr. Champion, and these vary in size as above described.

3. *Valdasus marginicollis*, n. sp.

Body above black; lateral margins of the pronotum, two central spots near base of scutellum and apex of same, a narrow linear fascia commencing at basal margin of corium extending through about half its

length and terminating in a club-shaped spot, claval apices, and apex of corium (margining base of cuneus) ochraceous. Eyes greyish. Antennæ with the first and second joints black, third and fourth fuscous, base of the third broadly pale luteous. Membrane fuscous, its apical half paler. Body beneath and legs black; underside of head and coxæ pale luteous, anterior and lateral margins of prosternum pale ochraceous. Rostrum black.

The upper surface is thickly and coarsely punctate; the pronotum has the lateral margins distantly channelled and very coarsely punctate, the anterior gibbous portion being centrally sulcated.

Long. 5-8 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet, Bugaba (*Champion*).

4. *Valdasus funebris*, n. sp. (Tab. XXIV. fig. 8.)

Body above dark fuscous; head and eyes obscure luteous, irregularly spotted and shaded with brownish; posterior margin of pronotum, two small spots near base of scutellum and apex of same, and four spots situate two on each claval margin near apex, obscure dull luteous; apex of corium margining the cuneus, and inner margin of cuneus ochraceous, the base of the last somewhat reddish; membrane fuscous, its apical margins somewhat paler; the corium is narrowly at inner margin and broadly at apex of claval margins dark velvety fuscous; legs dull obscure luteous, femora more or less distinctly biannulated with fuscous, the tibiæ somewhat pale fuscous; antennæ fuscous, apex of second joint luteous. Body beneath (*imperfectly examined owing to the specimen being carded*) fuscous; head, coxæ, and abdomen luteous, the last with a submarginal longitudinal series of fuscous spots.

The body is broad, and, excluding head and posterior margin of pronotum, very coarsely punctate, the lateral angles of the pronotum are non-prominent but obtusely acute, and the anterior lobe or gibbous portion is profoundly sulcated.

Long. 6½ millim.

Hab. PANAMA, Bugaba (*Champion*).

A single specimen only of this species was found by Mr. Champion.

5. *Valdasus erebeus*, n. sp.

Body above black; head either black with the eyes testaceous, or pale fuscous with the eyes dark fuscous; apex of scutellum, a very small spot at basal margin, and a large subquadrate spot about centre of lateral margin, and inner apical margins (narrowly) of corium luteous; near and following claval apex, on each side of corium, is a large dark velvety spot; cuneus either testaceous with the basal margin luteous, or luteous with the disk testaceous, its apex fuscous; femora luteous, biannulated with fuscous, their apices and the tibiæ and tarsi more or less fuscous; antennæ pale fuscous, base of first and apex of second joint pale luteous. Body beneath black; head, coxæ, and about four annulating fasciæ to abdomen (apparently fused on disk) luteous.

Pronotum and corium coarsely punctate, the scutellum subglobose and finely punctate; lateral pronotal angles rounded; corium deeply sinuate near centre.

Long. 5 millim.

Hab. PANAMA, Bugaba (*Champion*).

This species is allied to *V. funebris*, but differs by its smaller size, different markings, pronotal angles rounded and not obtusely acute, anterior area of pronotum not profoundly sulcated, &c.

6. *Valdasus cerbereus*, n. sp.

Allied to the preceding species, but smaller and paler, being dark castaneous in hue; antennæ very long and slender; spots to scutellum and corium very obscure or almost entirely obsolete, the subquadrate central

marginal spot to corium completely absent. Clavus with a short linear ochraceous spot on each side near apex; cuneus testaceous or castaneous, the base transversely luteous; membrane smoky hyaline or very pale fuscous; clavus with two oblong spots (one on each side of central suture), and corium with a large irregular apical spot dark velvety brown. Body beneath much as in preceding species, but paler.

V. cerebeus also differs from *V. erebeus* in having the pronotal angles distinctly subnodulose, the corium and pronotum less coarsely punctate, the scutellum not globose, but with a distinct and broad central longitudinal carination, &c.

Long. 4 millim.

Hab. PANAMA, Bugaba (*Champion*).

7. *Valdasus stygius*, n. sp. (Tab. XXIV. fig. 9.)

Body above dark castaneous; head dull ochraceous with two small central fuscous spots; antennæ with the first and second joints pale castaneous, the base of the first and the apex of the second pale luteous, third and fourth very pale fuscous; apex of scutellum, a very small spot at marginal base, and a large subquadrate spot about centre of lateral margin of corium, a small spot on each side of apex of clavus, and apical margin of corium greyish white; cuneus greyish white with the apex fuscous; membrane pale fuscous with some obscure greyish markings; femora luteous, irregularly annulated with castaneous; tibiæ and tarsi castaneous. Body beneath (*carded specimen*) with the head, coxæ, posterior margin of metasternum, and disk of abdomen (imperfectly seen) luteous or ochraceous.

This species is more or less distinctly pilose; the pronotum is thickly and coarsely punctate, very broad posteriorly, the lateral angles obtusely rounded and subnodulose; the scutellum is transversely wrinkled and punctate, with its base depressed; the corium is sparingly and finely punctate.

Long. 5 millim.

Hab. PANAMA, Bugaba (*Champion*).

The great width of the pronotum at base, irrespective of general colour and markings, at once separates this from the two preceding species.

8. *Valdasus rugosus*, n. sp. (Tab. XXIV. fig. 10.)

Above shining black and extremely rugose; antennæ fuscous, the apex of the second joint luteous; a small spot at basal margin of corium, a linear spot on each side of clavus near apex, and basal margin of cuneus obscure greyish; membrane fuscous, basal cellular areas blackish; basal angles of scutellum and an elongated spot on each side of apical claval suture deep velvety black; legs castaneous, femora with the base and a subapical annulation luteous, apices of tarsi luteous. Body beneath concolorous, posterior coxæ (anterior and intermediate coxæ unexamined owing to specimen being carded) luteous.

Pronotum with the anterior area globosely nodulate and profoundly sulcate, the base with two central contiguous smaller nodulations, the lateral angles obtusely rounded; scutellum with a central basal foveate impression, the apical portion gibbous, posteriorly deflexed and centrally carinate, corium obliquely and irregularly rugosely striate.

Long. 6 millim.

Hab. GUATEMALA, Senahu (*Champion*).

VANNIUS, gen. nov.

Allied to *Valdasus*. Head slightly and conically produced in front of the eyes, and then vertically deflexed, and with a slender central longitudinal sulcation; eyes contiguous to the anterior margin of the pronotum, but less prominent than in *Valdasus*. Antennæ with the basal joint stout and incrassated, not quite the length of the head; second, third, and fourth joints slender; the second twice the length of the first, and subequal in length to the third. Pronotum subtriangular, with an anterior transverse constriction, the

posterior margin slightly, but truncately, amplified at base of scutellum, and with a bisinuate transverse carination between and a little in front of the lateral angles. Scutellum with a central longitudinal carination. Corium with the lateral margins subparallel; cuneus longer than broad. Rostrum mutilated.

1. **Vannius rubrovittatus**, n. sp. (Tab. XXIV. fig. 11.)

Body above very pale brownish ochraceous; basal joint of antennæ, inner area of eyes, lateral margins of the pronotum, scutellum (excluding basal angles), a subclaval fascia, a curved transverse fascia on apical third of corium, and a large quadrate spot at base of cuneus rosy red. Legs pale obscure ochraceous, the apices of the femora somewhat darker. Abdomen beneath more or less fuscous; sternum irregularly shaded with reddish or fuscous. Second, third, and fourth joints of the antennæ obscure ochraceous, second and third with their apices greyish white. Corium, especially the costal margin, distinctly pilose. Long. $3\frac{1}{2}$ -4 millim.

Hab. GUATEMALA, Las Mercedes, Cerro Zunil (*Champion*); PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

Found by beating the withered leaves of the banana, *Musa*, sp. (*Champion*).

MONALONION.

Monalunion, Herrich-Schäffer, Wanz. Ins. ix. p. 168 (1853); Walk. Cat. Het. vi. p. 47 (1873).

This genus possesses many well-marked characteristics to prevent it being confused with any of the other genera here enumerated. The head is very broad and anteriorly deflexed, the sulcation is broad and subfoveate, the basal joint of antennæ very short and stout, remaining joints much more slender, gradually weakening, and distinctly and strongly pilose. The cuneus is much longer than broad.

Monalunion is found throughout the length of the Neotropical Region, to which it appears to be confined.

Frequently found in the withered leaves of the banana, *Musa*, sp. (*Champion*).

a. *Posterior tibiæ straight.*

1. **Monalunion annulipes**. (Tab. XXIII. fig. 25, var.)

Monalunion annulipes, Sign. Ann. Soc. Ent. de Fr. sér. 3, vol. vi. p. 500¹.

Hab. MEXICO¹ (*Deppe, Mus. Berol.*); GUATEMALA, San Gerónimo (*Champion*); PANAMA, Bugaba, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

With the series of specimens now before me, including a typical specimen sent by Dr. Signoret, I cannot but consider this to be a most variable and protean species. The head and antennæ are always black, the last having the base, or sometimes nearly the whole, of the first joint more or less yellowish; the pronotum varies from black with the margins brownish (as described by Signoret) to either wholly black or completely ochraceous; the corium also varies in a similar manner. The character, however, which is constant, and in my view always indicates this protean species, is the annulated posterior femora.

A Mexican variety belonging to the Berlin Museum is here figured.

2. *Monalonion versicolor*, n. sp. (Tab. XXIV. fig. 12.)

Head and antennæ shining black, the antennæ pilose, the head obscurely marked with castaneous near base; pronotum ochraceous, the whole of the anterior area and the lateral margins narrowly black, the ochraceous area containing a more or less arcuate castaneous fascia; scutellum ochraceous, its base opaquely greyish; corium pale reddish castaneous, the costal margins and a triangular spot in front of inner apical angles luteous, inner claval margins somewhat darker; cuneus reddish, the apex infuscated; membrane very pale fuscous and semihyaline, the cellular veins reddish; anterior legs black, intermediate and posterior legs ochraceous, the femora streaked with fuscous above, and the apices of the tarsi black. Body beneath *apparently* (carded specimen) with the head and sternum blackish, the abdomen ochraceous.

Long. 8 millim.

Hab. GUATEMALA, Las Mercedes (*Champion*).

3. *Monalonion hilaratum*, n. sp. (Tab. XXIV. fig. 13.)

Head black, with the base obscurely ochraceous; antennæ black, pilose, first joint with base and apex dull ochraceous, fourth joint and apex of third more or less fuscous; pronotum ochraceous, somewhat darker near lateral angles; scutellum reddish ochraceous; corium pale fuscous, the costal margins narrowly, at base broadly, ochraceous; cuneus bright reddish; membrane pale fuscous, the cellular veins reddish; legs ochraceous; tarsi and bases of posterior femora dark fuscous. Body beneath *apparently* (carded specimen) more or less reddish ochraceous.

Long. 9 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

b. *Posterior tibiæ curved.*

4. *Monalonion atratum*, n. sp. (Tab. XXIV. fig. 14.)

Head, antennæ, and pronotum dark shining black, the antennæ strongly pilose; eyes luteous; scutellum and corium dark shining fuscous, the first with its apex somewhat paler, the second with the costal margin (particularly broad at base) luteous; membrane pale fuscous; legs black and strongly pilose, the anterior and intermediate tibiæ very broadly annulated with luteous. Body beneath *apparently* (carded specimen) shining black; abdomen above dull reddish.

Long. 10 millim.

Hab. PANAMA, Bugaba (*Champion*).

c. *Pronotum excavated at base.*

5. *Monalonion dissimulatum*, n. sp. (Tab. XXIV. fig. 15.)

Body above ochraceous; head, antennæ, anterior constricted area of pronotum, apex of scutellum, and a broad transverse fascia at apex of corium black; base of first joint of antennæ ochraceous; membrane pale ochraceous and semihyaline, the margins narrowly, and the apex broadly, fuscous; legs ochraceous; the tarsi, bases of posterior femora, and posterior tibiæ (excluding base) black. Body beneath with the sternum ochraceous; the head, anterior margin of prosternum, acetabula, and coxæ black; abdomen mutilated.

Pronotum ovately excavated at base.

Long. 11 millim.

Hab. GUATEMALA, San Isidro (*Champion*).

ORASUS, gen. nov.

Body elongate. Head large, not vertically deflexed, the vertex somewhat triangularly raised, with a small and narrow longitudinal sulcation; the lateral and basal margins are broadly obliquely deflexed; eyes prominent, slightly directed backwards, and contiguous to the anterior margin of the pronotum. Antennæ with the basal joint not quite so long as the head, incrassated, but narrowed and constricted at base; second joint more than twice as long as the first, and moderately robust; third joint about two thirds the length of the second, and considerably more slender; fourth mutilated. Pronotum subquadrate, the posterior margin much broader than the anterior, and truncate, but oblique at lateral angles, which are subacute, lateral margins slightly concave; a transverse constriction before middle enclosing an anterior area, which is prominently nodulose. Scutellum subtriangular, its apex more or less depressed. Corium with the lateral margins slightly sinuate near base, and then concavely amplified towards apex. Cuneus a little longer than broad. Rostrum reaching the intermediate coxæ.

1. *Orasus robustus*, n. sp. (Tab. XXIII. fig. 13.)

Head black, finely pilose, slightly castaneous at inner margin of eyes; antennæ black, finely pilose, basal joint with a few long hairs, third joint paler and brownish, fourth joint mutilated. Pronotum dull reddish, with some obscure pitchy suffusion, finely pilose, and faintly transversely striate. Scutellum pitchy red, the lateral margins pale, and finely transversely striate. Corium pale fuscous and finely pilose; the lateral margins (widening from base) dull, pale ochraceous, the extreme edge fuscous; cuneus reddish, the base ochraceous, and apex pitchy. Membrane very pale fuscous and semihyaline. Anterior and intermediate legs pale castaneous; the tibiæ prominently setaceous, their apices infuscated; tarsi with their apices pitchy (posterior legs mutilated). Body beneath and rostrum pale castaneous; coxæ and basal disk of abdomen pale ochraceous.

Long. $5\frac{1}{2}$ millim.

Hab. MEXICO (*Sallé, Mus. Holm.*).

SYSINAS, gen. nov.

Body elongate and oblong, more or less shining, and sparingly pilose. Head broad at the base, and convexly tumid for about a third of its length, after which it is vertically deflexed, with a broad central sulcation on vertex; eyes prominent, subsessile, slightly directed backwards, and contiguous to the anterior pronotal collar. Antennæ with the joints gradually decreasing in substance, the first about the length of the head, and more than half the length of the second. Pronotum elongate and anteriorly attenuated, with a distinct anterior collar, behind which is a transverse constriction enclosing a convexly tumid area, lateral angles obtusely rounded; posterior margin truncate, and about twice the width of anterior margin. Scutellum with a central longitudinal sulcation, on each side of and beyond which the surface is tumid, forming a broadly V-shaped carination. Corium finely pilose, the costal margin reflexed. Legs finely and obscurely pilose. Rostrum not quite or about reaching the intermediate coxæ.

1. *Sysinas linearis*. (Tab. XXIII. fig. 21.)

Head and anterior area of pronotum luteous, posterior area of pronotum reddish; antennæ, eyes, a central longitudinal fascia to head and pronotum, scutellum, corium, and body beneath black; lateral margins of corium and cuneus sometimes narrowly luteous (in some specimens concolorous); membrane pale fuscous; head beneath, base of the second joint of the antennæ, rostrum, coxæ, and femora luteous, apices of femora above, and the tibiæ and tarsi dark fuscous.

In a female example, in which the lateral margins of the corium and cuneus are luteous (as in the specimen figured) the abdomen beneath is also luteous.

The posterior area of the pronotum and the corium is finely but distinctly punctate, the posterior tibiæ finely setose.

Long. 6 millim.

Hab. MEXICO (*Deppe, Mus. Berol.*).

2. **Sysinas audens**, n. sp. (Tab. XXIV. fig. 25.)

Head, antennæ, and anterior area of pronotum black; basal area of pronotum and bases of scutellum and corium rosy red; scutellum and corium black, the last with the lateral margins luteous; cuneus luteous, its inner half and apex black; membrane blackish, the apical margin pale; head beneath, basal joint of rostrum, pro- and mesosternums, coxæ, and legs luteous; apical portion of rostrum and apices of tibiæ (posterior tibiæ broadly) and the tarsi fuscous; a marginal anterior spot on each side of the pro-sternum (behind the eyes), two discal spots to mesosternum, metasternum, and abdomen blackish.

The eyes in this species are very large, the pronotum and corium punctate as in the preceding species, and the corium is finely and somewhat indistinctly pilose.

Long. $5\frac{1}{2}$ –6 millim.

Hab. PANAMA, San Lorenzo (*Champion*).

Found within the flowers of *Arums* growing in the virgin forest (*Champion*).

3. **Sysinas clarus**, n. sp.

Head, pronotum, sternum, rostrum, and legs luteous; antennæ, scutellum, corium, eyes, apical portion of rostrum, an upper streak to anterior femora, a subapical annulation to intermediate and posterior femora, basal and median annulations to tibiæ (those of the anterior tibiæ indistinct) and tarsi bluish black; base of the first joint of antennæ luteous; membrane pale hyaline, with the cellular areas blackish.

The pronotum and corium are much more indistinctly punctate than in the preceding species.

Long. $4\frac{1}{2}$ –5 millim.

Hab. PANAMA, Matachin (*Dr. Thieme, coll. Oberthür*).

4. **Sysinas centralis**, n. sp. (Tab. XXV. fig. 7.)

Head, pronotum, sternum, and legs luteous; eyes, antennæ, a broad central longitudinal fascia on disk and the apex of the head, anterior margin and a broad central fascia (narrowing anteriorly) to pronotum, scutellum, corium, membrane, and abdomen beneath blackish; lateral margins of corium and cuneus luteous; upper streaks to anterior and intermediate femora, apices of tibiæ, and tarsi fuscous.

Posterior area of pronotum and corium finely but distinctly punctate, the corium very finely pilose.

Long. 4 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

5. **Sysinas floridulus**, n. sp. (Tab. XXIV. fig. 24.)

Reddish ochraceous; head and subanterior margin to pronotum luteous; first and second joints of antennæ, eyes, scutellum, a broad central fascia occupying inner halves of corium, membrane, and apices of tibiæ (often concolorous) dark fuscous or black; base of first joint and the third and fourth joints of antennæ luteous; lateral margins of corium sometimes very narrowly and indistinctly luteous; vertex of head sometimes infuscated; apical margin of membrane pale hyaline.

Var. (probably sexual). Pronotum wholly luteous, with a broad central transverse fuscous fascia.

Pronotum and corium finely but distinctly punctate, the clavus somewhat coarsely punctate.

Long. $4\frac{1}{2}$ – $5\frac{1}{2}$ millim.

Hab. PANAMA, Bugaba (*Champion*).

Found within the flowers of *Arums* growing in the virgin forest (*Champion*).

ZOPYRUS, gen. nov.

Body oblong and depressed. Head anteriorly deflexed, obscurely and broadly sulcated on vertex; the eyes prominent and somewhat upwardly directed. Antennæ inserted well in front of the eyes, with the first

and second joints incrassated and very strongly pilose; the first about as long as the head and attenuated at base, the second nearly twice as long as the first; third and fourth slender and finely pilose. Pronotum coarsely punctate; the anterior margin about half the width of posterior, with a narrow central longitudinal carination, and with two deep transverse foveæ a little before anterior margin. Scutellum with a narrow central longitudinal carination, on each side of which the surface is deflected and transversely striate. Corium thickly punctate, slightly widening towards cuneus, which is longer than broad and coarsely punctate. Tibiæ very finely setose. Rostrum reaching the posterior coxæ.

1. **Zopyrus rubromaculatus**, n. sp. (Tab. XXV. fig. 8.)

Black, a broad central fascia posteriorly angulated, and lateral margins (excluding angles) of pronotum and prosternum sanguineous; posterior margins of eyes reddish ochraceous. Femora either luteous with their apices black or with the anterior and intermediate femora wholly black; membrane with the apical margin and a small spot near the apex of cuneus greyish white.

Long. 6-7 millim.

Hab. GUATEMALA, Quiche Mountains, Totonicapam (*Champion*).

2. **Zopyrus luteofasciatus**, n. sp. (Tab. XXV. fig. 9.)

Black; lateral margins and a central fascia to pronotum, central fascia to scutellum, base of corium (narrowly), and sternum luteous; abdomen sanguineous, its apex black, and the posterior segmental margins ochraceous; coxæ black, their bases somewhat luteous; membrane pale fuscous and at apex of cuneus narrowly greyish white; posterior femora luteous near base; rostrum dull ochraceous, the base and apex black.

Long. 7 millim.

Hab. COSTA RICA, Cache (*Rogers*).

ADMETUS, gen. nov.

Allied to *Zopyrus*, but differing by the head being more suddenly and vertically deflexed, the two basal joints of the antennæ less incrassated; the anterior area of the pronotum somewhat raised and not foveate, but obtusely and somewhat obsolete bituberculate, the posterior angular margins oblique and the anterior margin wider; the lateral margin of the corium not widened but subparallel; rostrum reaching the intermediate coxæ.

1. **Admetus fimbriatus**, n. sp. (Tab. XXV. fig. 10.)

Black; lateral margins of pronotum, and anterior and lateral margins of prosternum reddish ochraceous; base of first joint of antennæ, eyes, coxæ, and basal halves of femora luteous.

The disk of the pronotum is coarsely punctate and rugulose, the margins more sparingly punctate, the extreme anterior lateral margins are luteous and somewhat laminate and impunctate; the corium is finely, palely, and densely pilose.

Long. 5 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

OFELLUS, gen. nov.

Elongate and subdepressed. Head with a broad central sulcation vertically deflexed from the region of the eyes, which are prominent contiguous to the anterior margin of the pronotum, and somewhat directed upwards. Antennæ with the first and second joints incrassated; the first about as long as the head, and half as long as the second, which is narrower at the base than at the apex; third and fourth joints

slender, the third almost twice as long as the fourth. Pronotum punctate, with the anterior margin convexly rounded and about half as broad as the posterior, which is truncate, but oblique towards the lateral angles, which are rounded and non-prominent; anterior area somewhat gibbous, with a raised central carination and two transverse incisions. Scutellum with a central longitudinal incision. Corium obscurely punctate, the lateral margins subparallel. Cuneus longer than broad. Membrane mutilated.

1. **Ofellus præstans**, n. sp. (Tab. XXV. fig. 11.)

Tawny brown and finely pilose, the apical half of the corium somewhat paler. A large subquadrate spot at base of pronotum and abdomen beneath pale sanguineous. Eyes black. Membrane, tarsi, apex of second and third and fourth joints of antennæ fuscous.

Long. $3\frac{1}{2}$ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

Division LOPARIA.

Loparia, Reuter, Bih. Vet.-Ak. Handl. iii: 1, p. 6 (1875); Öfv. Vet.-Ak. Förh. 1875, no. 9, p. 63.

The characters relied upon by Dr. Reuter for the maintenance of this division are the following:—"Caput semper verticale, vertice lato et genis altis, antennæ autem sæpe in speciebus Americanis ad oculorum marginem interiorem insertæ. Pronotum lateribus a latere visis saltem acutis, apice strictura apicali bene discreta vel saltem margine apicali reflexo. Hemelytra furca cubiti semper discreta, cuneo elongato-triangulari. Alæ hamo nullo. Arolia divaricata, magna. Species per plures rufo-variegatæ."

RESTHENIA.

Resthenia, Spinola, Ess. Hém. p. 184 (1840); A. & S. Hist. des Hém. p. 280 (1843).

This genus consists of a number of well-marked and easily recognized species, which the sectional characters here used will better assist to elucidate than any attempt at an abstract diagnosis.

Resthenia is quite confined to the Nearctic and Neotropical Regions, and almost exclusively to the warmer portions of those regions.

Found resting upon leaves in the forest (*Champion*).

A. *Lateral margins of the pronotum acute, anteriorly subreflected. Rostrum usually not quite reaching the intermediate coxæ, basal joint generally slightly passing base of head. Tibiæ densely pilose.* Subg. CALLICHILA, Reut.

1. **Resthenia plagigera**. (Tab. XXIV. fig. 18.)

Resthenia plagigera, Stål, Stett. ent. Zeit. xxiii. p. 316. 233¹.

Hab. MEXICO¹ (*coll. Sign.*); BRITISH HONDURAS, river Sarstoon (*Blancaneau*); GUATEMALA, Panima, Sinanja (*Champion*).

In this species the scutellum possesses a basal, central, subtriangular black spot, a character not mentioned by Stål in his diagnosis.

A Guatemalan specimen is here figured.

2. ***Resthenia montana***, n. sp. (Tab. XXV. fig. 1.)

Head, with the vertex, reddish ochraceous, with a narrow waved black line between the eyes, which are pale ochraceous, the apex red with a central black line; pronotum reddish, with the anterior collar (excepting angles) and two large contiguous spots on disk black; scutellum, corium, membrane, legs, rostrum, and antennæ black; the femora more or less obscure, castaneous towards base, and the base of the first joint of the antennæ ochraceous. Body beneath reddish; prosternum with a large black spot on each side, and the abdominal segmental incisures margined with ochraceous.

Long. $10\frac{1}{2}$ millim.

Hab. PANAMA, Volcan de Chiriqui 3000 to 4000 feet (*Champion*).

3. ***Resthenia picticollis***. (Tab. XXII. fig. 2.)

Resthenia picticollis, Stål, Stett. ent. Zeit. xxiii. p. 317. 235¹.

Hab. MEXICO¹.

A typical specimen in the Stockholm Museum is here figured.

4. ***Resthenia pullata***. (*Resthenia candens*, Tab. XXII. fig. 3.)

Phytocoris pullatus, Burm. Handb. Ent. ii. 1. p. 271¹?

Reddish ochraceous; antennæ, eyes, two discal spots to pronotum, corium, legs, apical portion of rostrum, two large central spots to mesosternum, coxæ, and apical third of abdomen more or less dark fuscous; membrane fuscous. Antennæ shortly but thickly pilose, with the extreme base of the first joint ochraceous.

Var. Without the dark spots to mesosternum, and the coxæ concolorous with the body.

Long. 12-14 millim.

Hab. MEXICO, Oaxaca¹ (*Deppe, Mus. Berol.*); GUATEMALA, Zapote (*Champion*).

A Mexican specimen in the Berlin Museum is figured; Guatemalan examples have the pale colouring more ochraceous and the dark shadings more profound and black, the spots on the pronotum are also smaller.

5. ***Resthenia luteigera***. (Tab. XXIV. fig. 19.)

Resthenia luteigera, Stål, Stett. ent. Zeit. xxiii. p. 317. 234¹.

Hab. MEXICO¹.

The type in the collection of Dr. Signoret (not in "Mus. Holm." as stated¹) is here figured.

6. ***Resthenia melanochra***. Tab. XXII. fig. 4.)

Capsus menanochrus, H.-S. Wanz. Ins. viii. p. 17¹.

Capsus melanochrus, H.-S. Wanz. Ins. viii. fig. 793.

Hab. MEXICO¹ (*Koppe, Mus. Berol.*).

B. *Lateral margins of the pronotum obtuse, not anteriorly subreflected. Rostrum about reaching or passing the intermediate coxæ.* Subg. RESTHENIA, Spin.

a. *Rostrum reaching the intermediate coxæ. Basal joint of the antennæ longer than the head.*

7. **Resthenia ornaticollis.** (Tab. XXII. fig. 5.)

Resthenia ornaticollis, Stål, Stett. ent. Zeit. xxiii. p. 317. 237¹.

Hab. MEXICO¹. •

The figure represents a typical specimen in the Stockholm Museum.

8. **Resthenia panamensis**, n. sp. (Tab. XXV. fig. 6.)

♀. Reddish ochraceous; head with the eyes, antennæ, apex, a circular fascia between the eyes, and a small spot at base, corium (excluding base), legs, and apex of rostrum black; coxæ reddish ochraceous; oviposital sheath ochraceous.

Antennæ thickly and finely pilose; tibiæ thickly and finely setose; lateral margins of the pronotum slightly sinuated.

Long. 7½ millim.

Hab. PANAMA, Matachin (*Dr. Thieme, coll. Oberthür*).

9. **Resthenia univittata**, n. sp. (Tab. XXV. fig. 2.)

Ochraceous; eyes, a large triangular spot at base of pronotum, scutellum, corium, membrane, apices of femora, tibiæ, and tarsi dark fuscous or black; antennæ (third and fourth joints mutilated) black, the base of the first joint ochraceous; body beneath ochraceous, with the abdominal apex black.

Long. 7 millim.

Hab. GUATEMALA, San Isidro (*Champion*).

10. **Resthenia latipennis.** (Tab. XXII. fig. 6, and var. fig. 7.)

Resthenia latipennis, Stål, Stett. ent. Zeit. xxiii. p. 318. 240¹.

Hab. MEXICO¹ (*Deppe, Mus. Berol.*); GUATEMALA, San Gerónimo (*Champion*).

Two Mexican specimens are here figured, the first being a typical and the second a varietal form of the species. A single Guatemalan specimen obtained by Mr. Champion agrees with the last, with the exception of the pale coloration being more ochraceous than red.

11. **Resthenia chiriquina**, n. sp. (Tab. XXV. fig. 3.)

Bright ochraceous; head, antennæ, two contiguous spots near anterior margin of pronotum, base of scutellum, corium, with a small spot at basal angles and the whole apical area from near apex of scutellum, membrane, legs (excluding coxæ), rostrum, disk of mesosternum, and abdomen black.

Second joint of the antennæ distinctly thickened and somewhat strongly pilose.

Long. 10 millim.

Hab. PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

12. **Resthenia bracteata**, n. sp.

Black; lateral margin of head in front of eyes, base of first joint of antennæ, anterior area (concavely margined posteriorly) of pronotum, scutellum, head and body beneath, and coxæ bright ochraceous.
Long. 9–10 millim.

Hab. PANAMA, Bugaba (*Champion*).

13. **Resthenia obscurans**, n. sp. (Tab. XXV. fig. 4.)

Body above reddish ochraceous; head with a large central spot on vertex, and a smaller linear spot at apex, eyes, an irregularly arcuated fascia to pronotum, inner and outer claval margins, lateral margin (excluding base) of corium, cuneus, and membrane dark fuscous; antennæ dark fuscous, the base of the first joint reddish ochraceous. Legs reddish; tibiæ, tarsi, and the extreme apices of femora very dark fuscous or black. Body beneath reddish ochraceous; rostrum (excluding base) dark fuscous.

The body and antennæ are finely, and the tibiæ strongly pilose. The body is somewhat elongate and robust compared with the allied species.

Long. 9 millim.

Hab. PANAMA, Bugaba (*Champion*).

14. **Resthenia erubescens**, n. sp.

Dark sanguineous; head, antennæ, corium, membrane, and legs black; corium with a small sanguineous streak at basal angles; coxæ sanguineous; rostrum sanguineous, its apex and an annulated suffusion near centre dark fuscous.

The body is broad and subdepressed, the antennæ and tibiæ finely but thickly pilose.

Var. Head red, with the eyes black.

Long. $7\frac{1}{2}$ –8 millim.

Hab. PANAMA, Bugaba, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

One specimen only was sent home from the Volcan de Chiriqui, and this represents the variety described above, a small series of specimens from Bugaba being perfectly constant.

15. **Resthenia högbergi**. (Tab. XXIV. fig. 20.)

Resthenia Högbergi, Stål, Stett. ent. Zeit. xxiii. p. 317. 238¹.

Hab. MEXICO¹.

The type is contained in the collection of Dr. Signoret, and is here figured.

16. **Resthenia atrata**, n. sp.

Body above, antennæ, and legs black; body beneath sanguineous, with the rostrum and disks of head, sternum, and abdomen black; basal half of posterior femora pale fuscous. Body broad and subdepressed, the cuneus and membrane rather paler in hue than the corium.

The body is broad, subdepressed, and obsoletely and finely pilose; the corium has the costal margin distinctly carinate and also possesses a distinct subcostal, curved, linear carination near base; the antennæ and tibiæ thickly pilose.

Long. 8 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

This species is apparently allied to *R. zetterstedti*, Stål, a species described from Rio Janeiro.

aa. *Basal joint of the antennæ about equal in length to that of the head, or very little longer or shorter.*

17. ***Resthenia mimica***, n. sp.

Black; anterior half of pronotum, which is also centrally and posteriorly continued in a wedge-shaped streak into the black basal area, scutellum, base of corium to about middle of scutellum, and sternum bright yellow.

The second joint of the antennæ is somewhat distinctly incrassated in its apical half, and is distinctly pilose; tibiæ thickly and rather longly pilose.

Long. 11 millim.

Hab. PANAMA, Bugaba (*Champion*).

A single example of this interesting species was obtained by Mr. Champion. It closely resembles in colour and markings a species belonging to another section of the genus (*R. ornatcollis*, Tab. XXII. fig. 5), from which it differs by the shorter basal joint of the antennæ. *R. mimica* is also a larger insect than *R. ornatcollis*, and the markings of the pronotum are also different.

18. ***Resthenia guatemalana***, n. sp. (Tab. XXV. fig. 5.)

Head brownish ochraceous, with a central linear spot at apex, the eyes and antennæ dark fuscous; pronotum, scutellum, and base of corium to about centre of scutellum pale stramineous; pronotum with two contiguous transversely elongate dark fuscous spots near anterior margin; corium (excluding base), membrane, and legs fuscous. Body beneath, with the head, sternum, and coxæ stramineous; the abdomen fuscous, with the margins of the segmental incisures stramineous.

Long. 8½ millim.

Hab. GUATEMALA, Aceituno (*Champion*).

This, like the last species, is represented (at present) by a single example, and closely resembles in general pattern above a species in another division of the genus (*R. chiriquina*, Tab. XXV. fig. 3), from which it structurally differs in the length of the basal joint of the antennæ. *R. guatemalana* is also a paler-coloured insect than *R. chiriquina* and the scutellar and sternal markings are different in the two species.

This superficial resemblance of two species belonging to different sections of the same genus, and thus structurally differentiated in what is best but inadequately described as in a subgeneric manner, is not uncommon in other families of insects and notably in the Rhopalocera. In some cases this has caused the erection of a number of unnecessary and perplexing subdivisions styled genera, and has elsewhere been somewhat grandiloquently described as affording the material for a new "philosophical extension of the theory of mimicry." The facts seem to show a biological law of which we are at present in ignorance.

19. ***Resthenia plena***, n. sp.

Dull sanguineous; antennæ, eyes, scutellum, corium, membrane, a large oblong spot at apex of abdomen, apices of femora, and the tibiæ and tarsi black. Rostrum reaching the intermediate coxæ, its apex pitchy.

Body somewhat ovate, and finely and obscurely pilose.

Long. 8 millim.

Hab. MEXICO (*coll. Signoret*).

20. **Resthenia montivaga**, n. sp.

Body above, legs, antennæ, and rostrum black, the basal half of the posterior femora dull ochraceous, and the third and fourth joints of the antennæ pale fuscous; bases of the first joint ochraceous. Sternum and abdomen beneath reddish ochraceous; disk of sternum and lateral margins of prosternum blackish; coxæ reddish ochraceous, but more or less suffused with blackish.

Long. 7 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

This species is allied to *R. atrata* (previously described at page 254) in superficial coloration; but differs in having a much more elongate and narrow body, the basal joint of the antennæ shorter, &c.

21. **Resthenia sudatus**, n. sp. (Tab. XXII. fig. 17.)

♀. Body above red; apex of head, antennæ, clavus (excluding basal third), apical margins of corium, cuneus, legs, central disk of mesonotum, and oviposital sheath to abdomen dark fuscous or black; basal vertex of head, a sinuated discal line near anterior margin of pronotum, margins of lateral pronotal angles, a sub-claval linear streak to corium, membrane and rostrum fuscous, the last with the apical margins paler; coxæ red, more or less suffused with fuscous.

The body is broad and subdepressed, the tibiæ somewhat sparingly setose, the antennæ obscurely pilose. Long. 8 millim.

Hab. MEXICO (*Koppe, Mus. Berol.*).

b. *Rostrum reaching or passing the posterior coxæ.*

c. *Basal joint of the antennæ appreciably longer than the head.*

22. **Resthenia bicolor**, n. sp.

Reddish ochraceous; eyes, basal half of pronotum (excluding lateral margins), scutellum, corium, membrane, apex of head, a spot at abdominal apex, tibiæ and tarsi fuscous or black; antennæ fuscous, the first joint luteous, with its base and apex infuscated; head with a central longitudinal fuscous line on vertex; rostrum obscure reddish or pale fuscous, the basal joint reddish ochraceous and the apex pithy.

Antennæ somewhat thickly and strongly pilose; tibiæ strongly and thickly setose. Long. $8\frac{1}{2}$ to 9 millim.

Hab. GUATEMALA, Zapote (*Champion*).

cc. *Basal joint of the antennæ about equal in length to that of the head, or very little longer or shorter.*

23. **Resthenia bivittis**. (Tab. XXIV. fig. 21.)

Resthenia bivittis, Stål, Stett. ent. Zeit. xxiii. p. 318. 239¹.

Hab. MEXICO¹.

The type in the collection of Dr. Signoret is here figured.

24. **Resthenia vitticeps**. (Tab. XXIV. fig. 22.)

Resthenia vitticeps, Stål, Stett. ent. Zeit. xxiii. p. 318. 242¹.

Hab. MEXICO¹.

I am again indebted to Dr. Signoret for the loan of the type, which is here figured.

25. *Resthenia vittifrons*. (Tab. XXIV. fig. 23.)

Resthenia vittifrons, Stål, Stett. ent. Zeit. xxiii. p. 318. 241¹.

Hab. MEXICO¹.

The type in the collection of Dr. Signoret is here figured.

26. *Resthenia persignanda*. (Tab. XXII. fig. 21.)

Body above black and somewhat opaque; a small basal spot to head, anterior margin of pronotum, lateral margins of pronotum (obscurely and narrowly), and scutellum red; membrane fuscous; head beneath, sternum, rostrum, and legs black, lateral margins of prosternum broadly red; abdomen red, apical half of discal area black.

Antennæ (third and fourth joints mutilated) obscurely pilose; tibiæ moderately setose.
Long. 6 millim.

Hab. MEXICO (*Mus. Holm.*).

27. *Resthenia exornata*, n. sp. (Tab. XXII. fig. 20.)

Sanguineous; head, antennæ, two large basal subtriangular spots to pronotum, lateral angles of scutellum, corium, membrane, rostrum, disk of sternum, coxæ, legs, and a large apical pyramidal spot to abdomen black or fuscous.

The tibiæ are thickly but moderately setose, the antennæ obscurely pilose, and the lateral margins of the pronotum are slightly concavely sinuate.

Long. 6 millim.

Hab. MEXICO (*Deppe, Mus. Berol.*).

28. *Resthenia thoracica*. (Tab. XXII. fig. 14.)

♀. Sanguineous; head, eyes, antennæ, a small spot on anterior margin of pronotum, scutellum (excluding lateral angles*), corium, rostrum, legs, and oviposital sheath to abdomen fuscous or black; coxæ sanguineous, membrane pale fuscous.

Antennæ thickly pilose; tibiæ thickly and finely setose; lateral margins of pronotum very slightly sinuate.
Long. 8 millim.

Hab. MEXICO (*Koppe, Mus. Berol.*).

29. *Resthenia interpuncta*, n. sp. (Tab. XXII. fig. 15.)

♀. Sanguineous; head infuscated; central lobe of head, two spots near anterior margin of pronotum, basal angles of scutellum, cuneus (excluding base), disk of mesosternum, and oviposital sheath to abdomen black; rostrum reddish brown; coxæ sanguineous, more or less suffused with fuscous; membrane fuscous. Antennæ mutilated.

Lateral margins of the pronotum distinctly sinuated.
Long. 8 millim.

Hab. MEXICO (*Koppe, Mus. Berol.*).

This description is taken from a mutilated specimen; but the characters are sufficiently distinct to render its specific diagnosis unmistakable.

* These sanguineous basal angles to the scutellum have been overlooked by the artist, and do not appear, as they should do, in the figure.

30. *Resthenia marginanda*. (Tab. XXII. fig. 16.)

♀. Miniatous; anterior and posterior margins of pronotum and lateral margins of corium narrowly luteous. Antennæ black; head either dull ochraceous, with the apex and base black, or blackish, with a luteous spot at inner margin of eyes; pronotum with a transverse fuscous fascia a little before anterior margin; cuneus with its apex more or less broadly luteous; membrane pale fuscous. Body beneath dull ochraceous; lateral margins of prosternum, lateral margins of abdomen, oviposital sheath, and lateral margins and apex of anal appendage more or less miniatous; coxæ and femora ochraceous, apices of posterior femora, tibiæ, tarsi, and rostrum fuscous.

The tibiæ are strongly but sparingly setose, the anterior margin of the pronotum is distinctly sinuated, and the basal portion of the lateral margins of the pronotum distinctly reflexed.

Long. 8 millim.

Hab. MEXICO, Oaxaca (*Deppe, Mus. Berol.*).

31. *Resthenia parva*, n. sp. (Tab. XXII. fig. 18.)

Miniatous; antennæ, apex, a circular fascia on vertex and basal margin of head more or less dark fuscous; membrane pale fuscous; acetabula, coxæ, and legs brownish ochraceous; tibiæ, tarsi, and rostrum fuscous.

Anterior margin of pronotum not sinuate; eyes somewhat large and prominent, and slightly directed backward; tibiæ finely setose.

Long. 5½ millim.

Hab. MEXICO (*Deppe, Mus. Berol.*).

32. *Resthenia divisa*.

Capsus tetrastigma, H.-S. Wanz. Ins. ix. p. 166.

Capsus divisus, H.-S. Wanz. Ins. ix. fig. 960.

Resthenia divisa, Stål, Stett. ent. Zeit. xxiii. p. 317. 236¹.

Hab. MEXICO¹ (*coll. Sign.*).

A specimen in Dr. Signoret's collection, which constitutes my only knowledge of this species, having both the rostrum and antennæ mutilated, I am unable to sectionize its systematic position. The lateral margins of the pronotum are obtuse and not anteriorly reflexed.

LOPIDEA.

Lopidea, Uhler, Hayden's Surv. Mont. p. 411 (1872).

The shape of the pronotum—which is “trapezoidal, about one half wider than long; the lateral edges carinately elevated; the middle of the posterior margin sinuately deflexed”—will alone separate this genus from *Resthenia*, to which it is closely allied.

According to our present knowledge, the geographical range of *Lopidea* appears to be restricted to the southern portion of the Nearctic Region and the northern portion of the Neotropical.

1. *Lopidea scitula*. (Tab. XXIII. fig. 23.)

Capsus scitulus, Walk. Cat. Het. vi. p. 99. 183¹.

Hab. MEXICO (*Deppe, Mus. Berol.*), Oaxaca¹, Presidio (*Forrer*); GUATEMALA, San Gerónimo (*Champion*).

A Mexican specimen is figured.

Found by sweeping the paths in the fields of sugar-cane (*Champion*).

2. *Lopidea bellula*, n. sp.

Ochraceous; central fascia to head, eyes, antennæ, an indistinct suffusion at base of pronotum, scutellum, apical portion of clavus, apical margin of corium, cuneus, membrane, legs, rostrum, and apex of abdomen more or less dark fuscous.

Long. 6 millim.

Hab. GUATEMALA, San Isidro (*Champion*).

HADRONEMA.

Hadronema, Uhler, Hayden's Surv. Mont. p. 412 (1872).

This genus is allied to the preceding; but the body is less elongate, the antennæ have the third and fourth joints subequal in length and of nearly equal thickness.

The genus at present is only represented by a single species.

1. *Hadronema militaris*. (Tab. XXII. fig. 23.)

Hadronema militaris, Uhler, Hayden's Surv. Mont. p. 412¹; Bull. U.S. Geol. & Geog. Surv. ii. p. 317², iii. p. 415³; Wheeler's Rep. Geog. Expl. v. Zool. chap. xii. p. 838, t. 42. f. 12* (1875).

Hab. NORTH AMERICA, Colorado^{1 2 3}, Utah¹, California¹.—MEXICO (*Mus. Holm.*).

A Mexican specimen agreeing perfectly with Mr. Uhler's description, and which is contained in the Stockholm Museum, is here figured.

Mr. Uhler further describes the species as variable "in the width of the pale margin of the hemelytra and in the extent of black on the pronotum"¹, and also in the base of the corium being "sometimes entirely whitish"¹. It was collected on the hills of Colorado from July to September², and "seems to be a mountain-loving species, and did not occur to me on any of the lower levels on which I used the net"³.

Division PHYTOCARIA.

Phytocaria, Reuter, Bih. Vet.-Ak. Handl. iii: 1, p. 6 (1875).

In this and the following divisions the antennæ are inserted on the inner side of the eyes; and the characters which appear principally to divide the *Phytocaria* from the next division are, to quote Dr. Reuter, "Hemelytra vena brachiali distincta, cuneo elongato-triangulari."

As I understand and use this division, the cuneus is elongate and subtriangular and always as long and generally longer than broad.

* These figures are too rough for any practical purpose.

COMPSOCEROCORIS.

Compsocerocoris, Reuter, Öfv. Vet.-Ak. Förh. 1875, no. 9, p. 70.

The principal characteristics of this genus appear to be the central basal sulcation to the head, the length of the antennæ (as long as the body), with the basal joint slightly incrassated and about equalling in length that of the pronotum and half of the head together, and the lateral angles of the pronotum obtusely acute. This genus was founded by Dr. Reuter for the reception of a Texan species.

Of similar habits to the European genus *Phytocoris* and obtained by beating (*Champion*).

1. *Compsocerocoris exustus*, n. sp.

Ochraceous, mottled with pale brownish; pronotum with four black spots on basal margin; scutellum with two similar spots near apex, and three or four small brownish spots arranged on inner margin of cuneus, and one very small and obscure on each inner margin of corium near apex. Antennæ ochraceous, with the basal joint strongly setose and obscurely annulated with brownish at middle and apex; second joint with the apex fuscous, middle of the second joint and base of the third greyish. Cuneus somewhat paler than the corium. Membrane mottled with brownish. Femora ochraceous, annulated with brownish; fore and intermediate tibiæ with three distinct dark fuscous annulations; posterior tibiæ with similar but very obscure annulations and longly and palely setose. Body beneath (carded specimen) ochraceous and more or less mottled as above. Two elongate fuscous spots near lateral margins of prosternum, and one at lateral margins of mesosternum.

Long. $7\frac{1}{2}$ millim.

Hab. GUATEMALA, Quezaltenango (*Champion*).

2. *Compsocerocoris dubitatus*, n. sp. (Tab. XXV. fig. 12.)

Allied to the preceding species, but differing in the following particulars:—The pronotum is marked with a broad, central, longitudinal pale fascia, the eyes are dark fuscous, the second and third joints of the antennæ are concolorous and without the pale and dark markings; cuneus much paler, and membrane much darker.

Long. 7 millim.

Hab. GUATEMALA, Quiche Mountains (*Champion*).

It is with some doubt that I have described this form as a distinct species, though the markings are very divergent. Dr. Reuter has not stated that sexual differences of this nature are found in the genus, and we have received but a single specimen from Mr. Champion, and therefore cannot decide as to the sexual problem.

3. *Compsocerocoris vilis*, n. sp. (Tab. XXV. fig. 13.)

Ochraceous; basal joint of antennæ much mottled and annulated with brown, the apex somewhat reddish; some spots within the anterior and posterior margins of eyes, four longitudinal fasciæ to pronotum, which become somewhat macular at anterior and posterior margins, two spots to scutellum, a series of inner and outer claval spots, and three spots to cuneus, situate at basal angles and apex, reddish ochraceous. Femora ochraceous, mottled with brownish; the posterior femora with some obscure reddish annulations; tibiæ ochraceous, somewhat darker at bases and apices. Body beneath ochraceous, with reddish linear markings.

Long. $5\frac{1}{2}$ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*); PANAMA, Bugaba (*Champion*).

4. *Compsocerochoris elegans*, n. sp. (Tab. XXV. fig. 14.)

Ochraceous; basal joint of antennæ annulated and mottled with brown; eyes fuscous; pronotum with the basal area broadly greenish, and behind the anterior collar somewhat greyish; clavus and the corium at claval area somewhat infuscated, the outer claval margin (excluding base) very bright castaneous; disk of corium greenish; cuneus with the apex bright castaneous, and with a small darker spot near inner basal angle. Membrane dull obscure ochraceous, shaded with pale fuscous, especially at base. Legs ochraceous; tibiæ outwardly and lineately fuscous; apices of the tarsi fuscous. Body beneath ochraceous, more or less mottled with brownish.

Long. $5\frac{1}{2}$ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

5. *Compsocerochoris annulicornis*.

Compsocerochoris annulicornis, Reuter, Öfv. Vet.-Ak. Förh. 1875, no. 9, p. 70¹.

Ferruginous of more or less intense hue in different specimens; antennæ with the basal joint thickly irrorated with pale ochraceous, second and third joints with their bases pale ochraceous; eyes fuscous; pronotum with the basal margin narrowly obscure ochraceous, and inwardly bordered by a transverse series of small fuscous spots; scutellum with the apex obscure ochraceous; corium with the costal margin more or less spotted with ochraceous; cuneus variable in hue, sometimes obscure ochraceous with the apex ferruginous, its inner or apical margin always spotted with ferruginous; legs ochraceous, femora (excluding bases) annulated and mottled with ferruginous.

This appears to be a most protean and variable species, and the following notes refer to what I consider to be but different forms of the same. In all the specimens, however, the pronotum has the basal margin narrowly obscure ochraceous, inwardly bordered by a transverse series of small fuscous spots.

Var. *a.* Eyes fuscous; second and third joints of the antennæ with their bases and an annulation a little beyond middle pale ochraceous. Tibiæ distinctly annulated.

Var. *b.* Second and third joints of the antennæ with their bases alone pale ochraceous.

Var. *c.* Resembling var. *b.*, but with the eyes greyish.

Var. *d.* Eyes greyish or fuscous; antennæ as in preceding variety, colour pale and bright ferruginous; pronotum sometimes with two small discal dark spots; the tibiæ either very indistinctly or non-annulated.

Var. *e.* Resembling var. *d.*, but with the corium, membrane, and cuneus largely irrorated with greyish.

Var. *f.* Third joint of the antennæ distinctly and broadly black at apex; legs as in vars. *d* and *e*.

Var. *g.* Antennæ unicolorous, the second and third joints not pale ochraceous at base; tibiæ as in the three preceding varieties.

Long. 6 to $6\frac{1}{2}$ millim.

Hab. NORTH AMERICA Texas¹; GUATEMALA, San Gerónimo, Zapote, Cerro Zunil, Quezaltenango, Pantaleon, Las Mercedes, Totonicapam, El Tumbador (*Champion*); PANAMA, Bugaba, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

After a prolonged examination I can, at present, find no real specific differences among the above divergent forms, whose variation *inter se* is so great, that I feel little hesitation in placing them all under the cognomen of Reuter's species; and although but one specimen really appertains fully to the description of that species, yet that seems so inseparably linked with the most extreme forms of the series, that their specific unity appears to be reasonably demonstrated, and I have treated them accordingly. Even the varietal characters given above do not at all adequately express the extremely protean

phases, both in colour and markings, that can be observed in the series of specimens now before me, and this irrespective of local habitats to which they do not appear to be confined, save and except that var. *e* is represented alone by three specimens from Panama.

6. **Compsocerochoris mistus**, n. sp. (Tab. XXV. fig. 15.)

Allied to typical forms of the last species, but larger, and also differing in having the antennæ (excluding the basal joint) black, the bases of the second and third joints being narrowly pale ochraceous, the basal joint ochraceous, spotted and annulated with blackish, the lateral margins of the pronotum broadly blackish, &c. Long. 7 millim.

Hab. GUATEMALA, San Gerónimo, Totonicapam (*Champion*).

TÆDIA, gen. nov.

Allied to *Compsocerochoris*, but more robust, the posterior femora shorter and much more incrassated, the posterior tibiæ distinctly curved. Antennæ with the basal joint about equal to the length of the pronotum and half the length of the head together, incrassated, pilose, and faintly but distinctly nodulated at the extreme apex; second joint not quite twice the length of the first, its apical half incrassated; third and fourth extremely slender. Rostrum reaching the intermediate coxæ. Pronotum long, anteriorly depressed, about twice as broad at lateral angles as at anterior margin. Scutellum large, about subequal in length to pronotum, the lateral angles slightly convex, the disk distinctly and longitudinally depressed and foveate, thus rendering the lateral margins broadly and roundly subgibbous. Body pilose.

1. **Tædia bimaculata**, n. sp. (Tab. XXV. fig. 16.)

Head ochraceous, eyes black; antennæ with the first joint ochraceous, the second fuscous, with the base ochraceous, third pale fuscous, with the base greyish white; pronotum pale brownish, speckled with ochraceous, with a central and two lateral ochraceous fasciæ and with two transverse black spots on disk; scutellum and corium pale brownish speckled with ochraceous, the first with a central longitudinal narrow ochraceous fascia; cuneus paler than the corium, with its apex black; membrane pale smoky hyaline. Body beneath and legs ochraceous; sternum and abdomen with a lateral series of blackish spots (three on sternum), and those on abdomen gradually decreasing in size towards apex; apices of tarsi fuscous. Long. $7\frac{1}{2}$ –8 millim.

Hab. PANAMA, Bugaba (*Champion*).

NEUROCOLPUS.

Neurocolpus, Reuter, Öfv. Vet.-Ak. Förh. 1875, no. 9, p. 69.

The antennæ are the most striking features in this genus; the basal joint is distinctly shorter than the pronotum, but very strongly incrassated, and, in the species here referred to, subnodulose at apex; it is also densely setose, the apices of the setæ being dilated; the second joint is twice as long as the first, with its apex strongly incrassated; and the third and fourth joints together are shorter than the second.

1. **Neurocolpus mexicanus**, n. sp. (Tab. XXIII. fig. 5.)

Ochraceous, thickly pilose; antennæ with the apex of the second joint broadly fuscous, the third fuscous with the base ochraceous; margins of the lateral angles of pronotum slightly fuscous; scutellum more or less infuscated; inner claval margin and two discal but broken transverse fasciæ to corium (one near base and

the other about centre) fuscous; membrane pale fuscous, with a greyish spot on each lateral margin. Body beneath ochraceous; coxæ and basal halves of femora luteous; apical portion of femora, tibiæ, and tarsi ochraceous (posterior legs mutilated); rostrum luteous, its apex infuscated.

Long. 7 millim.

Hab. MEXICO (*Sallé, Mus. Holm.*).

2. *Neurocolpus affinis*, n. sp. or var. ?

Neurocolpus mexicanus, Dist. var. ?

Head, pronotum, and scutellum pale ochraceous, corium fuscous or brownish testaceous, cuneus reddish; antennæ with the basal joint somewhat castaneous, the second joint ochraceous with the apex fuscous, third fuscous with the base ochraceous, fourth fuscous; eyes fuscous; corium with obsolete transverse darker fasciæ as in preceding species; membrane pale fuscous, with a greyish spot on each lateral margin. Body beneath pale ochraceous, lateral margins of sternum and abdomen darker; coxæ pale ochraceous; anterior and intermediate femora ochraceous, thickly speckled with fuscous; posterior femora fuscous, their base, a subcentral (sometimes obsolete) and apical annulation pale ochraceous; tibiæ and tarsi ochraceous, apices of tarsi and base of posterior tibiæ fuscous.

Var. *a.* Posterior area of pronotum and scutellum thickly speckled with fuscous.

Var. *b.* Corium ochraceous, the dark transverse fasciæ distinct, and the inner margin of clavus fuscous.

Long. 5½–6 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*); PANAMA, Volcan de Chiriqui 2000 to 3000 feet, Bugaba (*Champion*).

I have considerable doubt as to this being a distinct species from the preceding, and think it possible that it may be included in some varietal forms of the same. However, it is smaller in size, and the colour-differences are considerable. The difficulty in the way of a decision arises from the fact of the type and sole representative of *N. mexicanus* being somewhat mutilated, and thus a series of Mexican specimens may probably prove the two forms here described as distinct species to be but varietal forms of only one.

PARACALOCORIS, gen. nov.

Body above distinctly pilose. Antennæ with the basal joint incrassated, shorter than the pronotum, thickly clothed with fine long hairs; second joint about twice as long as first, its apex distinctly incrassated; third and fourth slender, and together subequal to or longer than the second; fourth a little longer than the third. Pronotum distinctly subgibbous and convex at base, the width at posterior angles being about three times that of anterior margin. Rostrum reaching the intermediate coxæ. Other characters as in *Calocoris*.

Pronotum generally with two discal subexcavated spots.

A. Pronotum with two prominent and subexcavated black discal spots.

1. *Paracalocoris jurgiosus*. (Tab. XXV. fig. 17.)

Calocoris jurgiosus, Stål, Stett. ent. Zeit. xxiii. p. 320. 246¹.

Hab. MEXICO (*coll. Sign.*); GUATEMALA, Cerro Zunil (*Champion*).

A Guatemalan specimen is here figured, which exactly agrees with the Mexican type in the collection of Dr. Signoret. In the original description of this species the two prominent, though small, discal black spots to the pronotum apparently escaped notice.

2. *Paracalocoris attenuatus*, n. sp.

Fuscous or brownish testaceous, irrorated or marked with luteous. Antennæ with the first joint brownish testaceous, speckled with luteous; second joint fuscous, annulated with luteous near base; third and fourth pale fuscous, luteous at base; head brownish testaceous irrorated with luteous, especially at inner margins of eyes; pronotum brownish testaceous, with the anterior area, anterior and posterior margins, a central discal longitudinal line, and a few scattered spots luteous, posterior margin of anterior collar and two discal spots blackish; scutellum with the apex, a central longitudinal line, on each side of which is a basal sublunulate line (sometimes obsolete) luteous; clavus and corium with a number of linear and small rounded luteous spots; cuneus reddish, irrorated with luteous and with a black spot at apex and inner basal angle; membrane fuscous with greyish spots, and the discal cellular margin ochraceous. Body beneath brownish ochraceous, irrorated with luteous; legs brownish ochraceous; tibiæ annulated with luteous at middle and apex, the last annulation sometimes pale castaneous; tarsi annulated with luteous, bases of posterior femora more or less luteous.

Long. 4-5 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*); PANAMA, Bugaba (*Champion*).

Some varieties of this species have the basal annulation to the second joint of the antennæ quite obsolete. Mr. Champion informs us that this is one of the commonest species of the genus, and was obtained by sweeping low-growing plants.

3. *Paracalocoris fistulosus**, n. sp. (Tab. XXII. fig. 11.)

Head brownish testaceous, thickly covered with oblique ochraceous striæ; eyes fuscous; antennæ mutilated; pronotum brownish testaceous, the margins narrowly ochraceous, with two large discal subexcavated black spots margined with ochraceous; scutellum brownish testaceous, with two basal ochraceous streaks, and the apex of the same colour; corium brownish ochraceous, the costal and inner margins much paler; base of clavus brownish testaceous; cuneus reddish; membrane pale fuscous, the cellular margins ochraceous. Body beneath ochraceous; legs brownish testaceous, femora thickly spotted with luteous, the tibiæ annulated with the same colour; rostrum fuscous, with the base ochraceous.

Long. 7½ millim.

Hab. MEXICO (*Sallé, Mus. Holm.*).

- 4. *Paracalocoris annulatus*, n. sp.

Head, pronotum, and scutellum ochraceous, the pronotum with two discal excavated black spots a little before centre; eyes fuscous; antennæ with the basal joint pale castaneous, second ochraceous with its base narrowly and its apex broadly fuscous or black, third ochraceous, its apex fuscous, fourth brownish ochraceous; corium brownish ochraceous, the lateral margin, a spot on apical margin, and the claval apex more or less ochraceous; cuneus reddish; membrane fuscous. Body beneath and legs brownish ochraceous; anterior and intermediate tibiæ with a central pale ochraceous annulation; posterior tibiæ with two similarly coloured annulations, one before centre and one at apex; tarsi ochraceous, their apices fuscous.

Var. Second joint of the antennæ with two pale annulations, one near base and one preceding the black apical portion.

Long. 5-5½ millim.

Hab. PANAMA, Volcan de Chiriqui 4000 to 6000 feet, Bugaba (*Champion*).

* Owing to the absence of the antennæ in the typical specimen, the generic position of this species is rendered, for the present, somewhat uncertain. Judging, however, from the pilose body and the subexcavated black discal spots to the pronotum, there seems little doubt that it belongs to the new genus I have here proposed. As the first aim of this work is of a faunistic character, I have figured many unique though mutilated species, in order to make our enumeration as complete as possible.

5. **Paracalocoris molliculus**, n. sp. (Tab. XXV. fig. 18.)

Brownish ochraceous and finely pilose; eyes and apical third of the second joint of antennæ dark fuscous; two black central, discal subexcavated spots to pronotum. The head has a central longitudinal line, and the margins from base to apex passing inner margin of eyes luteous; third and fourth joints of antennæ luteous, the fourth very pilose and fuscous near base and apex; the discal black spots to pronotum are slightly surrounded with luteous; the scutellum is very finely transversely wrinkled, with a central pale levigate line; membrane dark shining ochraceous, the cellular margins darker; body beneath much paler, *some specimens* having a submarginal segmental series of small fuscous spots to the abdomen; legs brownish ochraceous, bases of the femora paler.

Long. $6\frac{1}{2}$ to $7\frac{1}{2}$ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

B. *Pronotum without the prominent subexcavated black discal spots.*

6. **Paracalocoris balteatus**, n. sp. (Tab. XXV. fig. 19.)

Brownish ochraceous, finely pilose; antennæ with the first and second joints pale castaneous, the apex of the second infuscated; third joint pale luteous and fourth black; head with the disk obliquely striated on each side, the eyes dark castaneous; pronotum olivaceous, the lateral angles somewhat darker, the anterior collar, some spots or suffusions before anterior margin, and the posterior margin from behind lateral angles luteous, the last containing a central basal brownish fascia; scutellum distinctly gibbous on disk, the apex luteous; apical angle of corium and apex of cuneus luteous; membrane ochraceous, with a pale luteous spot near apex of cuneus, and some darker spots at base and on lateral margins; body beneath paler, a fuscous spot on lateral portions of meso- and metasternums, and a submarginal series of blackish spots to abdomen; legs ochraceous, apices of femora with darker annulations, those of the posterior femora fuscous.

Long. $9\frac{1}{2}$ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

7. **Paracalocoris lunatus**, n. sp. (Tab. XXV. fig. 20.)

Dark castaneous, finely pilose; pronotum, excluding a wide basal and anteriorly lunate fascia, luteous; cuneus reddish, its lateral margins paler, and its inner basal angle somewhat fuscous; antennæ dark castaneous, apical portion of the second joint infuscated, third joint ochraceous, its apex fuscous; head with the apex, lateral margins, and eyes pitchy; scutellum with a central pale levigate line; corium with the apical portion somewhat darker, its lateral margins narrowly paler; membrane pale fuscous, with a pitchy spot at base; body beneath with the head pitchy, the sternum luteous, and the abdomen brownish ochraceous, the last with an obscure submarginal series of small dark spots; coxæ very dark castaneous; legs dark castaneous, anterior and intermediate tibiæ annulated with luteous near apex; tarsi ochraceous, their apices infuscated.

Long. 7 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

8. **Paracalocoris mastrucatus**, n. sp. (Tab. XXV. fig. 21.)

Ochraceous, finely pilose; pronotum (excluding a basal and anteriorly somewhat lunate fascia) and cuneus luteous; antennæ ochraceous, apical half of the second joint dark castaneous; eyes pale reddish; pronotum with two small brownish discal spots a little before middle, membrane pale fuscous; body beneath ochraceous (*carded specimen*); coxæ and femora castaneous, apices of the femora (those of the anterior very obscurely) ochraceous; tibiæ and tarsi ochraceous; tarsal apices fuscous.

Long. 7 millim.

Hab. PANAMA, Bugaba (*Champion*).

BIOL. CENTR.-AMER., Rhynch., February 1884.

PAPPUS, gen. nov.

Allied to *Paracalocoris*, but shining and sparingly pilose; head longer, second joint of antennæ not suddenly thickened near apex, but gradually thickened from base; third and fourth joints not slender but incrassated, the third longer or subequal in length to the fourth; pronotum not subgibbous, the base slightly convex, but less oblique towards lateral angles than in *Paracalocoris*.

1. *Pappus sordidus*, n. sp. (Tab. XXV. fig. 22.)

Reddish ochraceous, eyes pale fuscous; apex of scutellum ochraceous; lateral margins of corium (gradually widening to apex) ochraceous; cuneus reddish, membrane pale fuscous, the cellular margins reddish; body beneath and legs reddish ochraceous. The antennæ are pilose, the second joint more than twice the length of the first; basal half of pronotum distinctly punctate; scutellum finely and transversely wrinkled; corium (excluding lateral margins) punctate.

Long. 6 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

GARGANUS.

Garganus, Stål, Stett. ent. Zeit. xxiii. p. 321 (1862).

In this genus the basal joint of the antennæ is longer than the pronotum and more than half the length of the second, which is thickened and gradually attenuated at the base and apex; the head is vertically deflexed in front of the eyes.

These characters will alone separate *Garganus* from the two preceding genera, to which it is clearly allied.

1. *Garganus albidivittis*. (Tab. XXV. fig. 23.)

Garganus albidivittis, Stål, Stett. ent. Zeit. xxiii. pp. 322, 252¹.

Hab. MEXICO¹ (*coll. Sign.*); GUATEMALA, San Gerónimo (*Champion*).

A Guatemalan variety of this species is here figured, which differs from typical Mexican specimens by the very broad pale vitta to the scutellum.

Found by sweeping the margins of cane-fields (*Champion*).

CALOCORIS.

Calocoris, Fieber, Crit. Gen. p. 24 (1858); Eur. Hem. pp. 65 & 251 (1861); Walk. Cat. Het. vi. p. 42 (1873); Reut. Bih. Vet.-Ak. Handl. iii: 1, p. 11 (1875); Saund. Trans. Ent. Soc. 1875, p. 255.

This somewhat extensive genus is common in the Palæarctic Region, and occurs in the Nearctic and Neotropical Regions, and will doubtless be found to be generally and widely distributed, when our knowledge of the exotic Capsidæ is extended.

The differential characters between this and *Paracalocoris* have already been given. In all the species here enumerated as belonging to the genus *Calocoris* the rostrum about reaches the posterior coxæ.

A. *Pronotum marked with two discal black spots.*1. **Calocoris fasciiventris**, (Tab. XXV. fig. 24.)

Calocoris fasciiventris, Stål, Stett. ent. Zeit. xxiii. pp. 320, 247¹.

Hab. MEXICO¹, San Luis Potosi (*Dr. Palmer*).

The type in the collection of Dr. Signoret is here figured.

2. **Calocoris tinctus**, n. sp. (Tab. XXII. fig. 8.)

Ochraceous or reddish ochraceous; head, antennæ (apical joints mutilated), two spots on disk of pronotum and a broad irregular transverse suffusion at base of same, scutellum, apical half of clavus, inner margin of corium and a narrow subcostal line at base of same, inner basal angle of cuneus, basal half of membrane, body beneath, rostrum, and legs black. Abdomen with narrow transverse ochraceous fasciæ. Anterior tibiæ with an obscure ochraceous central annulation (intermediate and posterior legs mutilated).

Long. 7½ millim.

Hab. MEXICO (*Sallé, Mus. Holm.*).

B. *Pronotum indistinctly marked with two discal spots.*3. **Calocoris semiopacus**, n. sp. (Tab. XXII. fig. 9.)

Closely allied to the preceding species but smaller; the pronotum almost totally suffused with black, and the discal spots absent; corium more suffused with black; body beneath and legs brownish; abdomen with a lateral fascia and apical segment ochraceous; anal appendage, apices of the tibiæ, tarsi, and apex of rostrum black.

Long. 6 millim.

Hab. MEXICO, Oaxaca (*Deppe, Mus. Berol.*).

C. *Pronotum without the discal spots.*4. **Calocoris opacus**. (Tab. XXII. fig. 10.)

Capsus opacus, Walk. Cat. Het. vi. p. 100, 184¹.

Hab. MEXICO¹ (*Mus. Holm.*).

A specimen belonging to the Stockholm Museum is here figured.

5. **Calocoris nigricans**, n. sp. (Tab. XXII. fig. 22.)

Black, shining, pilose, and punctate; abdomen beneath and legs (anterior and intermediate legs mutilated) paler or somewhat castaneous; membrane pale fuscous. The lateral margins of the pronotum and corium are very longly pilose.

Long. 6½ millim.

Hab. MEXICO (*Sallé, Mus. Holm.*).

6. **Calocoris ? inustus**, n. sp. (Tab. XXIII. fig. 17.)

Greenish ochraceous; antennæ, eyes, apex and basal margin of the head, two large rounded discal spots to pronotum, a central basal spot to scutellum, and head and body beneath black; legs, rostrum, and extreme

base of antennæ pale greenish ochraceous. Membrane pale brownish ochraceous, the cellular margins ochraceous. Apex and inner basal angle of cuneus ochraceous.

Long. 5 millim.

Hab. MEXICO, Oaxaca (*Deppe, Mus. Holm.*).

Two specimens of this species have passed through my hands, both, however, more or less mutilated. I have therefore considered it best to place the species provisionally in the genus *Calocoris*, to which it certainly has the strongest affinities, if not really attributable to that genus.

CALONDAS, gen. nov.

Allied to *Calocoris*, but with the posterior margin of the pronotum convex; the posterior femora much incrassated. Antennæ with the basal joint slightly incrassated and about equal in length to that of the head; second about twice the length of the first, and with its apical half incrassated; third much thinner than second, but stouter and longer than fourth. Body shining. Rostrum reaching the intermediate coxæ.

Found on low-growing plants (*Champion*).

1. *Calondas superbus*, n. sp. (Tab. XXIII. fig. 22.)

Ochraceous or greenish ochraceous; head, eyes, first and second joints of the antennæ, a broad subbasal fascia to pronotum, clavus, and an obscure transverse fascia to corium near claval apex, black; antennæ with the third joint luteous, its apex narrowly fuscous, fourth joint fuscous, with its base luteous; costal margin of corium (obsolete at base) and apex of cuneus reddish; membrane pale fuscous, with an obscure greyish spot on each outer margin; body beneath pale ochraceous or greenish ochraceous, disk of mesosternum and apex of abdomen roseate; legs concolorous, posterior femora and base of posterior tibiæ pale reddish; tarsi more or less infuscated.

The body is shining but distinctly pilose above.

Long. $5\frac{1}{2}$ –6 millim.

Hab. MEXICO (*Deppe, Mus. Berol.*); GUATEMALA, Cerro Zunil, El Zumbador (*Champion*); PANAMA, Volcan de Chiriqui 2000 to 3000 feet and 4000 to 6000 feet (*Champion*).

A Mexican specimen is here figured.

2. *Calondas fasciatus*, n. sp. (Tab. XXVI. fig. 1.)

Head luteous, with the apex and basal margin black; eyes pale brownish; antennæ with the first and second joints black, third and fourth joints creamy white, apex of the fourth fuscous. Pronotum black, with a central transverse fascia and the basal margin pale greenish. Scutellum black, with the lateral margins and apex pale greenish. Corium pale testaceous, with greenish suffusions on basal half; costal margin (obsolete at base and widening at apex) bright castaneous; claval margins blackish; cuneus greenish, the apex broadly castaneous; membrane pale fuscous, the cellular margins darker. Body beneath ochraceous; prosternum black, with a central transverse fascia and the basal margin (both continued from pronotum above) pale greenish; a lateral black spot to meso- and metasternums, and a black spot at base of posterior coxæ; femora and posterior tibiæ pale testaceous, anterior and intermediate tibiæ greenish, with their apices pale testaceous; anterior and intermediate tarsi infuscated, posterior tarsi pale luteous.

The body above is shining; pronotum distinctly and somewhat coarsely punctate; scutellum finely and transversely wrinkled, its margins levigate; corium distinctly and thickly pilose.

Long. 8 millim.

Hab. PANAMA, Bugaba (*Champion*).

In the specimen figured the clavus is castaneous, in all other specimens examined it is black.

3. *Calondas testaceus*, n. sp. (Tab. XXVI. fig. 2.)

Testaceous; basal margin of pronotum and the scutellum (excluding basal margin) pale greenish; eyes, subbasal margin of pronotum, claval margins, and apical margins of cuneus and corium blackish. Costal area of corium ochraceous, the costal margin of the corium (obsolete at base) and the cuneus pale testaceous or reddish. Membrane pale fuscous, the basal angle blackish. Body beneath, rostrum, and legs pale testaceous; head beneath luteous. Antennæ testaceous, apex of the second joint and the whole of the third joint ochraceous (fourth joint mutilated).

The body above is shining and distinctly pilose, especially on the corium and scutellum.

Long. 11 millim.

Hab. COSTA RICA, Irazu (*Rogers*).

MEGACÆLUM.

Megacælum, Fieber, Crit. Gen. p. 21 (1858); Eur. Hem. p. 64. 249 (1861); Walk. Cat. Het. vi. p. 42 (1873).

In this genus the extreme apex of the scutellum is deflexed and curved downwards, a character which with its subopaque coloration will sufficiently distinguish it from the preceding genus.

1. *Megacælum? signatum*, n. sp. (Tab. XXIII. fig. 11.)

Pale ochraceous, head and pronotum somewhat darker; scutellum with two black spots near apex; membrane pale hyaline, cellular margins pale ochraceous; body beneath, rostrum, and legs concolorous; eyes fuscous. Long. 8 millim.

Hab. MEXICO (*Sallé, Mus. Holm.*).

PROBA, gen. nov.

Body elongate, ovate, shining; hemelytra semitransparent; margin of the corium somewhat convex. Head anteriorly deflexed in front of the insertion of the antennæ. Antennæ pilose; basal joint moderately incrassated, about as long as the head; second joint twice as long as the first, its apical half moderately incrassated, third and fourth slender, third about twice the length of fourth, and together shorter than second. Pronotum sparingly and faintly punctate, its posterior margin more than twice the breadth of anterior, and concavely sinuate before scutellum. Anterior and intermediate tibiæ finely, and posterior tibiæ strongly setiform. Rostrum reaching the intermediate coxæ.

1. *Proba gracilis*, n. sp. (Tab. XXVI. fig. 3; var. *b*, Tab. XXV. fig. 25.)

Pale luteous; second joint of the antennæ (excluding base), basal margin, and four irregular discal spots to head, two large spots near anterior margin of pronotum, scutellum (excluding lateral margins and apex), extreme lateral margins of corium, apical angle of cuneus, and basal angle of membrane black; third and fourth joints of antennæ fuscous; basal fascia to pronotum, clavus, a central fascia to membrane (widened at base and apex), and apices of posterior femora more or less fuscous.

Var. *a*. Darker, the eyes fuscous, corium (excluding costal areas) infuscated.

Var. *b*. Pronotum black, with a central ochraceous fascia, clavus more or less black; corium with two large blackish spots at inner angles.

Long. 5 millim.

Hab. GUATEMALA, Cerro Zunil, Quezaltenango, Totonicapam (*Champion*).

I am quite unable to separate specifically the forms described above as appertaining to this species, which is apparently of a most protean character.

PARAPROBA, gen. nov.

Allied to *Proba*, but differing by the more elongate body; the margin of the corium not convex, but straight or slightly concavely sinuate; tibiæ non-setose; third and fourth joints of antennæ together as long as second joint.

1. *Paraproba fasciata*, n. sp. (Tab. XXVI. fig. 4.)

Pale ochraceous; eyes, antennæ (excluding basal joint), a transverse fascia between the lateral angles of the pronotum, scutellum (excluding lateral margins and apex), and an inner claval fascia black; claval sutural margins terminating and fusing in a transverse fuscous fascia to corium. Membrane pale fuscous, with the base and apex more or less pale ochraceous. Body beneath (*carded specimen*) with the posterior margin of prosternum, oblique lateral fasciæ to meso- and metasternums, a marginal segmental row of spots to, and the apex of, the abdomen black.

Var. *a*. Pronotum with an anterior narrow black fascia, the transverse fascia between the lateral angles replaced by two large lateral spots; scutellum ochraceous, the margins narrowly black. Apices of posterior femora more or less fuscous.

Var. *b*. Head black, the lateral spots to pronotum (as in var. *a*) extending to near anterior margin.

Var. *c*. Differing from var. *b* by having the scutellum wholly black.

Long. $3\frac{1}{2}$ -4 millim.

Hab. GUATEMALA, San Gerónimo, Cerro Zunil (*Champion*).

This appears to be a variable species, but the general characters, and the colour markings of the antennæ and membrane are always constant and distinctive.

2. *Paraproba pallescens*, n. sp. (Tab. XXVI. fig. 5.)

Pale ochraceous; apex of the second joint of antennæ and eyes black, two small discal spots to corium and cellular margins to membrane fuscous. Body beneath and legs pale ochraceous.

Long. 4 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

NEOPROBA, gen. nov.

Allied to *Paraproba*, but differing in having the pronotum distinctly transversely constricted a little before middle; antennæ more robust, the first joint shorter than the head, second joint shorter than the third and fourth together; tibiæ either obscurely or sometimes prominently setose.

a. *Tibiæ prominently setose.*

1. *Neoproba rubescens*, n. sp. (Tab. XXVI. fig. 6.)

Pale reddish ochraceous and finely pilose; head ochraceous, with the eyes black; antennæ with the basal joint black, its base and apex ochraceous, second joint ochraceous with its base black, third and fourth joints fuscous; pronotum with the basal portion behind constriction generally paler and less reddish in hue; scutellum with a pale lateral fascia on each side (not occupying basal angles nor reaching apex); membrane pale fuscous, the cellular margins reddish. Body beneath reddish ochraceous; legs ochraceous, bases of posterior tibiæ narrowly fuscous.

Long. 5 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

b. *Tibiæ obscurely setose.*2. *Neoproba varians*, n. sp. (Tab. XXVI. fig. 7.)

Very pale ochraceous, the pronotum and scutellum more or less roseate in hue. Head pale greenish, the basal margin, apex, a central longitudinal fascia and eyes black; antennæ black, base and apex of the first joint and apex of the second joint pale greenish; pronotum with the anterior collar pale greenish; body beneath (*carded specimen*) with the sternum roseate and the abdomen greenish; legs pale greenish ochraceous with dark speckles, tibial bases narrowly fuscous.

Long. 4 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

This species is somewhat variable in markings, the second joint of the antennæ being sometimes broadly annulated with ochraceous.

PANDAMA, gen. nov.

Head moderately robust, not or very slightly anteriorly deflected. Antennæ with the first joint robust and about equal in length to, or very slightly longer than, the head; second joint slender and about twice the length of the first; third and fourth joints together longer than the second. Pronotum subtriangular, the posterior margin concave and twice the width of the anterior margin, which possesses a very distinct and well-developed collar. Tibiæ non-setose. Other characters as in the two preceding genera.

1. *Pandama præclara*, n. sp. (Tab. XXVI. fig. 8.)

Head, pronotum, and scutellum pale greenish; eyes and basal joint of antennæ black, remainder of antennæ pale ochraceous; corium very pale ochraceous and semihyaline, speckled with brownish, with the apex narrowly fuscous, and with a large fuscous spot near costal margin a little before apex; cuneus pale hyaline, its apex fuscous; membrane very pale brownish and subhyaline, the cellular margins fuscous; body beneath and coxæ greenish; legs ochraceous, with the tarsal apices fuscous (rostrum mutilated).

Long. $4\frac{1}{2}$ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

I have not seen the species mentioned below, and am in doubt as to its affinities, but it would seem to be near *Neurocolpus*.

Capsus scrupeus, Say, Heterop. New Harm. 23. no. 13.

Phytocoris scrupeus, Uhler, Bull. U. S. Geol. & Geog. Surv. ii. p. 317¹.

Capsus tetrastigma, H.-S. Wanz. Ins. ix. fig. 959².

Capsus externus, H.-S. Wanz. Ins. viii. p. 16, fig. 791.

Hab. NORTH AMERICA, Southern States¹.—MEXICO^{1 2}.

Mr. Uhler remarks that this "is a very variable insect, both in colours and in the width and thickness of the body and members. Pigmy specimens often occur in Eastern Massachusetts. I have found it in July on the grape-vines north of Baltimore.

"The two figures of Herrich-Schäffer represent varieties which are occasionally found in Maryland. Neither of them represents accurately the shape of the joints of the antennæ, although figure 791 is more nearly correct than the other."

These two forms figured by Herrich-Schäffer are indeed very distinct; and though

Mr. Uhler states they are varieties of one species; I think a mistake may have been made in that respect, more particularly as he refers to the description as well as the figure of *C. tetrastigma*, the first of which really refers to another species *C. (Resthenia) divisa*, as pointed out by Stål and previously recorded here (*anteà* p. 258).

Division CAPSARIA.

Capsaria, Reuter, Bih. Vet.-Ak. Handl. iii: 1, p. 6 (1875).

The following characters used by Dr. Reuter in his diagnosis of this division—"cuneo breviusculo, fractura sæpe profunda"—appear most easy of recognition, and, as I understand the division and use it, the Capsaria have the cuneus shorter than in the preceding division, but principally broader at the base.

LYGUS.

Lygus, Hahn, Wanz. Ins. i. p. 147 (1831); Fieber, Crit. Gen. p. 42 (1858); Eur. Hem. p. 272 (1861); Reuter, Bih. Vet.-Ak. Handl. iii: 1, p. 15 (1875).

In *Lygus* the second joint of the antennæ is not, or very slightly, incrassated; the first joint of the posterior tarsi is very little longer than the second; the eyes are moderately exserted; the hemelytra are more or less pubescent; the cuneus moderately elongated.

This genus probably occurs wherever the Capsidæ are found.

1. *Lygus pratensis*. (Tab. XXIII. figs. 4, 6, 7, & 16, vars.)

Cimez pratensis, Linn. Syst. Nat. p. 728; Faun. Suec. p. 949; Scop. Ent. Carn. p. 133.

Lygæus pratensis, Fabr. Ent. Syst. iv. p. 171. n. 126; Syst. Rhynch. p. 234. n. 155; Fall. Mon. Cim. p. 83.

Phytocoris pratensis, Fall. Hem. Suec. i. p. 90; Kol. Mel. Ent. ii. p. 119. n. 99.

Capsus pratensis, Sahlb. Geoc. Fenn. p. 111; Kirschb. Caps. p. 64. n. 112; Flor. Rhyn. Liv. i. p. 517.

Lygus pratensis, Fieb. Eur. Hem. p. 273. n. 1; Dougl. & Scott, Hem. p. 464. n. 8; Reut. Hem. Gymn. Sc. et Fenn. i. p. 70; Öfv. Vet.-Ak. Förh. 1875, p. 72. n. 6.

Lygæus umbellatorum, Panz. Faun. Germ. p. 93. n. 19.

Phytocoris alpina, Kol. Mel. Ent. ii. p. 20. n. 100, t. 10. f. 24.

Capsus gemellatus, H.-S. Wanz. Ins. iii. p. 81, t. 99. f. 301; Kirschb. Caps. p. 64. n. 102.

Coreus? lineolaris, Pal. Beauv. Ins. p. 187, t. ii. f. 7.

Lygus lineolaris, Uhler, Hayden's Surv. Mont. p. 413. 1¹; Bull. U.S. Geol. & Geogr. Surv. ii. p. 818. 1²; ib. iii. p. 415. 1³.

Capsus oblineatus, Say, Het. New. Harm. p. 21. 7.

Lygus redimitus, Uhler*.

Lygus diffusus, Uhler*.

* Mr. Uhler (Hayd. Surv. Mont. p. 413. 1) gives these names as synonyms of *L. lineolaris*, Pal. Beauv., but does not give a reference to their publication, which, at the time of writing, I have not traced.

Hab. EUROPE; NORTHERN ASIA; NORTH AMERICA, Canada¹, United States generally¹, Colorado^{1 3}.—MEXICO (*Mus. Holm.*), Oaxaca (*Deppe, Mus. Berol.*), Ciudad in Durango (*Forrer*); GUATEMALA, Dueñas, Cerro Zunil, Quezaltenango, and near the city of Guatemala (*Champion*).

Four Mexican varieties of this species are here figured. *L. pratensis* is a most variable species; but in all its protean forms I find the marginal spots to the cuneus and those at the pronotal angles to be perfectly constant. Some extreme varieties have the body beneath and the legs almost black.

2. ***Lygus tactus***, n. sp. (Tab. XXVI. fig. 9.)

Ochraceous; apical third of second joint, base and apex of third joint, and the whole of fourth joint of antennæ, eyes and basal margin of head, two large anterior submarginal spots to pronotum and a subbasal marginal line to same, basal margin of scutellum, claval, inner, and sutural margins, a large posterior discal spot to corium, inner basal angle and apex of cuneus, basal angle and cellular margins of membrane, base and apex of rostrum, a series of obscure marginal and segmental spots to abdomen, apices of posterior femora and tarsal apices fuscous or black. The basal portion of pronotum, and the clavus and inner disk of corium is more or less infuscated, and the membrane possesses a large central and two lateral pale fuscous spots.

Var. *a.* With the discal spot to corium reduced in size and linear in shape.

Long. 5½ millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

3. ***Lygus tribulis***, n. sp. (Tab. XXVI. fig. 10.)

Allied to *L. tactus*, but proportionately broader and stouter, and with the following colour differences, viz.:—the lateral margins of the pronotum are black, the scutellum has a very broad subquadrate central spot, the clavus has the apical third, and the corium an irregular transverse fascia black.

Long. 5 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

4. ***Lygus sallæi***. (Tab. XXIII. figs. 2 & 3, var.)

Lygus sallæi, Stål, Stett. ent. Zeit. xxiii. p. 321. 249¹.

Hab. MEXICO¹, Milpas in Durango (*Forrer*).

A typical specimen in the Stockholm Museum is represented by fig. 2, and a varietal specimen in the same collection by fig. 3.

5. ***Lygus championi***, n. sp.

Ochraceous; basal margin of head, apex of second joint of antennæ, basal and lateral submarginal lines to pronotum, two small spots at claval apices (sometimes a small discal spot to corium and two small subapical spots to scutellum) black; posterior femora more or less distinctly apically annulated with fuscous; body beneath and legs concolorous, tarsal apices fuscous. Third and fourth joints of antennæ somewhat fuscous.

Long. 6½ millim.

Hab. GUATEMALA, Quezaltenango and near the city of Guatemala (*Champion*).

6. ***Lygus vinaceus***, n. sp. (Tab. XXVI. fig. 11.)

Pale olivaceous; eyes, a basal submarginal line to pronotum, a central basal longitudinal and a transverse

BIOL. CENTR.-AMER., Rhynch., February 1884.

subapical fascia to scutellum, two contiguous spots at base and apex of claval suture, and a broad irregular transverse fascia to corium dark fuscous or black. Antennæ fuscous; base of first joint and base and apex of third joint luteous. Body beneath and legs pale olivaceous; lateral margins of the abdomen somewhat broadly infuscated; apices of femora more or less infuscated, those of the posterior femora somewhat distinctly biannulated; rostrum ochraceous, its apex black.

Long. $7\frac{1}{2}$ to 8 millim.

Hab. GUATEMALA, Totonicapam (*Champion*).

7. **Lygus inspersus**, n. sp. (Tab. XXIII. fig. 8.)

Pale greenish ochraceous; eyes and a number of minute spots irregularly scattered over the body, both above and beneath, fuscous. Legs and antennæ (the last with the third and fourth joints mutilated) pale greenish ochraceous, apices of tarsi fuscous or black.

Long. 6 millim.

Hab. MEXICO (*Deppe, Mus. Berol.*).

8. **Lygus scutellatus**, n. sp. (Tab. XXIII. fig. 9, & var. fig. 18.)

Pale ochraceous; eyes, two small contiguous spots at base of pronotum, inner claval margins and sutures, a small spot near each inner angle of corium, and a large basal spot to membrane fuscous (sometimes reddish). Antennæ black; base of first joint, a broad central annulation to second joint, and base of third joint ochraceous; scutellum pale shining greenish ochraceous. Head with a central longitudinal fascia and a marginal line in front of eyes; pronotum with two anterior linear spots, and scutellum with the base narrowly reddish. Body beneath pale ochraceous; abdomen with a submarginal reddish fascia; apices of tarsi and rostrum black.

Var. *a.* Pronotum with a broad subbasal fuscous fascia and the scutellum bright greenish.

Long. 5 millim.

Hab. MEXICO (*Deppe, Mus. Berol.*), Presidio and Milpas (*Forrer*); GUATEMALA, San Gerónimo (*Champion*).

9. **Lygus cristatus**, n. sp. (Tab. XXIII. fig. 10.)

Closely allied to the preceding species, but differing by the scutellum possessing a broad central longitudinal reddish-brown fascia and a longitudinal spot at each inner angle of corium; the clavus is sometimes totally reddish brown (as in the specimen figured), or with its inner margin and suture only of that colour, as in *L. scutellatus*. The general colour varies from pale greenish to ochraceous.

Long. 5 millim.

Hab. MEXICO (*Deppe, Mus. Berol.*); GUATEMALA, San Gerónimo, Dueñas (*Champion*); PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

A Mexican specimen is here figured.

PÆCILOCAPSUS.

Pæcilocapsus, Reuter, Öfv. Vet.-Ak. Förh. 1875, p. 73.

In this genus the body is glabrous and obsoletely and minutely punctured, the second joint of the antennæ being distinctly incrassated.

Dr. Reuter has divided his genus into two subgenera—*Pæcilocapsus* and *Metriorhynchus*, the first of which is, according to our present knowledge, alone represented in this fauna. Its characteristics consist in having the basal joint of the antennæ not longer than the head, and the rostrum not passing the anterior coxæ.

1. **Pæcilocapsus alacer.** (Tab. XXIII. fig. 1.)

Brachycoleus alacer, Stål, Stett. ent. Zeit. xxiii. p. 319. 243¹.

Pæcilocapsus (Pæcilocapsus) alacer, Reuter, Öfv. Vet.-Ak. Förh. 1875, p. 74.

Hab. MEXICO¹; GUATEMALA, Cerro Zunil (*Champion*).

A typical specimen in the Stockholm Museum is here figured.

The Guatemalan examples received from Mr. Champion are much more brightly coloured than the Mexican type; but, although the head is more distinctly red, the coxæ are almost concolorous with the body. The antennæ (not described by Stål) have the first joint blackish with its extreme base pale brownish, second joint pale brownish with the apical half blackish, third and fourth joints pale fuscous.

2. **Pæcilocapsus agrarius**, n. sp.

Piceous; head, an irregular anterior transverse fascia to pronotum, basal margin (narrowly) of pronotum, lateral margins of corium and cuneus (broadly), apical half of membrane, tibiæ, and tarsi more or less brownish or ochraceous.

Var. *a.* Pronotum (excluding base) brownish or ochraceous.

Var. *b.* Head, pronotum, and corium greenish ochraceous.

Long. 6 millim.

Hab. GUATEMALA, Totonicapam (*Champion*).

It is quite probable that this species may represent but varietal forms of the preceding *P. alacer*, Stål. The material now before me, however, does not allow me to adopt this conclusion.

3. **Pæcilocapsus frumentarius**, n. sp. (Tab. XXVI. fig. 12.)

Bright ochraceous; antennæ, a broad arcuated fascia commencing at claval apex, and occupying inner apical margin of corium and part of inner margin of cuneus, basal half of membrane, and abdomen beneath black; tibiæ fuscous, posterior tibiæ with a broad basal ochraceous annulation.

Long. 7 millim.

Hab. PANAMA, Volcan de Chiriqui 4000 to 6000 feet (*Champion*).

4. **Pæcilocapsus nigriger.** (Tab. XXII. figs. 12 & 13, vars.)

Brachycoleus nigriger, Stål, Stett. ent. Zeit. xxiii. p. 319. 244¹.

Pæcilocapsus (Pæcilocapsus) nigriger, Reut. Öfv. Vet.-Ak. Förh. 1875, p. 74.

Hab. MEXICO¹ (*Deppe, Mus. Berol.*).

This species is subject to considerable variation in colour and markings. The colour varies from ochraceous to greenish, as the two specimens here figured sufficiently indicate. Fig. 13 represents a variety which apparently possesses the maximum in dark macular marking. In fig. 12 the submarginal black stripe to the lateral sides of the pronotum is absent, and the black fasciæ to the corium are attenuated; whilst in a specimen kindly forwarded to me by Dr. Signoret, the corium merely possesses a claval oblique fascia and two discal spots, being the "var. *b*" as described by Stål.

5. **Pœcilocapsus ornatulus.** (Tab. XXVII. figs. 1, 2, 3, & 4.)

Brachycoleus ornatulus, Stål, Stett. ent. Zeit. xxiii. p. 319. 245¹.

Capsus decoratus, Walk. Cat. Het. vi. p. 100. n. 185².

Hab. MEXICO¹ (*coll. Sign.*), Orizaba²; GUATEMALA, Zapote, Cerro Zunil (*Champion*).

This is a very variable species. Figs. 1 & 2 represent Mexican forms in the collection of Dr. Signoret, and exhibit the maximum of melanism. Figs. 3 & 4, on the contrary, portray the extreme of albinic variation, and represent Guatemalan specimens.

NEOBORUS, gen. nov.

Body shining, pilose, and punctate. Head almost vertical, very broad across the eyes, which are very prominent. Antennæ with the basal joint about as long as, or a little longer than, the head and very slightly incrassated, the second joint about twice as long as the first, very slightly thickened towards apex. Pronotum long, its length generally almost equalling its breadth, the lateral margins nearly straight, being only very slightly concave about centre; posterior margin moderately convex. Corium with the margins slightly dilated and convex. Rostrum reaching the intermediate coxæ.

Neoborus has some superficial affinities with *Systratiotus*, Dougl. & Scott, a genus recorded by Dr. Reuter as occurring in Texas.

1. **Neoborus saxeus**, n. sp. (Tab. XXVII. fig. 5.)

Ochraceous, coarsely punctate; anterior and posterior margins of the pronotum very narrowly luteous; scutellum luteous, with a central basal piceous spot; eyes, an anterior transverse rugosity to pronotum, clavus, and costal margin of corium pale castaneous; corium with a pitchy spot before inner base of cuneus, which is luteous; membrane piceous; body beneath and legs ochraceous, apices of the femora more or less castaneous, apices of the tarsi piceous. Basal joint of the antennæ black; base and apex of rostrum piceous. The pronotum and corium are coarsely and the scutellum sparingly punctate.

Long. 4½ millim.

Hab. PANAMA, Volcan de Chiriqui 4000 to 6000 feet (*Champion*).

2. **Neoborus scaber**, n. sp. (Tab. XXVII. fig. 6.)

Allied to the last species but larger, paler in hue; the eyes black; scutellum with the whole disk piceous; clavus (excluding extreme apex) and corium (excluding two pale linear fasciæ) infuscated; cuneus infuscated, its outer margin and apex luteous; membrane piceous; body beneath and legs pale ochraceous; margins of sternum and abdomen piceous; femora and legs more or less annulated with brownish; apices of the tarsi piceous; antennæ black, base of the first and basal half of the third joint luteous.

Long. 5 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

3. **Neoborus hirsutus**, n. sp. (Tab. XXVII. fig. 7.)

Head and pronotum ochraceous; eyes and a central longitudinal line to head, two subbasal transverse streaks, and some anterior lineate marks to pronotum, scutellum, and corium shiny fuscous; cuneus reddish, its apex and margins luteous; membrane fuscous, the cellular margins ochraceous; legs and antennæ ochraceous. (Body beneath imperfectly seen, owing to the specimen being carded.)

Long. 5 millim.

Hab. GUATEMALA, Pantaleon (*Champion*).

In this species the pronotum is somewhat shorter and broader at the base than in the two preceding species, thus attaining a subgeneric position.

EUBATAS, gen. nov.

Apparently allied to *Euarmentosus*, Reuter. Body shining, moderately pilose; the corium somewhat strongly pilose. Antennæ with the basal joint moderately incrassated, about the length of the head and sparingly pilose; second joint very strongly pilose, gradually incrassated from base, and about, or a little more than, twice the length of the first; third and fourth slender, sparingly pilose and together about equal in length to the second. Eyes contiguous to the pronotum. Pronotum with the base truncate at area of scutellum, the lateral angles posteriorly oblique, and breadth at same more than twice that of anterior margin. Scutellum with a distinct apical carination. Femora glabrous, tibiæ setiform. Rostrum reaching the intermediate coxæ.

1. *Eubatas chiriquinus*, n. sp. (Tab. XXVII. fig. 8.)

Head, pronotum, scutellum, and base of corium to near apex of scutellum reddish ochraceous, remainder of corium dark bluish; cuneus pale testaceous, with the base dark bluish; membrane fuscous; antennæ testaceous, second joint (excluding extreme base) and eyes blackish; head beneath, sternum, and legs reddish-ochraceous, abdomen purplish black; apices of the tibiæ and tarsi infuscated.

Long. $4\frac{1}{2}$ millim.

Hab. PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

NEOCAPSUS, gen. nov.

Allied to the preceding genus, but with the rostrum reaching the posterior coxæ. Antennæ with the second joint twice as long as the first, but not strongly incrassated or pilose.

Body shiny, punctate and pilose. Pronotum with the lateral angles obliquely rounded, and between them more than twice as broad as at anterior margin. Tibiæ strongly setiform.

1. *Neocapsus mexicanus*. (Tab. XXII. fig. 19.)

Pronotum reddish ochraceous; head, antennæ (third and fourth joints mutilated), anterior collar and transverse basal fascia to pronotum, scutellum, corium, and cuneus piceous; membrane pale fuscous; body beneath and legs (anterior and posterior legs mutilated) dark testaceous or pale piceous; lateral margins of prosternum reddish ochraceous.

Long. 7 millim.

Hab. MEXICO (*Deppe, Mus. Berol.*).

HORCIAS, gen. nov.

Body convex, shining, impunctate, very slightly and obsoletely pilose. Head smooth. Eyes large, prominent, and contiguous to anterior margin of pronotum. Antennæ with the basal joint slightly incrassated and about as long as the head; second joint nearly twice as long as the first with its apex slightly incrassated, third and fourth slender. Rostrum reaching the intermediate coxæ. Pronotum with a distinct anterior collar, its basal half convex and deflected to anterior margin, which is about half the width of the base between the lateral angles. Scutellum moderately tumid. Tibiæ setiform.

1. *Horcias variegatus*, n. sp. (Tab. XXVI. fig. 13.)

Bright ochraceous; eyes, apex of head, a basal fascia (widest at centre) to pronotum, a central longitudinal fascia (sometimes absent) to scutellum, clavus, lateral fascia to corium (which does not quite reach outer margin at base, is very broad at apex, and there transversely connected with claval apex), and inner base and apex of cuneus, black. Antennæ ochraceous; basal annulations to and apical half of first and second joints, apex of third joint, and basal annulation to and apex of fourth joint black.

Body beneath and legs ochraceous; femora with their apices more or less testaceous, anterior and intermediate

tibiæ with a central, and posterior tibiæ with two (one near centre, and one near apex) pale ochraceous annulations, and their apical halves always darker or fuscous; tarsi pale ochraceous, with their apices black.

Long. $4\frac{1}{2}$ –5 millim.

Hab. PANAMA, David and Bugaba (*Champion*).

2. **Horcias notatus**, n. sp. (Tab. XXVI. fig. 14.)

Ochraceous; eyes, apex of head, a large central basal spot to pronotum, clavus (excluding base), lateral margins of corium, commencing a short distance from base and extending to about centre, where it is transversely continued in an oblique fascia to apex of clavus, inner base and apex of cuneus, black; membrane pale ochraceous, the cellular margins black. Antennæ ochraceous; basal annulations to, and apical halves of first and second joints, and apex of third joint black; fourth joint fuscous, with a pale basal annulation. Body beneath and legs ochraceous; femora with obscure apical dark annulations; tibiæ darker, with two distinct pale annulations; tarsal apices black.

Long. 5 millim.

Hab. GUATEMALA, Pantaleon (*Champion*); PANAMA, David (*Champion*).

3. **Horcias thoracicus**, n. sp. (Tab. XXVI. fig. 15.)

Head and pronotum reddish ochraceous; scutellum and corium bluish black; cuneus purplish; antennæ ochraceous, first joint (excluding extreme base), basal annulations to, and apical halves of, second and third joints, and the fourth joint fuscous or black; membrane fuscous; sternum beneath and legs reddish ochraceous (abdomen mutilated); tibiæ darker, anterior and intermediate tibiæ with a central, and posterior tibiæ with two (one near centre, and one near apex) pale annulations; tarsi pale ochraceous, their apices black.

Long. 5 millim.

Hab. PANAMA, Bugaba (*Champion*).

4. **Horcias chiriquinus**, n. sp.

Allied to the last species, but differing in the following particulars:—Head black; eyes very pale fuscous; antennæ as in *H. thoracicus* but darker, the third joint (excluding base) wholly black, fourth joint mutilated; pronotum with the basal margin bluish black; body beneath bluish black, prosternum ochraceous; legs dark castaneous, intermediate tibiæ with a central, and posterior tibiæ with two (one near base, and one near apex), pale annulations; tarsi pale ochraceous, their apices black.

Long. 5 millim.

Hab. PANAMA, Volcan de Chiriqui 4000 to 6000 feet (*Champion*).

5. **Horcias scutellatus**, n. sp.

Black; pronotum (excluding a broad black basal margin) and scutellum ochraceous. Antennæ black, the bases of the joints narrowly ochraceous. Body beneath, with the head, sternum, and legs ochraceous, the abdomen blackish; intermediate tibiæ with a central, and posterior tibiæ with two (one near base, and one near apex) pale annulations; tarsi pale ochraceous, with their apices black.

Long. $4\frac{1}{2}$ –5 millim.

Hab. GUATEMALA, San Juan in Vera Paz (*Champion*); PANAMA, Bugaba, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

6. **Horcias decoratus**, n. sp. (Tab. XXVII. fig. 9.)

Reddish ochraceous; a pronotal basal fascia (broadest at centre) and the corium castaneous; scutellum luteous, with a large central basal castaneous spot, and the apex of the same colour; cuneus pale castaneous;

membrane pale fuscous; eyes black; antennæ brownish, extreme bases of the joints luteous, a basal annulation and apical half of the second joint blackish. Body beneath with the head, sternum, and legs reddish ochraceous, abdomen blackish; anterior and intermediate tibiæ with a central pale annulation (posterior tibiæ imperfectly seen, owing to specimen being carded); tarsi ochraceous, their apices fuscous.

Long. 5 millim.

Hab. GUATEMALA, Zapote (*Champion*).

7. *Horcias plagosus*, n. sp. (Tab. XXVI. fig. 16.)

Ochraceous; scutellum luteous, with a central castaneous fascia; inner area of clavus, and a broad lateral fascia (commencing a short distance from base, not reaching costal margin, widened and inwardly curved before apex, where it contains a small ochraceous spot, and terminating at inner base of cuneus) to corium, bright castaneous; outer margin of clavus fuscous; cuneus pale ochreous, a quadrate spot near inner basal angle and the apex bright castaneous; membrane pale brownish, with waved pale fuscous fasciæ; eyes black; antennæ black or fuscous, bases of the joints, a central annulation to the second joint, and the whole central portion of the fourth joint ochraceous. Body beneath and legs ochraceous; femora with some obscure castaneous apical annulations; tibiæ with their bases more or less castaneous and biannulated with the same colour; tarsi ochraceous, their bases and apices fuscous.

Long. 5 millim.

Hab. PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

8. *Horcias plumatus*. (Tab. XXVII. fig. 10.)

Allied to the preceding species, but differing in the following particulars:—The antennæ are black, the bases of the first and third joints being alone ochraceous; the inner claval area and outer claval margin are dark fuscous; the corium is uniformly ochraceous, with a dark fuscous spot at inner apical angle; membrane pale fuscous, the cellular margins and apex piceous; body beneath and legs pale ochraceous, posterior femora with apical castaneous annulations, posterior tibiæ with the bases piceous; tarsi pale ochraceous, with their apices fuscous.

Long. 4½ millim.

Hab. PANAMA, Bugaba (*Champion*).

9. *Horcias rutilus*, n. sp. (Tab. XXVII. fig. 11.)

Pronotum and scutellum pale sanguineous, basal margin of pronotum and the corium pale castaneous; head piceous; eyes black; antennæ piceous, bases of the joints luteous, second joint with a broad ochraceous annulation near base; membrane pale fuscous. Body beneath and legs pale sanguineous; apices of tibiæ infuscated, intermediate tibiæ with a central, and posterior tibiæ with two (one near centre, and one near apex) pale ochraceous annulations; tarsi pale ochraceous, their apices fuscous.

Long. 5 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

10. *Horcias unicolor*, n. sp. (Tab. XXVII. fig. 12.)

Very pale sanguineous; eyes and antennæ black, the last with the joints narrowly ochraceous at their base (fourth joint mutilated); corium with a submarginal ochraceous fascia commencing about centre and terminating in inner base of cuneus, which also has the apex fuscous; membrane smoky ochraceous, with pale fuscous suffusions; body beneath and legs very pale sanguineous; coxæ more or less ochraceous, apices of the tarsi piceous.

Long. 5½ millim.

Hab. PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

11. *Horcias atratus*, n. sp.

Black; membrane fuscous; eyes luteous; antennæ black, bases of the joints (third and fourth joints mutilated) luteous, second joint with a broad brownish annulation near base; body beneath and legs black, intermediate tibiæ with a central, and posterior tibiæ with two (one central and one near apex) pale ochraceous annulations; tarsi pale ochraceous, their apices black.

Long. 5 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

CALOCORISCA, gen. nov.

Scutellum tumid and convexly gibbous, apical third deflexed, apex globosely suberect. Body finely pilose. Pronotum punctate and subrugulose, twice as broad posteriorly as at anterior margin, lateral angles rounded and from thence obliquely angulated to angles of scutellum, where the posterior margin is truncate. Eyes large and prominent. Head moderately slender, transversely striate and with a faint central longitudinal sulcation. Antennæ slender, moderately and finely pilose; basal joint but little longer than the head, second more than twice the length of the first, and gradually incrassated towards apex; third and fourth attenuated and together shorter than the second. Rostrum about reaching the intermediate coxæ. Membrane more or less distinctly reticulated.

1. *Calocorisca villosa*, n. sp. (Tab. XXVI. fig. 17.)

Greenish ochraceous; a basal fascia to pronotum and the scutellum and corium mottled with fuscous, membrane greenish ochraceous, with a large basal fuscous spot, and fuscous reticulations on apical half; antennæ ochraceous, third and fourth joints more or less fuscous; eyes black; pronotum with two small, shining black, macular callosities near anterior margin; corium with the lateral margin distinctly spotted with fuscous, and with an obscure linear discal fuscous spot; cuneus fuscous, the apex and lateral margin ochraceous, the last spotted with fuscous; body beneath and legs ochraceous, lateral margins of the body broadly fuscous; annulations to femora and apices of tibiæ and tarsi fuscous.

Long. 7 millim.

Hab. GUATEMALA, Senahu, Capetillo (*Champion*); PANAMA, Volcan de Chiriqui 4000 to 6000 feet (*Champion*).

2. *Calocorisca thoracica*, n. sp. (Tab. XXVII. fig. 13.)

Pale ochraceous; eyes, two posteriorly attenuated spots at anterior margin, and a transverse fascia at base of pronotum, scutellum, corium, and cuneus fuscous; lateral margins of corium spotted with pale ochraceous, lateral margin and apex of cuneus more or less ochraceous; membrane smoky subhyaline, with fuscous suffusions; body beneath and legs much as in preceding species, but the tibiæ thickly annulated with brownish; antennæ with the first and second joints ochraceous, third fuscous (fourth mutilated).

Long. 9½ millim.

Hab. COSTA RICA, Irazu (*Rogers*).

3. *Calocorisca tenera*, n. sp. (Tab. XXVI. fig. 18.)

Pale ochraceous, more or less mottled with fuscous; eyes, and third and fourth joints of antennæ fuscous; two shining black rounded macular callosities near anterior margin of pronotum; scutellum with a more or less distinct central longitudinal fuscous line; cuneus distinctly darker and more or less fuscous; membrane smoky subhyaline, mottled with pale fuscous; body beneath and legs ochraceous; lateral margins of the body more or less infuscated, annulations to femora and apices of tibiæ and tarsi fuscous.

Long. 7-8 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

4. *Calocorisca antennata*, n. sp. (Tab. XXVII. fig. 14.)

Head, pronotum, and scutellum ochraceous; eyes and a central linear fascia to head, broad basal, lateral, and central fasciæ to pronotum, basal, central, and lateral fasciæ to scutellum fuscous or black; apex of scutellum shining pale ochraceous; corium pale castaneous, a longitudinal claval line, a large discal spot, and a series of small spots on lateral margins fuscous or black; cuneus dark fuscous, its apex and a series of spots on lateral margin ochraceous; membrane obscure ochraceous, with fuscous reticulations; antennæ fuscous, the basal joint ochraceous; body beneath ochraceous, apparently (*carded specimen*) clouded with fuscous; legs ochraceous; femora and tibiæ annulated with fuscous; apices of the tarsi fuscous.

Long. 9 millim.

Hab. GUATEMALA, Capetillo (*Champion*).

CIMATELAN, gen. nov.

Allied to *Calocorisca*, but differs in having the body flatter, more ovate, shining, and thickly punctate. Scutellum only slightly tumid, the apex depressed. Pronotum coarsely punctate, with the lateral margins nearly straight, not sinuated. Head and antennæ generally as in *Calocorisca*. Membrane semihyaline, not reticulated. Rostrum just passing the intermediate coxæ.

1. *Cimatlan delicatum*, n. sp. (Tab. XXVII. fig. 15.)

Head ochraceous, spotted and striated with fuscous; eyes fuscous; antennæ ochraceous, apical half and sometimes the whole of the second joint fuscous; pronotum black, anterior and lateral margins and a small central spot at base ochraceous; scutellum black, basal angles and apex luteous and levigate; corium and cuneus ochraceous, thickly mottled with fuscous; apex of cuneus fuscous; membrane smoky subhyaline, cellular margins fuscous; body beneath ochraceous, thickly mottled with fuscous; legs ochraceous, annulated with fuscous.

Var. *a.* Head with the disk fuscous; second, third, and fourth joints of antennæ more or less fuscous.

Long. 7–8½ millim.

Hab. GUATEMALA, Capetillo, Panajachel (*Champion*).

FULVIUS.

Fulvius, Stål, Stett. ent. Zeit. xxiii. p. 322 (1862); Walk. Cat. Het. vi. p. 47 (1873).

This genus is very distinct from those to which it is in this work allied, being distinguished by the more elongate body, the elongately produced head, the pronotum as described by Stål ("thorax leviter transversus, trapezoideus, basi truncatus, callis leviter elevatis, margine antico haud calloso," &c.).

Species of this genus are found running actively on the surface of fungoid growths attached to fallen timber (*Champion*).

1. *Fulvius anthocorides*. (Tab. XXIII. fig. 15.)

Fulvius anthocorides, Stål, Stett. ent. Zeit. xxiii. p. 322. 253¹.

Hab. MEXICO¹; GUATEMALA, Balheu (*Champion*); PANAMA, Volcan de Chiriqui 2000 to 4000 feet, Bugaba, David (*Champion*).

Panama specimens collected by Mr. Champion differ from typical Mexican specimens (one of which, in the Stockholm Museum, is here figured) by the less variegated corium.

BIOL. CENTR.-AMER., Rhynch., April 1884.

The examples from Panama have also, usually, a white spot on the corium extending from the lateral margin to about the centre of the claval margin; but intermediate forms exist in which this spot is subobsolete.

Of the antennæ (not described by Stål) the basal joint is castaneous, the second joint darker but with its apical third whitish, the remaining joints slender and pale fuscous.

2. **Fulvius albomaculatus**, n. sp. (Tab. XXVII. fig. 16.)

Head black; antennæ with the first joint ochraceous, its base narrowly piceous; second joint ochraceous, its centre piceous and its apical third whitish; third and fourth joints fuscous; pronotum black, its base, which has its centre piceous, reddish; scutellum black; corium pale whitish ochraceous, base of costal margin, apical third, and clavus (excluding apex) black; cuneus blackish, with a large basal roseate spot; membrane very pale fuscous and semihyaline, cellular margins darker. Body beneath blackish; coxæ (excluding base) luteous; femora reddish ochraceous, tibiæ brownish, tarsi luteous.

Long. 4 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

3. **Fulvius fuscans**. (Tab. XXVII. fig. 17.)

Head and pronotum brownish ochraceous; head with the eyes and lateral margins, pronotum with a central basal spot, to which are attached two central spots terminating in a transverse fascia (enclosing two pale spots), the lateral margins, and a small spot on each side near base of corium dark fuscous; scutellum dark fuscous, the apical third pale ochraceous; corium brownish ochraceous, mottled with fuscous, and with two lateral marginal whitish spots, one at base and one near centre; cuneus fuscous, with a large transverse and somewhat lunate whitish spot; membrane pale fuscous, the cellular margins darker. Body beneath imperfectly seen (*carded specimen*); legs dark brownish; femora with broad central and narrow apical paler annulations; bases of tibiæ, and the tarsi ochraceous; antennæ with the basal joint brownish ochraceous, its apex narrowly paler; second joint blackish, third and fourth joints fuscous.

Long. 3½ millim.

Hab. GUATEMALA, Balheu (*Champion*).

4. **Fulvius atratus**. (Tab. XXVII. fig. 18.)

Black; corium with a subbasal transverse whitish fascia terminating at centre of outer claval margin; cuneus testaceous, inner basal angle and apex black; membrane blackish, its apical half pale fuscous; femora brownish ochraceous, with their bases piceous; tibiæ pale fuscous, tarsi ochraceous; antennæ with the first joint brownish ochraceous, its base piceous; second joint black, third and fourth joints fuscous.

Long. 4 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

HENICOCNEMIS.

Henicocnemis, Stål, Rio Jan. Hem. p. 53 (1858).

Hemicocnemis, Walk. Cat. Het. vi. p. 47 (1873).

This genus is particularly characterized by the compressed and dilated anterior tibiæ; the posterior femora are also compressed.

According to our present knowledge, *Henicocnemis* is confined to the Neotropical Region.

1. *Henicocnemis albitarsis*. (Tab. XXVII. fig. 19.)

Henicocnemis albitarsis, Stål, Stett. ent. Zeit. xxiii. p. 320. 248¹.

Hab. MEXICO¹.

A typical specimen in the collection of Dr. Signoret is here figured.

2. *Henicocnemis albo-ornata*, n. sp. (Tab. XXVII. fig. 20.)

Black, clothed with white pile; pronotum with two foveate black spots on anterior portion of disk; antennæ ochraceous; apical thirds of the first, second, and third joints and the whole of the fourth joint fuscous; legs dark castaneous or black, and clothed with white pile; intermediate tibiæ with one and posterior tibiæ with two pale ochraceous annulations; tarsi pale ochraceous, with their apices black; membrane piceous, apices of the cellular margins whitish, and with a whitish spot on each lateral margin.

Long. 4-4½ millim.

Hab. PANAMA, Bugaba (*Champion*).

This species seems to be closely allied to *H. patellata*, Stål, a species described from Rio Janeiro. From the description of Stål's species, it differs by its smaller size, the foveate spots to the pronotum, its white pilosity, different colour of the antennæ, &c.

Division BRYOCORARIA.

Bryocoraria, Reuter, Bih. Vet.-Ak. Handl. iii: 1, p. 6 (1875).

Cyllocoraria, Reuter, Bih. Vet.-Ak. Handl. iii: 1, p. 6 (1875).

Cyllocoraria, Reuter, Öfv. Vet.-Ak. Förh. 1875, p. 79.

As I do not, at present, clearly apprehend the distinction, in all cases, of the above divisions proposed by Dr. Reuter, I have, to prevent confusion, and in conformity with the course pursued at p. 212 of this work when dealing with some of the late Dr. Stål's divisions, placed them together. In doing this I have no wish or intention to disparage the validity of Dr. Reuter's work; but as this publication is primarily "faunistic" in character, I should, had I adopted that author's systematic proposals, been compelled to make even further divisional separation of genera.

The antennæ being not quite so wide apart as the eyes, appears to be the strongest structural difference of the division as here used.

ECCRITOTARSUS.

Eccritotarsus, Stål, Rio Jan. Hem. i. p. 57 (1858); Walk. Cat. Het. vi. p. 47 (1872).

The following is Stål's complete diagnosis of this genus:—"Corpus formâ variabile, ovale, oblongum, vel elongatum. Membrana unicellulata. Tarsi basi gracillimi apicem versus sensim latiores, crassiores."

a. *Body subelongate. Pronotum not prominently gibbous.*

1. ***Eccritotarsus generosus***. (Tab. XXII. fig. 24.)

Eccritotarsus generosus, Stål, Stett. ent. Zeit. xxiii. p. 323. 254¹.

Eccritotarsus eucosmus, Stål, Stett. ent. Zeit. xxiii. p. 323. 255².

Hab. MEXICO^{1 2} (*coll. Sign.*); GUATEMALA, Zapote, San Isidro (*Champion*),

A typical specimen of *E. generosus* in the Stockholm Museum is here figured, with which I have compared typical specimens of *E. eucosmus* in the collection of Dr. Signoret, and have come to the conclusion that differential characters do not exist, sufficient at least to denote more than one species.

2. ***Eccritotarsus nigripes***, n. sp.

Dark bluish black; head (both above and beneath) and pronotum sanguineous; the eyes vary in colour from sanguineous to greyish ochraceous; the body above is distinctly and finely punctate.

Var. a. Basal joint of the antennæ and basal margin of the scutellum sanguineous.

Long. 4½ millim.

Hab. MEXICO, Ciudad (*Forrer*); GUATEMALA, Cubilguitz (*Champion*).

3. ***Eccritotarsus genetivus***, n. sp. (Tab. XXII. fig. 25.)

Head and pronotum reddish ochraceous; scutellum, corium, and body beneath piceous; membrane fuscous; coxæ and legs luteous, apices of the posterior femora and apices of the tarsi fuscous; rostrum luteous, its apex piceous; antennæ with the basal joint ochraceous; second joint piceous, remaining joints mutilated.

Long. 4½ millim.

Hab. MEXICO (*Deppe, Mus. Berol.*).

4. ***Eccritotarsus splendens***, n. sp. (Tab. XXVIII. fig. 1.)

Dark shining bluish; head, pronotum, sternum, and legs luteous; antennæ piceous, base of the first joint luteous; rostrum luteous, with its apex piceous; eyes blackish; legs with an upper linear streak to anterior femora, a subapical broad annulation to intermediate and posterior femora, basal and central annulations to tibiæ, and base and apex of tarsi fuscous; membrane smoky subhyaline, its basal cellular area piceous.

Long. 4½ millim.

Hab. PANAMA, Bugaba (*Champion*).

In this species the eyes are large and considerably recurved; the antennal joints are uniform, and not distinctly incrassated.

5. ***Eccritotarsus vestitus***, n. sp. (Tab. XXVIII. fig. 2.)

Ochraceous; antennæ, membrane, tibiæ, and tarsi piceous; scutellum, clavus (excluding base), and inner margins of corium bluish black; apical margin of the membrane smoky hyaline. The ochraceous colouring of the corium is more rufous than that of the head and pronotum.

Long. 4½ millim.

Hab. GUATEMALA, Pantaleon (*Champion*).

The antennæ in this species are distinctly pilose, and the apex of the basal joint distinctly incrassated.

6. ***Eccritotarsus mundulus***. (Tab. XXIII. fig. 19.)

Eccritotarsus mundulus, Stål, Stett. ent. Zeit. xxiii. p. 323. 257¹.

Hab. MEXICO¹.

A typical Mexican specimen in the Stockholm Museum is here figured.

b. *Body ovate. Pronotum prominently gibbous.*

7. ***Eccritotarsus pallidirostris***. (Tab. XXIII. fig. 14.)

Eccritotarsus pallidirostris, Stål, Stett. ent. Zeit. xxiii. p. 323. 256¹.

Hab. MEXICO¹; GUATEMALA, San Gerónimo, San Isidro (*Champion*).

The Guatemalan examples of this species differ slightly from the Mexican typical specimen (in the Stockholm Museum) here figured by the darker margins of the cuneus.

8. ***Eccritotarsus incurvus***, n. sp. (Tab. XXVI. fig. 19.)

Black, more or less clothed with greyish pile; antennæ, two marginal spots to corium (one near base and one at apex), and legs pale luteous; third and fourth joints of antennæ somewhat infuscated; vertex of head sometimes more or less ochraceous; eyes dark castaneous; cuneus pale ochraceous hyaline, basal margin irregularly piceous; membrane pale ochraceous hyaline, cellular margins piceous; posterior femora with a broad fuscous apical annulation; apices of the tibiæ fuscous.

Long. 3-3½ millim.

Hab. GUATEMALA, San Gerónimo, Cerro Zunil (*Champion*).

9. ***Eccritotarsus gibbus***, n. sp.

Eccritotarsus incurvus, var. ?

Closely allied to *E. incurvus*, but differing by having the first and second joints of the antennæ black; the first pale marginal spot to the corium reaching base, and the second entirely absent; cuneus with some linear waved piceous markings at base. Other characters as in *E. incurvus*.

Long. 3½ millim.

Hab. GUATEMALA, Senahu (*Champion*).

Only a single specimen of this presumed species has been received; but it is probable that intermediate forms exist between it and the typical form of *E. incurvus*.

10. ***Eccritotarsus atratus***, n. sp. (Tab. XXVI. fig. 20.)

Black; antennæ with the basal joint black, second and third joints luteous, the third with its apical portion infuscated, fourth joint fuscous; corium with a pale ochraceous apical spot; cuneus pale ochraceous hyaline, its basal margin and apex piceous; membrane pale ochraceous hyaline, its cellular margins and

a central longitudinal fascia piceous; legs very dark castaneous; coxæ, base of posterior femora, and the tarsi luteous; apices of the tarsi fuscous.

Long. $2\frac{1}{2}$ millim.

Hab. PANAMA, Bugaba (*Champion*).

PSEUDOBRYOCORIS, gen. nov.

Allied to *Ecritotarsus* (as represented by *E. pallidirostris*), but differing by the pronotum being convexly produced at base and almost completely covering the scutellum, body more elongate, and margins of the corium subparallel.

1. *Pseudobryocoris bicolor*, n. sp. (Tab. XXVIII. fig. 3.)

Pale luteous; first and second joints of the antennæ, head, pronotum, scutellum, clavus, a central transverse fascia to corium (inwardly broadest at claval apex), apical margin of cuneus, cellular area of membrane, head beneath and sternum, and an apical annulation to posterior femora black or fuscous; extreme base of first joint of antennæ and anterior collar to pronotum luteous; apices of the tarsi fuscous. The body above is obscurely pilose, the pronotum coarsely punctate, and the clavus more obscurely punctate; the first and second joints of the antennæ are stoutest, and the second almost twice as long as the first.

Long. $3\frac{1}{2}$ millim.

Hab. PANAMA, Bugaba (*Champion*).

MONALOCORISCA, gen. nov.

Body broad, robust, coarsely punctate; pronotum and scutellum rugulose. Antennæ with the first joint slightly incrassated and a little shorter than the head; second joint rather more than twice as long as the first; third about half as long as second, longer than fourth. Eyes large and globular, slightly deflected on anterior collar of pronotum. Pronotum moderately gibbous; its lateral angles very slightly subnodulose, its posterior margin narrowly levigate, irregularly convex, and more than twice the breadth of the anterior collar, which is also levigate. Scutellum broad, the lateral margins very slightly convex near base; clavus large and broad; corium with the lateral margins slightly dilated and convexly amplified; cuneus with the angular fracture abrupt. Membrane with two cells. Rostrum about reaching the intermediate coxæ.

1. *Monalocorisca granulata*, n. sp. (Tab. XXVIII. fig. 4.)

Luteous, punctured and mottled with ochraceous; anterior collar and posterior margin of pronotum and an outer submarginal linear fascia to clavus pale and levigate; eyes pale brownish; antennæ black, extreme base of first joint and a broad central annulation to second joint dark ochraceous; basal margin of scutellum, an irregular spot near apical sutures of clavus, some large and irregular mottled markings on apical half of corium, and some small outer marginal spots to same, castaneous brown; cuneus pale ochraceous brown, its apex and lateral margins paler; membrane fuscous, the cellular margins pale luteous; legs ochraceous, apices of the tarsi fuscous.

Long. 4 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

2. *Monalocorisca ravid*a, n. sp. (Tab. XXVIII. fig. 5.)

Uniformly dull ochraceous; eyes somewhat paler; antennæ with the first joint black, its extreme base ochraceous; second joint ochraceous, its extreme base and apical half fuscous (remainder mutilated); cuneus

with a dark fuscous spot at inner angle; membrane pale brownish, the basal angle and apical third dark fuscous; legs ochraceous, femora and tibiæ annulated with brownish.

Long. 4 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

This species not only differs from *M. granulata* by the above described colour-differences, but has the posterior margin of the pronotum much more prominently convex and the lateral pronotal angles more distinctly subnodulose; the pronotum and scutellum are also less rugulose than in the preceding species.

CARNUS, gen. nov.

Body convex, glabrous, shining. Head moderately convex, smooth. Antennæ with the basal joint not quite as long as the head; second joint about twice as long as the first, its apical half incrassated; third and fourth slender, and together either almost equal to or more or less shorter than the second. Pronotum coarsely punctate, elongate, with a broad distinct anterior collar preceded by a transverse impression; the anterior margin about one third the width of posterior margin, which is either convexly rounded or truncate. Scutellum somewhat tumid, shining, and glabrous. Corium somewhat convexly dilated. Rostrum reaching the intermediate coxæ. Tibiæ indistinctly setose.

a. *Posterior margin of the pronotum convex.*

1. *Carnus lunatus*, n. sp. (Tab. XXVIII. fig. 6.)

Ochraceous; posterior margin of pronotum, clavus, a transverse fascia to corium near claval apex, posterior portion of outer margin to corium and outer margin and apex of cuneus sanguineous; apical half of the second joint of antennæ, anterior collar and a central basal spot to pronotum, central base of scutellum, a broad central spot to clavus, and basal half of membrane black; scutellum pale luteous, the extreme apex black, and the black central base giving it a lunate appearance; body beneath and legs ochraceous.

Var. *a.* Eyes black; scutellum without the black basal spot.

Var. *b.* Resembling var. *a.*, but pronotum without the black basal spot.

Long. 4 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet, Bugaba (*Champion*).

2. *Carnus formosus*, n. sp.

Allied to the preceding species, but differing by the more elongate body. Eyes black; anterior collar to pronotum reddish ochraceous; posterior margin of pronotum pale luteous, with a small central black spot; scutellum with a smaller black central base and the apex concolorous; clavus with the apex only sanguineous; corium without the transverse sanguineous fascia; sternum with a black spot between anterior and intermediate coxæ.

Var. *a.* Pronotum with a small black spot on each lateral margin, these spots linearly connected with the basal spot.

Long. $3\frac{1}{2}$ –4 millim.

Hab. PANAMA, Volcan de Aittlan 2500 to 3000 feet (*Champion*).

3. *Carnus parvus*, n. sp. (Tab. XXVIII. fig. 7.)

Pale ochraceous; central longitudinal fascia to and base of head, broad subbasal and sublateral fasciæ, and narrow anterior marginal fascia with connecting central fascia to pronotum reddish ochraceous; clavus and corium

reddish ochraceous, the last with the disk paler, and with the anterior half of lateral margin and an apical spot levigate pale ochraceous; eyes, apex of second joint of antennæ, and third and fourth joints (excluding bascs) black; cuneus reddish; membrano pale brownish ochraceous and semihyaline, the cellular margins brownish; head beneath and sternum reddish ochraceous; abdomen, metasternum, and centre of mesosternum (*carded specimen*) black; legs ochraceous.

Long. $3\frac{1}{2}$ millim.

Hab. GUATEMALA, Las Mercedes (*Champion*).

b. *Posterior margin of the pronotum truncate.*

4. **Carnus funebris**, n. sp.

Bright greenish black; basal half of head, antennæ, rostrum, and legs ochraceous; rostrum with the apex piceous; antennæ with the apex of the second joint luteous (third and fourth joints mutilated); pronotum very coarsely punctate; membrane fuscous, cellular margins pale brownish; abdomen beneath having the transverse segmental margins somewhat paler.

Long. 4 millim.

Hab. PANAMA, Bugaba (*Champion*).

PSEUDOCARNUS, gen. nov.

Differing from *Carnus* by having the basal joint of the antennæ longer than the head and incrassated; second joint about twice as long as the first; third and fourth joints very short, and together scarcely or about as long only as the first joint. Pronotum obscurely punctate.

1. **Pseudocarnus lineolatus**, n. sp. (Tab. XXVIII. fig. 8.)

Ochraceous; antennæ with the basal joint reddish; apical fourth of second joint, the third joint and fourth joint (excluding base and apex) castaneous; eyes silvery grey; pronotum with the posterior margin pale sanguineous, the lateral posterior margins black; inner (excluding base) and sutural margins of clavus, a basal streak and submarginal fascia (deflected at centre and angularly continued to near claval apex) to corium black; cuneus with the lateral margins and apex sanguineous; membrane pale fuscous and semihyaline, the cellular margins black. Body beneath and legs ochraceous, basal lateral margins of prosternum black.

Long. 4 millim.

Hab. PANAMA, Bugaba (*Champion*).

This species is peculiar by the great length of the first and second joints of the antennæ and the relative shortness of the third and fourth, which together are not much more than half the length of the second.

2. **Pseudocarnus magnus**, n. sp. (Tab. XXVIII. fig. 9.)

Ochraceous; eyes, lateral margins of pronotum, a narrow central linear fascia to clavus, a sublateral fascia to corium deflected a short distance from apex and transversely continued to inner apical angle, castaneous; antennæ ochraceous, basal joint and apex of second joint pale castaneous, third joint ochraceous, fourth fuscous; clavus and inner disk of corium much suffused with reddish; cuneus with the inner margin sanguineous; membrane pale brownish and semihyaline, cellular margins castaneous; sternum and legs ochraceous; abdomen reddish.

Long. 6 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

Beside the large size of this species, other structural characteristics are found in the length of the first and second joints of the antennæ and the shortness of the third and fourth joints, which together are not more than a third of the length of the second joint. The transverse impression preceding the anterior collar of the pronotum is also very profound.

PARACARNUS, gen. nov.

Body elongate, convex, and shining. Head narrow, convex, and smooth. Eyes very large and long, but not exerted. Antennæ with the basal joint about as long as the head; second joint about half as long again as the first, with its apex incrassated; third and fourth together about equal in length to second. Pronotum coarsely punctate, narrowly elongate, with a distinct anterior collar preceded by a broad transverse impression; posterior margin truncate and about twice the width of anterior margin. Scutellum tumid, shining, and glabrous. Corium with the lateral margin slightly sinuate and convexly amplified. Rostrum reaching the intermediate coxæ. Tibiæ indistinctly setose or practically non-setose.

1. *Paracarnus elongatus*, n. sp. (Tab. XXVIII. fig. 25.)

Head and pronotum pale ochraceous; eyes black; antennæ pale ochraceous, apex of the second joint fuscous; pronotum with a short roseate oblique fascia near lateral angles; scutellum luteous and levigate; clavus reddish ochraceous, with an inner dark fuscous fascia, which is broadest at apex of scutellum; corium pale hyaline, with the inner margin of embolium ochraceous, and with a large fuscous spot which extends from claval apex to and covering base of membrane, which is otherwise pale hyaline, with the cellular margins ochraceous; body beneath and legs ochraceous; posterior margins of meso- and metasternum, some abdominal markings (*imperfectly seen, owing to specimen being carded*), and a subapical annulation to intermediate and posterior femora pale sanguineous.

Long. 4 millim.

Hab. PANAMA, Bugaba (*Champion*).

NEOCARNUS, gen. nov.

Allied to *Paracarnus*, but with the first joint of the antennæ considerably longer than the head and a little shorter than the second joint. Head a little broader, and eyes more removed from the anterior margin of the pronotum. Lateral angles of the pronotum distinctly subnodulose. Scutellum tumid, shining, and glabrous, but more triangular and the lateral margins less convex than in *Paracarnus*. Legs much longer; tibiæ indistinctly setose or practically non-setose.

1. *Neocarnus vitreus*. (Tab. XXIX. fig. 1.)

Pale shining ochraceous; antennæ with the first and second joints ochraceous, the third and fourth creamy white; apices of the second, third, and fourth joints of the antennæ, basal and lateral margins of scutellum, claval suture, apical margin of corium, inner cellular margins to membrane, and apices of tarsi fuscous or black; eyes pale brownish; scutellum shining luteous; lateral angles of the pronotum subnodulose and brownish.

Long. 5 millim.

Hab. PANAMA, Bugaba (*Champion*).

ANIA, gen. nov.

Body elongate and subovate, somewhat shining, the hemelytra semitransparent, the pronotum coarsely punctate. Head smooth and shining, vertically deflexed in front of the eyes. Antennæ with the basal

joint much longer than the head, a little stouter and shorter than the second, which has its apical half moderately incrassated. Pronotum elongate, tumidly convex, but anteriorly depressed, with a distinctly raised anterior collar, preceded by a transverse constriction; the posterior margin truncate and more than twice the width of anterior, the lateral angles rounded. Scutellum with the central disk to apex moderately tumid. Corium distinctly amplified and rounded at centre. Rostrum reaching anterior coxæ. Tibiæ non-setose.

This genus differs from the preceding (*Neocarnus*) by the broader and anteriorly less narrowed pronotum, the different structure of the scutellum, &c.

1. *Ania bimaculata*, n. sp. (Tab. XXVII. fig. 25.)

Shining pale ochraceous; head, first and second joints of antennæ, two transverse spots on the anterior constriction, and two rounded spots on the posterior disk of pronotum, basal angles of scutellum, base, apex, and margins of clavus, inner angle and a transverse streak to corium, inner margin and apex of cuneus, cellular margins to membrane, an anterior lateral spot to prosternum, meso- and metasternums, base and a series of marginal spots to abdomen, fuscous or black; base of the first joint of antennæ ochraceous; membrane fuliginous; legs pale ochraceous, the femora obscurely spotted with pale brownish.

Var. *a*. First and second joints of the antennæ ochraceous, the apex of the second joint black; corium with only faint indications of the transverse streak; body beneath with the dark marking paler or partly obliterated.

Long. 5 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*); PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

2. *Ania decoloris*, n. sp. (*Mala decoloris*, Tab. XXVI. fig. 23.)

Pale shining ochraceous; eyes, base and apex of second joint of antennæ, lateral angles of pronotum, scutellum, inner margins and apex of clavus, base of membrane, and inner margin of cuneus black; scutellum with a pale ochraceous spot on each lateral margin, and with the apex obscurely ochraceous; clavus pale brownish, the same hue appertaining to the interior angle of the corium; membrane pale hyaline; body beneath and legs pale ochraceous; femora obscurely spotted with pale brownish.

Long. 5 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

Beside the colour differences, this species differs from the preceding by the more ovate body, the base of the pronotum being wider, and the lateral margins of the corium more convexly dilated. On the Plate the figure of this species has been erroneously ascribed to the genus *Mala*.

FUNDANIUS, gen. nov.

Body shining, faintly and obsoletely pilose. Head small, vertically deflexed and immersed in the pronotum to the eyes, where it is very broad. Antennæ with the basal joint about as long as the head; the second joint twice the length of the first, with its apical half gradually incrassated; third and fourth slender, third much longer than fourth, and together not quite so long as the second. Pronotum very coarsely punctate, with a wide anterior constriction, the width at lateral angles about three times that of anterior margin, angles posteriorly oblique to the basal margin, which is truncate. Scutellum tumid, constricted at base, and with its apical half deflexed. Corium very finely pilose. Tibiæ smooth, not setiform. Rostrum not quite reaching the intermediate coxæ.

1. **Fundanius rubricosus**, n. sp.

Ochraceous red or pale sanguineous; eyes, antennæ, apical half of cuneus, whole disk of body beneath, rostrum, and legs black; apical halves of the fore and intermediate tibiæ and apical third of the posterior tibiæ dull ochraceous; membrane smoky hyaline, the basal half dark fuscous; corium finely but distinctly pilose.

Long. $4\frac{1}{2}$ millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

2. **Fundanius maculatus**, n. sp. (Tab. XXVIII. fig. 10.)

Head and pronotum ochraceous; eyes, antennæ, and a large central spot to pronotum black; scutellum, corium, and cuneus black, corium with the base and a large spot at apex and inner half of cuneus ochraceous; membrane pale hyaline, with the basal half dark fuscous; body beneath ochraceous, with the whole disk blackish; legs black, apical halves of anterior and intermediate tibiæ and apical third of posterior tibiæ pale brownish. Corium and base of membrane finely but distinctly pilose.

Long. $4\frac{1}{2}$ millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

3. **Fundanius marginatus**, n. sp.

Black; inner margins of eyes, lateral margins of pronotum, head beneath and prosternum, apical halves of anterior and intermediate tibiæ, and apical third of posterior tibiæ ochraceous.

Long. $4\frac{1}{2}$ millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

4. **Fundanius pallescens**, n. sp. (Tab. XXVIII. fig. 11.)

Ochraceous; outer margin of first joint of antennæ, base and apical third of second joint, and the whole of third and fourth joints, eyes, and a basal central linear spot to scutellum fuscous or black; base of the pronotal constriction, claval margins, some irregular macular markings at basal margin of corium, and apex of cuneus brownish or pale castaneous; membrane smoky, or pale fuscous, with a lateral pale spot on each side and the cellular margins dark fuscous; body beneath (*carded specimen*) ochraceous, mottled and marked with brownish or pale castaneous; legs ochraceous.

Long. 5 millim.

Hab. GUATEMALA, Quiche Mountains (*Champion*).

5. **Fundanius albo-maculatus**, n. sp. (Tab. XXVIII. fig. 12.)

Head pale ochraceous, with two central black lines; antennæ fuscous, the base of first joint and a broad central annulation to second joint ochraceous; eyes fuscous; pronotum ochraceous, much shaded with fuscous, the margins narrowly pale and levigate; scutellum fuscous, basal angle and apex ochraceous; clavus fuscous, with a central linear ochraceous spot; corium fuscous, with a small subbasal and a large central pale ochraceous spot; cuneus dark fuscous; membrane pale fuscous, the cellular margins darker and with a large pale spot near apex of cuneus; body beneath ochraceous, shaded with fuscous; legs ochraceous, posterior femora with a broad central fuscous annulation.

Long. $4\frac{1}{2}$ millim.

Hab. GUATEMALA, Panajachel (*Champion*).

NEOFURIUS, gen. nov.

Body broad, subovate, more or less pilose, but corium always distinctly and sometimes strongly pilose. Head short and broad, deflexed before the eyes, which are contiguous to the anterior margin of the pronotum. Antennæ with the basal joint about as long as the head, second joint about half as long again as the first; third and fourth together a little longer than second. Pronotum punctate, with an anterior collar preceded by a broad transverse constriction; posterior margin truncate, sometimes slightly concave (oblique at lateral angles), and more than twice or sometimes nearly three times the width of anterior margin. Scutellum moderately small and subtriangular, with the apex more or less acute. Corium broad, the lateral margins dilated and convex; fracture of cuneus profound. Rostrum about reaching the intermediate coxæ; legs always more or less pilose.

Mr. Champion found all the species of this genus by beating and sweeping low plants. I have here described sixteen species, and it is probably a most prolific Neotropical genus. It is found alike in the lowlands, and one species (*N. affinis*) at as high an altitude as 8000 feet.

1. *Neofurius villosus*, n. sp. (Tab. XXVIII. fig. 13.)

Reddish ochraceous; apex of head, eyes, and scutellum black; antennæ ochraceous, base and apex of first joint, second joint excluding base, and the fourth joint fuscous or black; membrane pale brownish, the basal half fuscous; body beneath (*carded specimen*) blackish; legs pale ochraceous.

The pronotum is somewhat coarsely punctate; the clavus thickly and finely punctate, and with the corium finely pilose.

Long. $4\frac{1}{2}$ millim.

Hab. PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

2. *Neofurius variabilis*, n. sp.

Pale ochraceous; apical half of second joint of antennæ, eyes, a large cordate spot to pronotum, two basal angular spots to scutellum, clavus, and a broad central fascia to corium (not reaching lateral margins) black; the black markings to pronotum and corium more or less margined with pale sanguineous, especially the central fascia to corium, which is thus continued to lateral margin; body beneath and legs pale ochraceous, apices of posterior femora frequently pale sanguineous.

Var. *a.* An arcuated fascia to pronotum, clavus, and the whole of the transverse fascia to corium dull sanguineous.

Var. *b.* Resembling var. *a.*, but the pronotum wholly pale ochraceous, without spot or fascia.

Var. *c.* Resembling typical forms of the species, but with the basal joint of the antennæ sanguineous, and with a transverse black line across centre of pronotum.

Var. *d.* Resembling var. *c.*, but with the black markings of the pronotum and corium pale and dull reddish.

Long. $4\frac{1}{2}$ millim.

Hab. GUATEMALA, San Gerónimo, Cerro Zunil (*Champion*); PANAMA, Bugaba, David, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

In this variable species the black spots to the scutellum are (in the series now before me) always constant; and the same remark applies to the black apex of the second joint of the antennæ.

3. *Neofurius auratus*, n. sp. (Tab. XXVIII. fig. 14.)

Head, antennæ, pronotum, scutellum, and corium ochraceous; cuneus pale hyaline; second joint of antennæ, eyes, two discal spots to corium, inner claval margins, an oblique spot about centre of corium, and inner

and outer margins of clavus black; membrane smoky hyaline, with a pale fuscous spot at base; body beneath ochraceous; legs pale luteous; apices of posterior femora sanguineous, with a blackish streak above; tarsi somewhat infuscated; basal joint of antennæ more or less castaneous, apex of third and the fourth joints fuscous.

Long. 4 millim.

Hab. GUATEMALA, San Isidro (*Champion*).

4. *Neofurius amethystus*, n. sp. (Tab. XXVIII. fig. 15.)

Rosaceous; head, antennæ, sternum, and legs luteous; apex of head, lateral margins of sternum, abdomen, and apices of posterior femora rosaceous; cuneus very pale luteous, with the inner angle rosaceous; membrane pale semihyaline, narrowly fuscous at base; eyes and apex of second joint of antennæ black; scutellum with an elongate fuscous spot at each basal angle, and occupying half of each lateral margin.

Long. 3 millim.

Hab. PANAMA, Bugaba (*Champion*).

5. *Neofurius argentatus*, n. sp.

Creamy white; second, third, and fourth joints of antennæ, eyes, a spot on each side of clavus near apex of scutellum, a spot on each disk of corium near apex of clavus, basal angles and apex of cuneus, and cellular margins of membrane fuscous or black; legs pale ochraceous; tibiæ and apices of tarsi more or less fuscous or black.

Var. *a.* Differing from typical forms of the species by having the first joint of the antennæ (excluding base) and the inner apical margin of the cuneus only fuscous or black; tibiæ and the apices of the posterior femora brownish.

Long. 4½ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*); PANAMA, Volcan de Chiriqui 2000 to 4000 feet (*Champion*).

6. *Neofurius scriptus*. (Tab. XXVIII. fig. 16.)

Creamy white; eyes, an outer streak to basal joint and the apex of second joint of antennæ, a central anterior spot to pronotum, scutellum, basal and apical spots to clavus, a transverse irregular curved fascia to corium, apex of cuneus, cellular margins of membrane, and a lateral spot to pro-, meso-, and metasternums (*abdomen indistinctly seen owing to specimen being carded*) black.

Long. 5 millim.

Hab. GUATEMALA, Pantaleon (*Champion*).

7. *Neofurius ornandus*, n. sp.

Creamy white; eyes, antennæ (excluding base of first joint), a spot near centre of each lateral margin of pronotum, scutellum, basal third of clavus, a large discal spot to corium near apex of clavus, sometimes connected to lateral margin by a narrow streak, apex of cuneus, cellular margins to membrane, tibiæ, a broad subapical annulation to posterior femora, apices of the tarsi, and some lateral sternal spots fuscous or black.

Long. 4 millim.

Hab. GUATEMALA, La Tinta (*Champion*); PANAMA, Tolé (*Champion*).

8. *Neofurius pictus*, n. sp. (Tab. XXIII. fig. 24, var. *Furius pictus*.)

Creamy white; eyes, apex of second joint of antennæ, scutellum, an oblique spot at basal inner margin of

clavus, apex of clavus, an irregular transverse fascia to corium, and a lateral spot to mesosternum black; body beneath and legs pale ochraceous; membrane pale hyaline, the cellular margins fuscous.

Var. *a*. Apex of the clavus concolorous, not black; mesosternum without the lateral black spot. Long. 5 millim.

Hab. MEXICO (*Mus. Berol.*); GUATEMALA, San Gerónimo (*Champion*).

A Mexican varietal specimen is here figured.

9. *Neofurius affinis*, n. sp.

Creamy white; first and second joints of the antennæ, basal margin of head, lateral angles and a spot at the anterior angles of pronotum, scutellum, base of clavus, a broad longitudinal fascia from apex of scutellum to claval apex, an irregular central transverse fascia to corium, inner margin of cuneus, apices of femora and bases of tibiæ, and some lateral sternal markings (*carded specimen*) black; base of the first joint of antennæ creamy white; membrane pale hyaline, the cellular margins pale brownish.

Long. $4\frac{1}{2}$ millim.

Hab. PANAMA, Volcan de Chiriqui 8000 feet (*Champion*).

10. *Neofurius decoratus*, n. sp. (Tab. XXVIII. fig. 17.)

Pale stramineous; eyes, apex of second joint of antennæ, a narrow transverse central fascia to pronotum, basal angles of scutellum, clavus (excluding outer basal angle), an irregular central transverse fascia to corium, which is widest at costal margin, and is continued along claval margin to inner angle, and basal angle of membrane black; apices of posterior femora sanguineous.

Costal margin of corium amplified and possessing a distinct pouch-like depression about centre.

Long. $4\frac{1}{2}$ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

11. *Neofurius infumatus*, n. sp. (Tab. XXVIII. fig. 18.)

Pale stramineous with a greenish tinge; eyes, apex of second joint of antennæ, a large and broad sublunate basal spot to pronotum, basal angles of scutellum, clavus, an irregular but broad central fascia to corium not reaching the costal margin, and inwardly extending to inner angle, and basal angle of membrane black.

Long. $3\frac{1}{2}$ millim.

Hab. GUATEMALA, Pantaleon (*Champion*).

12. *Neofurius denigratus*, n. sp.

Obscure ochraceous; eyes, apex of first, and the whole of the second, third, and fourth joints of antennæ, a narrow central longitudinal fascia to and a spot at the lateral angles of pronotum, scutellum, clavus, an irregular central fascia to corium, not quite reaching costal margin, and broadest at inner angle, inner and outer margins of cuneus, basal angle and cellular margins to membrane, lateral spots to sternum and abdomen, and sometimes sternal and abdominal sutures, and apices of the tarsi fuscous or black.

Var. *a*. Scutellum black, with the margins and apex ochraceous; clavus ochraceous, with the margins black.

Long. 5 millim.

Hab. GUATEMALA, San Isidro, Cerro Zunil (*Champion*).

13. *Neofurius hieroglyphicus*, n. sp. (Tab. XXVIII. fig. 19.)

Obscure ochraceous; basal spot to apex of head, basal joint of antennæ (remainder mutilated), a central longitudinal macular fascia passing through the anterior collar and constriction of pronotum, scutellum

(excepting basal angular spots and lateral margins and apex), margins of clavus, a reticulated transverse fascia to corium, a transverse streak at base of cuneus, cellular margins to membrane, sternal and abdominal sutures (*carded specimen*) black; anterior and intermediate legs ochraceous (posterior legs mutilated).

Long. $5\frac{1}{2}$ millim.

Hab. GUATEMALA, Sinanja (*Champion*).

14. *Neofurius pallidulus*, n. sp. (Tab. XXVIII. fig. 20.)

Creamy white; eyes, apex of second joint, apical half of third joint and the fourth joint of antennæ, inner margins of clavus, and an oblique spot near centre of costal margin of corium, black; costal margin of corium from near base to centre, and posterior femora dark sanguineous; lateral margins of cuneus narrowly fuscous; body beneath indistinctly seen (*carded specimen*).

Costal margin of corium amplified and possessing a distinct pouch-like depression about centre.

Long. 4 millim.

Hab. GUATEMALA, Panajachel (*Champion*).

15. *Neofurius plagosus*, n. sp. (Tab. XXVIII. fig. 21.)

Creamy white, tinged with very pale ochraceous; eyes, first and second joints of antennæ, a rounded spot at base, and an elongate spot about centre of clavus, an oblique fascia about centre of corium, inner margin of cuneus, cellular margins to membrane, two lateral spots to sternum, apices of femora, and the tibiæ fuscous or black; base of first joint of antennæ and apex of posterior tibiæ creamy white, tinged with pale ochraceous.

Long. 6 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

16. *Neofurius linearis*, n. sp. (Tab. XXVIII. fig. 22.)

Head, pronotum, and legs ochraceous; scutellum, corium, and membrane creamy white; eyes, first and second joints of antennæ, a longitudinal fascia crossing clavus and continued along corium to inner angle of cuneus, outer and inner margins of cuneus, costal margin of corium, cellular margins to membrane, apices of femora, the tibiæ, and apices of tarsi fuscous or black; base of first joint of antennæ pale ochraceous; body beneath pale ochraceous or with the abdomen sometimes creamy white.

Long. 5 millim.

Hab. GUATEMALA, San Gerónimo, Mirandilla (*Champion*).

BIBACULUS, gen. nov.

Allied to *Neofurius*, but with the body elongate and very indistinctly pilose, the lateral margins of the corium parallel, not dilated. Antennæ with the first joint about as long as or a little shorter than the head, second joint almost twice as long as the first, third joint distinctly longer than second. Pronotum as in preceding species, but longer, posterior margin concavely truncate, and about twice the width of anterior margin. Other characters as in *Neofurius*.

This genus has apparently considerable superficial resemblance to *Hyaliodes*, Reut., founded for the reception of *Capsus vitripennis*, Say, a species I only know by the figure given by Townend Glover (Ill. Ins. Hem. t. vii. f. 8). Reuter's genus is, however, rendered very distinct by the great length of the basal joint of the antennæ.

1. **Bibaculus modestus**, n. sp. (Tab. XXVIII. figg. 23, 24.)

Creamy white; eyes, apex of first joint and the second, third, and fourth joints of antennæ, an irregular arcuated fascia to pronotum, two basal spots to scutellum, inner margins and apical half of clavus, an irregular macular transverse fascia to corium, lateral margins of cuneus, cellular margins of membrane, apices of femora, inner sides of tibiæ, and apices of tarsi fuscous or black; second joint of antennæ with a pale central annulation.

Var. *a.* Differing by having all the black markings brownish and more or less obliterated.

Long. 4 millim.

Hab. GUATEMALA, Senahu, Las Mercedes (*Champion*).

MALA, gen. nov.

Body elongate, the corium convexly amplified. Head broad, smooth and shining, deflected a little in front of the eyes, which are contiguous to the angles of the pronotal collar. Pronotum strongly constricted and narrowed beyond middle, the basal half convexly gibbous and thickly punctate, the lateral margins convex to the anterior constriction, the posterior margin truncate and about twice as broad as anterior margin. Antennæ long, slender, the first joint stoutest and longer than the head, second about half as long again as the first, third a little shorter than second and subequal in length with fourth. Scutellum somewhat tumid, with a basal depression. Corium very finely and obscurely punctate. Posterior tibiæ finely and obscurely setose. Rostrum not quite reaching the intermediate coxæ.

1. **Mala unicolor**, n. sp. (Tab. XXVI. fig. 21.)

Very pale ochraceous; eyes black; outer margin of first joint and the third and fourth joints of antennæ and apices of the tarsi fuscous; the scutellum and abdomen are slightly darker or more ochraceous in hue; membrane pale hyaline, the cellular margins pale brownish; inner and outer margins of the cuneus pale brownish.

Long. 6 millim.

Hab. GUATEMALA, San Isidro (*Champion*).

2. **Mala ornata**, n. sp. (Tab. XXVI. fig. 22.)

Head, pronotum, scutellum, antennæ, body beneath, and legs very pale ochraceous; corium pale creamy, talc-like and shining; eyes, apex of the second joint of antennæ, a subquadrate spot on each side of clavus near base, claval suture (excluding base and apex), and an oblique transverse fascia to corium black; membrane pale hyaline, the cellular margins pale fuscous; outer margin of cuneus pale fuscous.

Var. *a.* Differing from typical specimen by having the eyes ochraceous.

Var. *b.* Eyes black, but the claval suture entirely ochraceous.

Long. 6 millim.

Hab. PANAMA, Bugaba, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

Three specimens captured by Mr. Champion represent the three forms above described, and our only knowledge of the species, which may therefore be considered as of a very variable character.

SILIA, gen. nov.

Body elongate, oblong, somewhat shining and sparingly pilose. Head broad at base and vertically deflexed, the eyes contiguous to the pronotal collar. Antennæ pilose; basal joint moderately incrassated, as long as the head; second joint almost twice the length of the first, its apex scarcely thickened, third and fourth very slender. Pronotum elongate, with a wide and convexly tumid anterior collar, preceded by a transverse constriction, the discal portion to base convexly tumid and coarsely punctate, the lateral angles

subacutely rounded, the base truncate and about twice the breadth of anterior margin. Scutellum tumid, with the base excavated. Corium with the margins almost parallel and strongly pilose. Legs finely but thickly setiform. Rostrum reaching the intermediate coxæ.

1. * **Neosilia viduata**, n. sp. (Tab. XXVII. fig. 21, *Silia viduata*.)

Very pale ochraceous; eyes, antennæ, two large transverse basal spots to pronotum, scutellum, clavus, interior area of corium, inner basal angle and apex of cuneus, and apices of the tarsi, fuscous or black; bases of the first and third joints of antennæ and apex of the scutellum pale ochraceous; membrane pale fuscous, the cellular margins darker and the apex paler; body beneath pale ochraceous, a spot at basal lateral angles of prosternum black, margins and apex of abdomen fuscous.

Long. 5 millim.

Hab. PANAMA, Bugaba (*Champion*).

2. **Neosilia sororia**, n. sp. (Tab. XXIX. fig. 2.)

Head castaneous; eyes black; antennæ black, the base of the first joint ochraceous; pronotum black, the anterior constriction ochraceous; scutellum black; clavus black, with a central ochraceous spot on each side; corium very pale ochraceous, with a black spot near inner angle; inner margin and apex of cuneus fuscous; membrane pale ochraceous, the cellular margins black, the cellular areas fuscous, and the base blackish; head beneath ochraceous; sternum black, with the anterior margin ochraceous; abdomen pale greenish ochraceous, with a lateral segmental row of small fuscous spots; legs pale ochraceous, apices of the femora, tibiæ, and tarsi fuscous.

Long. 4 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

3. **Neosilia cineracea**, n. sp. (Tab. XXVII. fig. 22, *Silia cineracea*.)

Cinereous; eyes and antennæ black, the basal joint of the latter cinereous; a central longitudinal streak to clavus, a central spot to pronotum, lateral margins of the corium excluding base, outer and inner margins of cuneus (the last not reaching base), cellular margins to membrane, and apices of the tarsi fuscous.

Var. *a.* The fuscous markings to clavus and corium obsolete or only faintly visible.

Long. 5 to 5½ millim.

Hab. PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

CHIUS, gen. nov.

Allied to *Neosilia*, but differing by the longer head, the eyes not contiguous but some distance from the pronotal collar. First joint of the antennæ as long as the head, second joint about twice the length of the first. Pronotum levigate, with the anterior collar narrower than in *Neosilia*, the posterior margin concave. Scutellum large, strongly deflected from base to apex. Corium with the margins almost parallel but not pilose. Rostrum almost reaching the posterior coxæ.

1. **Chius maculatus**, n. sp. (Tab. XXVII. fig. 23.)

Very pale ochraceous; eyes, apices of the first, second, and third joints of antennæ, two basal spots to pronotum, apex of scutellum, apex of clavus, a spot near each apex of corium, and a spot on each lateral margin of membrane fuscous or black.

Long. 4 millim.

Hab. GUATEMALA, near the city (*Champion*).

* Since publishing the name "*Silia*" on the preceding page, I have found that it is preoccupied (May, Moll. 1876); it is therefore better to at once change it to prevent future correction. For the same reason and with the same object I now substitute *Zacynthus* for *Zacorus* (p. 240), *Zoilus* for *Zopyrus* (p. 249), *Carmelus* for *Carnus* (p. 287), and *Annona* for *Ania* (p. 289).

PARACHIUS, gen. nov.

Allied to *Ohius*, but with the antennæ much longer and the basal joint considerably longer than the head. Legs much longer, the posterior tibiæ being especially developed.

1. *Parachius luteolus*, n. sp. (Tab. XXVII. fig. 24.)

Pale ochraceous; eyes, outer margin of basal joint, the apex of second joint, and the third and fourth joints of antennæ, and the bases and apices of tarsi fuscous or black; sutural margins of clavus, inner margins of corium, and cuneus greenish; membrane pale ochraceous and subhyaline.

Long. 5 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

FALCONIA, gen. nov.

Body elongate, subdepressed, finely but obscurely and sparingly pilose. Head with about the basal half somewhat tumid and slightly channelled on the inner side of the eyes, remaining portion vertically deflexed. Eyes large, prominent, slightly directed backwards, and situate contiguous to anterior margin of pronotum. Antennæ with the basal joint slightly incrassate and longer than the head; second joint much more slender, finely pilose, about half as long again as first, and slightly thickened at apex; third and fourth slender, third much longer than fourth. Pronotum elongate, somewhat coarsely punctate, the posterior margin, which is strongly and concavely sinuate before the scutellum, more than twice as broad as the anterior, with a strong transverse constriction near anterior margin, between which it is prominently tumid; lateral angles obtusely rounded or subnodulate. Scutellum transversely and profoundly excavated at base. Corium with the disc punctate, the costal margin convexly amplified towards apex. Rostrum reaching the intermediate coxæ.

1. *Falconia poetica*, n. sp. (Tab. XXIX. fig. 3.)

Creamy ochraceous; eyes, anterior margin of pronotum, and scutellum black; antennæ black, the basal joint ochraceous, outwardly streaked with black; a fuscous spot at base of membrane extending over the apical margins of the corium; inner margin and apex of cuneus fuscous. Body beneath ochraceous; the meso- and metasternums, the anterior margin of the prosternum, and three large spots on basal half of lateral margins of abdomen, black*; coxæ and legs ochraceous, the tarsi and apical halves of the posterior femora fuscous.

Long. 4 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

2. *Falconia caduca*, n. sp. (Tab. XXIX. fig. 4.)

Creamy ochraceous; eyes, anterior margin of pronotum, and the scutellum black; corium with a large oblong fuscous spot at each inner angle; head with the apex and a transverse central linear spot fuscous; antennæ with the first and second joints ochraceous, outwardly streaked with fuscous (remaining joints mutilated). Body beneath pale ochraceous, lateral margins of the sternum blackish (*carded specimen*); legs pale creamy ochraceous, apices of the tarsi and an upper streak on the apical halves of posterior femora fuscous.

Long. 4 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

ANTIAS, gen. nov.

Body elongate subovate, subdepressed, the lateral margins of the corium amplified. Head moderately tumid; eyes large and contiguous to the anterior margin of the pronotal collar. Antennæ with the basal joint not prominently incrassated, but little longer than the head, second joint more than twice the length of first, third and fourth slender, almost subequal in length. Pronotum broad, very coarsely

* The markings underneath imperfectly seen owing to the specimen being carded.

punctate, with a distinct anterior collar, the posterior margin about twice the breadth of anterior, the lateral angles more or less nodulose. Scutellum moderately tumid. Corium semihyaline, the lateral margins distinctly and convexly amplified. Rostrum reaching the intermediate coxæ.

1. **Antias subæratatus**, n. sp. (Tab. XXIX. fig. 5.)

Pale ochraceous; eyes black; apex of the head and apical joint of antennæ fuscous; antennæ with the apex of the second joint, third joint excluding base, a broad subclaval fascia on each side of corium meeting posteriorly and extending to base of membrane, apical margin of corium, and apex of posterior femora pale reddish; cuneus and membrane pale hyaline; pronotum with a narrow curved blackish fascia at anterior margin; body beneath (*imperfectly seen owing to carded specimen*) with the anterior margin of prosternum and some central longitudinal markings blackish.

Note. The pale reddish markings above are inconstant in size and arrangement.

Long. 4 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

2. **Antias aheneus**, n. sp. (Tab. XXIX. fig. 6.)

Pale ochraceous; eyes, apex of second joint of antennæ, and two transverse spots near anterior angles of pronotum dark fuscous; clavus and a spot at inner angle of corium pale fuscous; first and second joints of antennæ, a lateral submarginal streak to corium, and apices of posterior femora more or less reddish; apical joint of antennæ pale stramineous; body beneath (*carded specimen, and imperfectly examined*) pale reddish, anterior margin of prosternum, a large central spot to mesosternum, a large lateral spot on each side of metasternum, and apex of abdomen blackish.

Long. 4 millim.

Hab. PANAMA, David (*Champion*).

FUSCUS, gen. nov.

Body elongate subovate, moderately robust and pilose, the lateral margins of the corium moderately convexly amplified. Head moderately tumid; eyes large and prominent. Antennæ with the first joint shorter than the head and moderately incrassated; second joint about three times the length of the first, and with its apical half strongly incrassated; third and fourth short, slender, and subequal in length. Pronotum coarsely punctate, moderately convexly tumid, the posterior margin about twice the width of anterior, the lateral angles subnodulose. Scutellum triangular, somewhat tumid, the apex depressed. Corium with the lateral margins distinctly and laminately amplified; cuneal fracture not profound. Membrane considerably passing the apex of abdomen. (*Length of rostrum undetermined, owing to specimen being carded.*)

1. **Fuscus crinitus**, n. sp. (Tab. XXIX. fig. 7.)

Ochraceous, finely pilose; head with the apex, eyes, apical half of the second joint of antennæ, and fourth joint (excluding base) fuscous or black; pronotum with four longitudinal castaneous fasciæ, the two central broadest and not reaching anterior or posterior margins; scutellum with two central longitudinal fasciæ, and the lateral margins between these fasciæ and base very dark castaneous; clavus with two central, short, dark castaneous fasciæ, divided by the suture, and parallel with the two central fasciæ of scutellum; corium with some irregular and somewhat reticulated discal castaneous fasciæ; cuneus with two longitudinal castaneous fasciæ, one central and one lateral; membrane with the base and apical margin broadly fuscous. Legs ochraceous, apices of the tibiæ blackish; apices of the femora and bases of the tibiæ infuscated. (*Body beneath unexamined owing to the specimen being carded.*)

Long. 4 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

NEOLEUCON, gen. nov.

Elongate subovate. Head very short and broad, vertically deflected before the eyes, which are moderately stylated and directed upwards, basal margin concave; antennæ with the basal joint somewhat incrassated

and much longer than the head, second joint not quite twice as long as the first, third a little more than half the length of second, and subequal to or a little shorter than fourth. Pronotum punctate, with a wide nodulose constriction on anterior half followed by a wide anterior collar, lateral angles nodulose, posterior margin about twice the width of anterior. Scutellum triangular, foveate at base. Corium with the lateral margins moderately amplified; cuneal fracture and base indistinct. Membrane considerably passing apex of abdomen. Rostrum reaching posterior coxæ.

1. *Neoleucon horribilis*, n. sp. (Tab. XXVI. fig. 24.)

Head, pronotum, and corium ochraceous; apex of head, two large transverse spots near lateral angles of pronotum, scutellum, a large subcordate spot at claval suture, lateral margins, and a large transverse spot at apex of corium black; cuneus pale hyaline, with the inner and outer margins black; membrane pale hyaline, the cellular margins black; antennæ with the first and second joints black, third and fourth fuscous, bases of the first and third pale luteous; eyes fuscous. Body beneath ochraceous (*carded specimen*); meso- and metasternums, a large lateral spot to prosternum, and base of abdomen fuscous or black. Legs black, basal halves of femora pale luteous; extreme apices of femora, apices of tibiæ, and the tarsi more or less ochraceous.

Long. 6 millim.

Hab. PANAMA, Bugaba (*Champion*).

SPARTACUS, gen. nov.

Body elongate subovate. Head short and broad, abruptly deflected in front of the eyes, which are stylated and slightly directed upwards. Antennæ with the basal joint much longer than the head, second a little longer than the first, third almost subequal in length to second and a little longer than fourth. Pronotum punctate, long, strongly constricted about the middle, the basal half convexly gibbous, the lateral angles subnodulose, with a well-developed anterior collar, the basal margin about twice the width of anterior margin. Scutellum somewhat small, triangular, the basal margin transversely sulcate at centre. Corium and membrane pale hyaline, the lateral margins of the first moderately and convexly amplified. Cuneus long, slender, and curved, extending to apex of membrane. Rostrum just passing the anterior coxæ.

1. *Spartacus albatu*s, n. sp. (Tab. XXVI. fig. 25.)

Head, pronotum, and scutellum pale creamy ochraceous; eyes and antennæ dark fuscous, the base of the first joint pale creamy ochraceous; corium and membrane pale hyaline and talc-like; outer and apical margins of cuneus and cellular margins of membrane fuscous. Body beneath (*carded specimen*) and legs pale creamy ochraceous; apices of the tarsi fuscous.

Long. 5 millim.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

TRYGO, gen. nov.

Body elongate subovate, lateral margins of the corium amplified. Head large, gibbous, deflected in front of the eyes; eyes large, prominent, not stylated. Antennæ with the basal joint a little shorter than the head, second joint a little more than twice the length of the first, third and fourth short and slender. Pronotum punctate, with a wide, anterior, tumid constriction, followed by a wide anterior collar, the basal portion moderately convex, the lateral angles faintly subnodulose, the posterior margin more than twice the width of anterior margin. Scutellum triangular, moderately tumid. Corium with the lateral margins convexly amplified, the amplified portion pale hyaline, its inner margin concave; cuneus moderately long and subtriangular. Rostrum not reaching the intermediate coxæ.

1. *Trygo imitationis*, n. sp. (Tab. XXIX. fig. 8.)

Bright and deep shining stramineous; head, eyes, anterior constriction to and lateral angles (very broadly) of pronotum, basal margin and angles of scutellum, base of corium, inner and sutural margins of clavus,

lateral margins of corium (very narrowly) preceding the amplified and hyaline extension, apex of corium (widest at inner angle), lateral margins of membrane, and body beneath black; pronotal collar castaneous; antennæ with the basal joint pale stramineous, the second joint black with its base stramineous, third and fourth joints fuscous; coxæ and legs ochraceous (*carded specimen*); membrane pale smoky hyaline.

Long. 4 millim.

Hab. PANAMA, Bugaba (*Champion*).

JORNANDES, gen. nov.

Body above broadly subovate, depressed, glabrous, shining. Head very broad at base and vertically deflexed. Antennæ inserted at some distance before the eyes, with the basal joint incrassated and much shorter than the head; second joint about three times the length of the first, its apex slightly incrassated; third and fourth joints more slender than second, the third twice the length of fourth. Pronotum broad, the lateral angles subacutely rounded, the posterior margin slightly concave at centre, width at lateral angles about twice that of anterior margin. Scutellum faintly transversely striate, its disc convexly tumid. Corium widening posteriorly to cuneus, the fracture deep. Apices of posterior femora and the posterior tibiæ with a few scattered setæ. Rostrum (apparently*) not reaching the intermediate coxæ.

1. *Jornandes championi*, n. sp. (Tab. XXIX. fig. 9.)

Head ochraceous, the apex, eyes, and a central spot at base black; antennæ with the first and second joints ochraceous, the base of the first and base and apex of the second black, third and fourth joints black; pronotum black, the anterior and lateral margins and angles broadly ochraceous, the basal margin narrowly and obscurely ochraceous; scutellum and corium black, base of clavus and corium, apex of clavus, and a spot preceding cuneus ochraceous; cuneus fuscous; membrane fuscous, black at base. Body beneath (*carded specimen*) black, lateral margins of sternum and legs ochraceous, tarsi blackish.

Long. 3 millim.

Hab. GUATEMALA, La Mercedes (*Champion*).

FLORUS, gen. nov.

Body broadly subovate, lateral margins of corium convexly amplified. Head broad, deflexed in front of eyes, which are contiguous to anterior margin of pronotum. Antennæ with the first joint simple and a little longer than head; second joint twice the length of first, and gradually incrassated; third and fourth joints slender and subequal in length. Pronotum punctate, convex, anteriorly deflected, with a narrow anterior collar, the lateral angles rounded and subnodulose, the anterior angles broadly rounded. Scutellum triangular, tumid at base. Corium with the amplified margins subhyaline; cuneus broadly triangular, fracture not profound; membrane considerably passing apex of abdomen. (*Rostrum imperfectly seen, owing to specimen being carded* †.)

1. *Florus insolitus*, n. sp. (Tab. XXIX. fig. 10.)

Head and pronotum black, anterior collar and basal margin of pronotum ochraceous; antennæ with the first and third joints pale luteous, second joint black, fourth joint fuscous; scutellum black; clavus black,

* Judging from a difficult examination of a carded specimen.

† The great majority of the new species here described are only represented by single specimens, and as these are carded, they are, though in beautiful condition, somewhat unfit for the careful examination of several characters important to the description of new genera and species. Soft-bodied insects like the Capsidæ do not admit with safety of the operation of floating from the cards to which they are affixed, and I have therefore been compelled to give the best description possible, which with the figures will, I think, simplify the process of identification.

with a central ochraceous spot on each side; corium ochraceous, with a basal spot and a central transverse fascia, which at middle is continued posteriorly to base of membrane, black; cuneus pale ochraceous; membrane pale fuscous, with a large apical ochraceous spot; head and sternum beneath black, anterior margin of prosternum ochraceous; abdomen and legs ochraceous, the abdomen with some black basal spots (*carded specimen*).

Long. 4 millim.

Hab. PANAMA, David (*Champion*).

PIRITHOUS, gen. nov.

Body subovate, more or less gibbous, opaque, and pilose. Head somewhat tumid, anteriorly and vertically deflexed before the eyes, which are large and contiguous to the anterior margin of the pronotum. Antennæ with the first joint constricted at base and longer than head; second joint a little longer than the first; fourth a little longer than third. Pronotum punctate, tumidly convex at base and then deflected to head, with an obscure transverse anterior constriction, the basal margin convex, and not quite twice the width of anterior margin, the lateral margin oblique to the anterior constriction. Scutellum subtriangular, with a central longitudinal nodulose carination. Corium with the lateral margin widened towards cuneus, which is almost as broad at base as long, with the fracture profound. Membrane considerably passing the apex of the abdomen. Rostrum about reaching the intermediate coxæ.

This genus is apparently allied to *Dacota*, Uhler, from which the structure of the antennæ will at once separate it.

1. *Pirithous pallipes*, n. sp. (Tab. XXIX. fig. 11.)

Black, opaque, more or less covered with greyish pile; antennæ pale stramineous, the third and fourth joints infuscated; corium with a more or less distinct castaneous tinge; cuneus black; membrane pale hyaline, the cellular areas dark fuscous; body beneath black, covered with greyish pile; legs pale stramineous, the apices of the tarsi fuscous.

Long. $3\frac{1}{2}$ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

The three following genera I prefer at present to leave divisionally unattached. The two first, *Eurotas* and *Lampethusa*, seem to appertain to Reuter's division Plagiognatharia; but the third, *Demarata*, is distinct from any division which, so far as I know, has been proposed, and this distinctness is in the aberrant character of the antennæ, which, taken alone, would even almost prevent it being classified in the family Capsidæ.

EUROTAS, gen. nov.

Body somewhat elongately subovate, moderately deflexed, and shining. Head deflexed, compressed, and tapering before the eyes. Antennæ inserted in front of the eyes, with the first joint a little longer than the head, very thickly incrassated and subnodulose; second joint about half as long again as the first, its basal half slender, the apical half nodulosely incrassated; third joint a little more than half the length of second, and moderately incrassated; fourth joint about half the length of second, and robust. Pronotum somewhat triangular, the base moderately convexly tumid, the anterior margin with a very slender anterior collar, the basal margin about twice the width of anterior margin. Scutellum triangular, detached from pronotum, its apex acutely produced and with a transverse basal sulcation. Pronotum with the lateral margins not dilated, the cuneus elongately triangular. Rostrum about reaching the intermediate coxæ.

1. *Eurotas nodosus*, n. sp. (Tab. XXIX. fig. 12.)

Black, shining; eyes dull greyish; membrane pale fuscous. Structural characters as described in generic diagnosis.

Long. 4 millim.

Hab. PANAMA, Bugaba (*Champion*).

LAMPETHUSA, gen. nov.

Subovate, more or less opaque. Head moderately compressed, and tapering before the eyes. Antennæ inserted in front of the inner margin of the eyes; first joint not quite twice the length of the head, very widely compressed and dilated; second joint slender, incrassated towards the apex, and subequal in length to first; third and fourth joints slender, third longer than fourth. Pronotum with a distinct anterior collar, the posterior margin convex, and twice as broad as the anterior margin, beyond basal half strongly deflected towards head. Scutellum moderately large and tumid, triangular, and with a faint central longitudinal carination. Corium widening towards apex; cuneus subtriangular, with the fracture distinct. Membrane considerably longer than the abdomen. Rostrum about reaching the intermediate coxæ.

1. *Lampethusa anatina*, n. sp. (Tab. XXIX. fig. 13.)

Ochraceous, mottled and marked with very dark castaneous. Head ochraceous, the eyes fuscous; antennæ with the basal joint castaneous, its margins pilose, second joint fuscous, annulated with luteous near base, third joint ochraceous, darker towards apex, fourth joint dark ochraceous; pronotum ochraceous, with the lateral angles and two large and almost confluent spots on each basal side dark castaneous; scutellum pale castaneous, with three small basal dark castaneous spots, and with the margins and central carination paler; corium and clavus ochraceous, largely and irregularly spotted with dark castaneous; cuneus pale castaneous, the basal angles and apex dark castaneous; membrane pale fuscous, spotted and marked with greyish. Body beneath imperfectly seen (*carded specimen*); legs castaneous, tibiæ annulated with ochraceous.

Long. $4\frac{1}{2}$ millim.

Hab. GUATEMALA, Zapote (*Champion*).

DEMARATA, gen. nov.

Body subovate, moderately convex, pilose, and punctate above. Head broad, compressed in front of eyes. Antennæ inserted nearer to each other than to eyes; first joint moderately incrassated, shorter than head; second joint rather more than twice the length of first, and slightly incrassated at apex; third and fourth joints as stout as second, third about half as long as second, and longer than third. Pronotum deflected from about the basal third towards head, with the lateral angles not prominent, but subacute, posterior margin about twice the width of anterior margin, which is not provided with a collar. Scutellum triangular. Corium widening towards cuneus, which is subtriangular, the fracture not profound. Membrane considerably longer than the abdomen. Rostrum reaching the intermediate coxæ.

1. *Demarata villosa*, n. sp. (Tab. XXIX. fig. 14.)

Head, pronotum, and scutellum black, the pronotum with the base and lateral angles dark castaneous; antennæ with the first and second joints ochraceous, the third and fourth fuscous; corium and cuneus dull castaneous; membrane pale fuscous, the cellular areas *sometimes* darker. Body beneath (*carded specimen*) fuscous; coxæ and legs ochraceous, apices of the tarsi fuscous. The body above is covered with greyish pile, which is less abundant on the head and pronotum.

Long. $3\frac{1}{2}$ millim.

Hab. GUATEMALA, near the city (*Champion*).

Dysdercus obscuratus (p. 230).

To the localities given, add:—MEXICO, Atoyac in Vera Cruz (*Schumann*), Teapa in Tabasco (*H. H. Smith*).

Dysdercus concinnus (p. 231).

To the localities given, add:—MEXICO, San Lorenzo near Cordova (*M. Trujillo*), Teapa in Tabasco (*H. H. Smith*); PANAMA, Bugaba, David (*Champion*).

Dysdercus obliquus (p. 232).

To the localities given, add:—MEXICO, Presidio de Mazatlan in Sinaloa (*Forrer*), Tepic in Jalisco (*Schumann*), Orizaba in Vera Cruz (*H. H. Smith & F. D. G.*), Chilpancingo and Xucumanatlan in Guerrero (*H. H. Smith*), Temax in North Yucatan (*Gaumer*); GUATEMALA, Cerro Zunil and Dueñas (*Champion*); COSTA RICA, Caché (*Rogers*); PANAMA, Bugaba (*Champion*).

Dysdercus chiriquinus (p. 232).

To the locality given, add:—MEXICO, Teapa in Tabasco (*H. H. Smith*).

Dysdercus capitatus (p. 233).

To the locality given, add:—MEXICO, Temax in North Yucatan (*Gaumer*).

Dysdercus ruficollis (p. 233).

To the localities given, add:—GUATEMALA, Teleman in Vera Paz (*Champion*); PANAMA, Bugaba (*Champion*).

We have now received a variety very similar to that figured by Hahn (Wanz. Ins. ii. fig. 123), with the exception that the scutellum, clavus (wholly or part), and the basal half of the pronotum are black, as well as the posterior half of the corium. This variety was found by Mr. Champion at Bugaba and on the Volcan de Chiriqui. In my own collection there are examples of it from Colombia and Brazil.

MIRIS (p. 236).

Miris guatemalanus (p. 236).

To the localities given, add:—MEXICO, Omilteme in Guerrero (*H. H. Smith*); PANAMA, Volcan de Chiriqui 4000 to 5000 feet (*Champion*).

2 (A). **Miris panamensis**, n. sp. (Tab. XXXVI. fig. 8.)

Allied to *M. guatemalanus*, but larger, the pronotum and scutellum more sparingly and finely punctate; apex of the clavus fuscous, a curved inner fuscous streak to corium terminating in a darker fuscous spot near

inner basal angle of cuneus; posterior femora castaneous; apex of the head more produced than in *M. guatemalanus*.

Long. 11-12 millim.

Hab. PANAMA, Volcan de Chiriqui 8000 feet (*Champion*).

Mr. Champion took two examples of this species, and both at the above altitude.

EIONEUS, gen. nov. (To follow the genus *Miris*, p. 237.)

Head long and moderately ascending in front, the apex subacutely produced, the lateral margin between base of antennæ and apex prominently toothed, the basal half with a central narrow longitudinal sulcation; antennæ with the basal joint about as long as the head and pronotum together, incrassated and strongly setose, second joint longer than the first, but shorter than the third. Pronotum much longer than broad, the anterior margin concavely sinuate, the posterior margin strongly concavely sinuate before the base of the scutellum, the anterior area with two fine transverse constrictions. Scutellum with the base convex, a very large and profound fovea at each basal angle, followed by a fine but distinct transverse constriction, the apex nodulose. Posterior legs very long, the femora almost reaching the apex of the membrane, tibiæ long and strongly setose. (Under surface not described owing to specimens being carded.)

The remarkable structure of the scutellum renders this genus very distinct.

1. **Eioneus bilineatus**, n. sp. (Tab. XXXVI. fig. 9.)

Pale ochraceous; eyes black; apex of head and the basal sulcation infuscated; two central indistinct fuscous lines extending through pronotum and scutellum; antennæ with the basal joint dark ochraceous and very strongly setose; posterior tibiæ and base of posterior tarsi very bright castaneous, apices of all the tibiae black.

Long. 7-8 millim.

Hab. MEXICO, Teapa in Tabasco (*H. H. Smith*); GUATEMALA, San Gerónimo and Senahu in Vera Paz (*Champion*); HONDURAS, Ruatan Island (*Gaumer*).

Our collection contained one specimen from each of the above localities.

CREONTIADES (p. 237).

Creontiades rubrinervus (p. 237).

To the localities given, add:—MEXICO, Presidio de Mazatlan in Sinaloa (*Forrer*), Orizaba in Vera Cruz (*H. H. Smith & F. D. G.*).

MINYTUS (p. 237).

1 (A). **Minytus bicolor**, n. sp. (Tab. XXXVI. fig. 10.)

Head, pronotum, and scutellum ochraceous; corium dark castaneous speckled with ochraceous; basal margin of cuneus and the membrane brownish ochraceous; body beneath and legs ochraceous. (Antennæ mutilated, the second joint dark castaneous.)

Long. 7 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

A single specimen, in poor condition, constitutes my sole knowledge of this species. It is, however, sufficiently distinct from *M. argillaceus* to make its description necessary.

Besides its different colour, it is separated from that species by having the base of the pronotum more concave and the base of the scutellum more foveate.

COLLARIA.

Collaria, Provancher, Nat. Canad. iv. p. 79 (1872).

Nabidea, Uhler, Proc. Bost. Soc. Nat. Hist. xix. p. 397 (1878); Reuter, Zool. Jahr., Arthr. p. 507 (1879).

Trachelomiris, Reuter, huj. op. p. 238.

I am indebted to Dr. Bergroth for pointing out to me some two years ago that Reuter's genus was preoccupied by that of Provancher, and Dr. Reuter has recently tacitly admitted the same.

1. *Collaria oleosa*.

Trachelomiris oleosus, huj. op. p. 238, Tab. XXIV. fig. 2.

Collaria oleosa, Reut. Ann. Soc. Ent. Fr. 1892, p. 393¹.

To the localities given, add:—MEXICO, San Lorenzo near Cordova (*M. Trujillo*), Orizaba (*H. H. Smith & F. D. G.*), Fortin in Vera Cruz, Chilpancingo and Tierra Colorada in Guerrero, and Teapa in Tabasco (*H. H. Smith*); GUATEMALA, Dueñas (*Champion*); NICARAGUA, Chontales (*Janson*).—VENEZUELA, Colonia Tovar, San Esteban, Caracas (*Simon*¹).

XENETUS (p. 239).

Prof. Uhler (Ent. Amer. iii. p. 151) has stated that my genus *Xenetus* "will no doubt prove upon actual comparison of the types to be the same" as *Eucerochoris*, Westw. I can scarcely follow this opinion, as the two genera have not only been fully described, but the types of both have been also figured. The structure of the antennæ alone is sufficient to prevent any confusion.

Eucerochoris, Westw.

"Antennæ corpore toto fere triplo longiores."
"Articulis tribus primis longitudine fere æqualibus." (Prof. Westwood's figure shows the basal joint to be about as long as the posterior tibiæ and tarsi together.)

Xenetus, Dist.

"Antennæ not quite so long as the body."
"First joint about as long as the head or longer, second joint three times the length of the first, third about half the length, or nearly as long as the second."

Xenetus lanuginosus (p. 239).

To the localities given, add:—MEXICO, Teapa in Tabasco (*H. H. Smith*); GUATEMALA, Teleman, Chacoj, Coatepeque (*Champion*); PANAMA, Bugaba (*Champion*).

Xenetus chryselectrus (p. 240).

To the locality given, add:—GUATEMALA, San Gerónimo (*Champion*).

ZACYNTHUS.

Zacorus, huj. op. p. 240 (nomen præocc.).

Zacynthus, huj. op. p. 297, nota.

1. *Zacynthus staphyliniformis*.

Zacorus staphyliniformis, huj. op. p. 240, Tab. XXIV. fig. 5.

2. *Zacynthus curvicornis*.

Zacorus curvicornis, huj. op. p. 241.

ZOSIPPUS (p. 241).

2. *Zosippus fœdus*, n. sp. (Tab. XXXVI. fig. 11.)

Black; eyes, basal joint of antennæ and bases of second and third joints, a short transverse fascia near centre of corium, apices of the tibiæ, posterior margins of the pro- and mesosternum, and a spot near base of abdomen, ochraceous. The body above is very sparingly greyish pilose.

Long. 4 millim.

Hab. PANAMA, Bugaba (*Champion*).

This species differs from *Z. inhonestus*, Dist., by the much more profound anterior constriction of the thorax, the more oblique and less conical tubercle to the scutellum, the less pilose body, absence of the apical pale spot to corium, &c. Mr. Champion found a single example.

3. *Zosippus gibbus*, n. sp. (Tab. XXXVI. fig. 12.)

Very pale castaneous; eyes fuscous, the posterior margin of the pronotum very dark violaceous; tubercle to the scutellum dark castaneous; antennæ with the apices of the second and third joints and the whole of the fourth joint pale fuscous; corium with a central transverse curved fascia which is pale ochraceous anteriorly and dark castaneous posteriorly, and with two pale ochraceous spots near base of membrane; cuneus ochraceous, with the basal margin, inner angle, and apex fuscous; base and apex of clavus, a lateral spot beyond centre of corium and inner apical angle and apex of same violaceous; femora ochraceous spotted with castaneous, tibiæ and tarsi brownish-ochraceous; membrane brownish-ochraceous. Tubercle to scutellum large, broad, and upright. (Body beneath imperfectly seen owing to specimens being carded.)

Long. 5 millim.

Hab. PANAMA, Bugaba (*Champion*).

This species, of which we have received two examples, is distinguished by the large, broad, upright tubercle to the scutellum.

HERDONIUS. (To follow the genus *Zosippus*, p. 241.)

Herdonius, Stål, Rio Jan. Hem. i. p. 55 (1858).

I place the following species in this genus on account of the antennæ being as long as the body, the scutellum possessing an erect spine at the apex, and the abdomen being constricted, though not "fere petiolatum." The shape of the head appears different from the rather meagre description of the same, and the thorax is not "apice capite multo angustior"; but not having seen a typical specimen, and the general