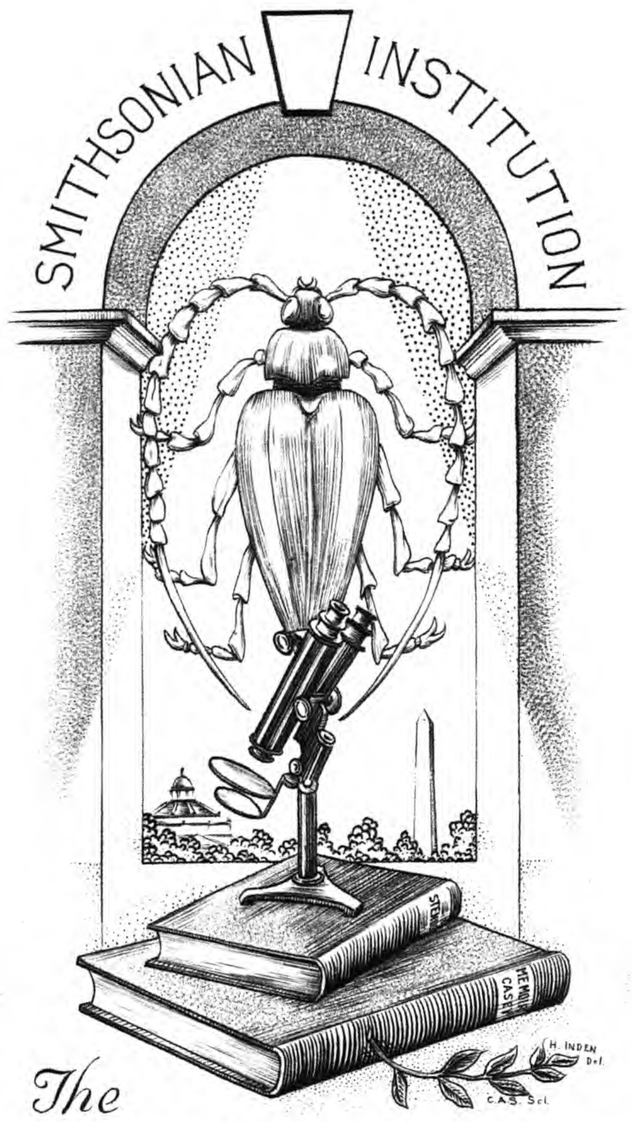

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BIOLOGIA CENTRALI-AMERICANA.

INSECTA.

COLEOPTERA. Vol. IV. Part 3.

RHYNCHOPHORA.

CURCULIONIDÆ.

ATTELABINÆ, PTEROCOLINÆ, ALLOCORYNINÆ, APIONINÆ,
THECESTERNINÆ, OTIORHYNCHINÆ.

BY

DAVID SHARP, F.R.S.,

AND

G. C. CHAMPION, F.Z.S.

1889-1911.

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INTRODUCTION.

THIS Volume, one of five required for the enumeration of the Rhynchophora, was commenced by Dr. Sharp in 1889 and is now concluded by myself. The study of the "Otiorhynchinæ Alatæ" has unfortunately been delayed for many years, during the publication of Vol. IV. parts 4, 5, and 7, all of which are devoted to the Family Curculionidæ. The present Volume, IV. part 3, includes the Subfamilies Attelabinæ, Pterocolinæ, Allocoryninæ, Apioninæ, Thecesterninæ, and Otiorhynchinæ. The Attelabinæ are represented by 104 (88 new), the Pterocolinæ by three (all new), the Allocoryninæ (a new subfamily) and Thecesterninæ each by one, the Apioninæ by 88 (84 new), and the Otiorhynchinæ by 419 (340 new) species respectively; the total number for the six subfamilies being 616 species, with 516 new, and forty new genera. Amongst the 419 Otiorhynchinæ, the apterous and winged forms are almost equal in number, there being a preponderance of apterous terrestrial species (*Eupagoderes*, *Epicærus*, *Epagriopsis*, &c.) in the arid portions of Mexico and the winged forms (*Exophthalmus*, &c.) becoming relatively more numerous in the forest regions southward. Taking the Curculionidæ as a whole—the subfamilies Curculioninæ and Calandrinæ, in addition to those worked out in the present Volume,—the number of species enumerated altogether from Central America is as follows:—Vol. IV. part 3, 616; IV. part 4, 1365; IV. part 5, 908; IV. part 7, 344: total 3233. The three other families of Rhynchophora—the Brenthidæ, Scolytidæ, and Anthribidæ,—dealt with in Vol. IV. part 6, number 615 species, thus bringing the total for the whole of the weevils up to 3848. The Rhynchophora, therefore, as anticipated (though not to the extent roughly estimated by myself in the Introduction to Vol. IV. part 4 of this series), greatly outnumber the Phytophaga (2619, including the Hispidæ and Cassididæ) within our limits.

The Otiorhynchid material examined by me includes that belonging to the U.S. National Museum, to whom we are indebted for co-types of all the species here described from their collection, as well as for many N.-American forms for comparison. From Costa Rica we have received during recent years numerous interesting species, both from Pittier and Biolley. Mr. Wickham, too, during his visit to Mexico in 1909, secured various Otiorhynchids, and, as usual, has kindly allowed us to retain any of these specimens that we required. Signor A. Solari, again, has also permitted us to keep for the British Museum the types of such species as have been described by me from his collection, which includes a portion of that of Jekel. The "Sommer collection" of Curculionids (including various types of Boheman, &c.) having been recently acquired by Prof. Poulton for the Oxford University Museum, we have been enabled to verify the names of certain species left unidentified by Dr. Sharp, and this involves some slight corrections to the synonymy of the "Otiorhynchinæ Apteræ," which are noted in the Supplement.

As stated in a footnote on p. 317, various Apioninæ left undetermined by Dr. Sharp for want of sufficient material, with such forms that have since come to hand, have been handed over to the specialist Herr Hans Wagner for study, and his descriptions of the new forms will be published elsewhere.

Of the fifteen coloured Plates issued, the first six were drawn by Mr. Purkiss, the others by Mr. E. Wilson of Cambridge.

It will not be out of place to note here that the enumeration of the Coleoptera, commenced in 1879, is now completed, bringing the total number of species to 18,039, for which eighteen Volumes have been required.

G. C. C.

December 1911.

ERRATA.

Page	Line	
211	17	for *pterygonalis* read *pterygomalis*.
223	2	for *conicus* read *conicollis*.

ZOOLOGIA.

Class INSECTA.

Order COLEOPTERA.

Tribe RHYNCHOPHORA.

Fam. CURCULIONIDÆ.

Subfam. *ATTELABINÆ.*

ATTELABUS.

Attelabus, Linnæus, Syst. Nat. ed. xii. 1, p. 619 (1767) ; Olivier, Ent. v. p. 5.
Chyphus, Thunberg, Act. Ups. vii. p. 110.
Cyphus, Bedel, Faune Col. Seine, vi. pt. 2, p. 23 [1].

Attelabus is at present a genus of more than 100 species, distributed over the continental regions of the world, and no doubt numerous in the tropics, as there are many undescribed species extant in collections. South America and the Antilles have yielded at present the larger proportion of its representatives.

Bedel [1] has recently proposed to transfer the name *Attelabus* to the allied genus *Apoderus*, on the ground that in the tenth edition of the 'Systema Naturæ' an insect now referred to *Apoderus* was the representative of *Attelabus.* In the Munich Catalogue, which I here follow, the origin of the genus is assigned to the twelfth edition of the 'Systema Naturæ'; or the genus may be credited to Olivier, whose work really inaugurated the modern arrangement of the genus and its allies. Either course appears sufficiently satisfactory, and enables us to avoid the confusion caused by Bedel's proceeding [which involves the alteration of some hundreds of names of species of Curculionidæ—*Apoderus* being called *Attelabus*, *Attelabus Chyphus* (emended to *Cyphus*), and *Cyphus Neocyphus*], so that I have no doubt the course I now adopt will receive the sanction of Coleopterists.

Attempts have been made in a more or less distinct manner to subdivide the genus;

but the divisions have not proved satisfactory, and I follow Lacordaire and the Munich Catalogue in using the name in its more extended sense.

I. *Anterior femora without teeth or spines.* (Attelabus, *auct.*)

A. *Eyes very widely separated, the space between them not carinate; spurs of the anterior tibiæ of the female placed one in front of the other.* (Pilolabus, *Jekel.*)

1. **Attelabus sumptuosus.**

Attelabus sumptuosus, Gory in Guér. Mag. Zool. 1834, Cl. ix. t. 119 [1].

Hab. Mexico (*Brit. Mus. ex coll. Children*), Ventanas in Durango (*Höge*).—?? South America [1].

We have received only three examples, all females, that I can refer to this species; this sex has the peculiarity that the front tibiæ are bimucronate at the extremity, the mucrones being placed at the inner edge, one in front, the other behind.

Attelabus sumptuosus has hitherto been only recorded from South America, but I feel sure that this has been the result of error. Gory [1] says, "cette charmante espèce a été trouvée dans l'Amérique méridionale, et m'a été donnée par M. Children de Londres." Now the two examples of the species in the collection of the British Museum are also from Children's collection and are labelled Mexico, so that it is highly probable that Gory's example was really from there; this appears more certain when we recollect how vague is the term "Amérique méridionale" used by Gory.

2. **Attelabus viridans.** (*A. viridanus*, Tab. I. figg. 1, 1 *a*.)

Attelabus viridans, Gyll. in Schönh. Gen. et Spec. Curc. v. p. 303 [1].

Hab. Mexico, between Oaxaca and Acapulco [1], Cuernavaca (*Sallé*).

If I rightly apply this description, *A. viridans* is very closely allied to *A. sumptuosus*, and differs chiefly in the coarser sculpture of the wing-cases. It is apparently very variable in colour, some specimens being in this respect similar to *A. sumptuosus*, while others are blue or green, without copper or golden stripe; I think, however, all belong to one species, though this is by no means certain. The structure of the front tibiæ of the female is the same as in *A. sumptuosus*.

This is apparently a rare insect, as our editors have received only five examples, and I am acquainted with only two or three others in the collections of the Rev. H. S. Gorham and myself, obtained from old sources.

3. **Attelabus smithi,** sp. n.

Subtus viridi-auratus, supra cupreus, prothoracis basi elytrorumque viridis, antennis pedibusque nigris; elytris fortiter profundeque punctatis.

Long. cum rostro 8 millim.

Hab. Mexico, Mescala in Guerrero (*H. H. Smith*).

Antennæ very short, the fourth joint a little longer than broad, the sixth about as long as broad, the seventh and eighth transverse, the club abrupt, compact, about as long as the five preceding joints, the tenth joint rather shorter than the ninth or eleventh. Rostrum short and broad, only as long as the head; eyes prominent, widely separated, the surface between them rugose. Thorax narrower in front than behind, constricted both in front and at the base. Elytra with a series of deep punctures, subrugose, not brilliant even at the apex.

We have received only two female examples of this species. One of the varieties of *A. viridans* is almost similarly coloured, but I separate *A. smithi* on account of its smaller size and still coarser and deeper sculpture. The cupreous-red parts of *A. smithi* are duller in colour than in *A. sumptuosus* and *A. viridans*, var., and the legs have scarcely any metallic tint.

4. **Attelabus splendens.** (Tab. I. fig. 2, ♂.)

Attelabus splendens, Gyll. in Schönh. Gen. et Spec. Curc. v. p. 304 [1].

Hab. Mexico, Vera Cruz (*Chevrolat* [1], *Sallé*).

I have seen only two examples of this species. The female has the front tibiæ bimucronate, the mucrones being placed similarly to those of the same sex of *A. viridans* and *A. sumptuosus*; the mucrones, however, are much smaller in *A. splendens*, and the tibia is shorter and stouter and the crenulations on its inner face are much less marked. The male is in an immature and mutilated condition, and has only a single small mucro on the front tibiæ.

5. **Attelabus klugi.** (Tab. I. fig. 3, ♂.)

Attelabus klugii, Gyll. in Schönh. Gen. et Spec. Curc. v. p. 302 [1].

Hab. Mexico (*Klug* [1]), Parada (*Sallé*).

6. **Attelabus nigriclava,** sp. n.

Gracilis, æneus, rugosus, griseo-pubescens, antennarum clava nigerrima, elytris singulis puncto depresso fusco. Long. cum rostro 7 millim.

Hab. Mexico, Chilpancingo in Guerrero 4600 feet (*H. H. Smith*).

Var. Elytris minus profunde rugosis, quasi submaculatis; minus conspicue griseo-pubescens.

Hab. Mexico, Omilteme in Guerrero 8000 feet (*H. H. Smith*).

Antennæ moderately long, the club abrupt, quite black and thus contrasting strongly with the other joints, as these bear much white hair. Head as long as the rostrum; eyes prominent, widely separated. Thorax much narrowed towards the front, but not constricted either in front or at the base, deeply transversely rugose. Scutellum narrow. Elytra rather deeply and coarsely rugose; on the middle of each is a small

round fovea. Legs slender. Male with a depression along the middle of the ventral segments.

We have received five examples of this species, which is allied to *A. klugi*, but differs in a great many minor points, besides the foveæ on the wing-cases. Of the variety we have received only one specimen. It is quite possible that it may prove to be a distinct species.

7. **Attelabus diffinis,** sp. n.

Gracilis, nigerrimus, brevissime parcissimeque pubescens, subopacus; elytris obsolete sculpturatis.
Long. cum rostro 9 millim.

Hab. MEXICO, Chilpancingo in Guerrero (*H. H. Smith*, June 1888).

Head elongate, about as long as the rostrum, the eyes convex, very widely separated, the space between them without depressions, rugosely sculptured. Thorax elongate, rounded at the sides and a little narrowed in front, with a feeble depression or constriction in front of the base, the surface transversely rugose. Scutellum narrow and quite small. Elytra elongate, with a distant, very irregular punctuation. Legs long and slender.

This insect has the form of *A. klugi*, but is very different in colour, sculpture, and pubescence. Only one example has been obtained; it is a female, and has the two spurs on the anterior tibiæ placed one in front of the other as in *A. viridans*.

B. *Eyes only moderately distant, the space between them carinate; surface pubescent; spurs of the anterior tibiæ of the female placed one above the other.* (Himatolabus, *Jekel.*)

8. **Attelabus vestitus.**

Attelabus vestitus, Gyll. in Schönh. Gen. et Spec. Curc. v. p. 307 [1].

Hab. MEXICO, between Oaxaca * and Acapulco [1], Oaxaca (*Höge*), Yolos (*Sallé*).

Var. duplo minor.

Hab. MEXICO, Ciudad in Durango, Zacualtipan in Hidalgo (*Höge*).

The sexual distinctions, except in the front legs, are not conspicuous in this species; the female has the armature of these parts very strongly developed, the upper of the two apical mucrones being of unusual size.

The unique exponents from Ciudad and Zacualtipan may not be really conspecific; they by no means agree with one another, however, and if distinct from *A. vestitus* must represent two closely allied species.

* Schönherr writes in this and other cases "Oaxara"; but as there can be little doubt that Oaxaca is intended I shall make this change whenever I have occasion to quote the locality from him.

9. **Attelabus rudis.**

Attelabus rudis, Boh. in Schönh. Gen. et Spec. Curc. viii. p. 360 [1].

Hab. Mexico (*Sturm* [1]).

This may possibly be a small variety of the female of *A. vestitus*.

10. **Attelabus vinosus,** sp. n.

Rufo-obscurus, pube pallescente sat dense vestitus; prothorace elytrisque fortius sculpturatis; scutello subquadrato, haud transverso.

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

Hab. Mexico, Totosinapam, Capulalpam (*Sallé*), Jalapa (*Höge*); Guatemala, Quiche Mountains 7000 to 8000 feet (*Champion*).

Closely allied to *A. vestitus*, but distinguished by the dark vinous-red colour and the much more evident sculpture. The sexual distinctions, except in the front legs, are slight. The rostrum is quite short, thick, the head broad, the eyes placed nearly midway between the front of the thorax and the mouth. The thorax is rather coarsely and irregularly sculptured, without any transverse groove. The elytra are even, scarcely at all depressed behind the scutellum, rather coarsely and irregularly sculptured, the striation quite visible. The front femora are entirely unarmed.

A specimen of this species in Sallé's collection from Sturm's cabinet is labelled *A. cinnamomeus*, Sturm; but as this name is not a suitable one—being much more applicable to the closely allied *A. vestitus*—I have not used it. The four Mexican examples before me are all in a bad state of preservation; the description therefore is taken from the Guatemalan exponents, six in number.

11. **Attelabus axillaris.** (Tab. I. fig. 4, ♀.)

Attelabus axillaris, Gyll. in Schönh. Gen. et Spec. Curc. v. p. 308 [1].

Hab. Mexico, between Oaxaca and Acapulco [1], Parada, Yolos (*Sallé*), Playa Vicente (*Höge*); Guatemala, near the city, San Gerónimo (*Champion*).

This insect shows considerable variation in size and sculpture, but I believe the nine examples before me really represent one species. In some specimens the front tibiæ are bimucronate at the apex; these I consider to be females.

C. *Eyes but little separated, the space between them sulcate or carinate; surface without pubescence.* (Xestolabus, *Jekel.*)

12. **Attelabus heterocerus,** sp. n.

Nudus, nigerrimus, nitidus, elytris singulis plaga magna humerali rufa; antennis articulis 2^{o}–8^{m} piceis, clava elongata sed cum articulo ultimo minuto.

Long. cum rostro 5 millim.

Hab. Mexico, Amula and Chilpancingo in Guerrero (*H. H. Smith*).

We have received only two examples of this insect; they are males, and the peculiarity of the antennæ by which the species may be distinguished from all others of the genus is perhaps less marked in the other sex—the ninth and tenth joints are each about as long as the four preceding joints together, while the terminal joint is small and acuminate, and subconstricted in the middle. In general form *A. heterocerus* somewhat resembles *A. corvinus*, but it has a more conical thorax. The head is elongate, and the rostrum short, hardly so long as the head; the eyes only moderately convex, rather widely separated, the space between them depressed, feebly carinate in the middle. Thorax rather long, subconical, almost smooth, there being only a slight sculpture along the base. Elytra with a subobsolete, rather scanty, diffuse punctuation, and also with series of fine, distant punctures, quite obsolete towards the apex; the sutural series is more distinct than the others, but does not reach the apex, and the outer series are so indistinct that they can scarcely be perceived even at the base. The scutellum is much narrower than it is in *A. corvinus*.

13. **Attelabus corvinus.**

Attelabus corvinus, Gyll. in Schönh. Gen. et Spec. Curc. v. p. 304 [1].

Hab. Mexico, between Oaxaca and Acapulco [1], Atoyac in Vera Cruz (*H. H. Smith*), Ventanas in Durango, Juquila, Tapachula (*Höge*), Toxpam (*Sallé*); British Honduras, R. Hondo (*Blancaneaux*); Guatemala, El Tumbador, Las Mercedes, Cerro Zunil, Zapote, Capetillo, Dueñas, Purula, Chacoj (*Champion*), Panzos (*Champion, Conradt*), Coban (*Conradt*); Nicaragua, Chontales (*Belt*); Costa Rica (*Van Patten*); Panama, Volcan de Chiriqui 3000 feet (*Champion*).—South America, Colombia (*coll. Gorham*).

There are important differences between the sexes of this species, the front legs and the thorax, and the various parts of the head, including even the eyes and the antennæ, being longer in the male than in the female: in the former sex the strongly curved front tibiæ have a single mucro at the apex, and the apex of the rostrum is strongly bidenticulate beneath; in the female the front tibiæ are bimucronate.

A. corvinus appears to be abundant in Guatemala, but from Mexico we have received only seven examples, and only a single individual from each of the more southern provinces.

14. **Attelabus læsicollis.** (Tab. I. figg. 5, 5 *a*, ♂.)

Attelabus læsicollis, Gyll. in Schönh. Gen. et Spec. Curc. v. p. 305 [1].

Hab. Mexico (*coll. Chevrolat* [1]), Tacambaro, Acapulco (*Höge*); Guatemala, San Gerónimo (*Champion*).

Gyllenhal's description was taken from one male example, and the characters he gives are in part applicable only to that sex. *A. læsicollis* in both sexes may be dis-

tinguished from *A. corvinus* by the smaller size, by the elytra being feebly tinted with blue and the rostrum with blue or green, by the feeble depression on the wing-cases behind the scutellum, and by the existence of some coarse sculpture on the sides of the prothorax. The most remarkable of the differential characters are, however, the peculiarities of the male of *A. læsicollis*: the thorax in this sex bears two large depressions; the head at the vertex has a transverse channel, connecting in front with a longitudinal channel; the rostrum is comparatively very elongate; the head at the sides behind the eyes is deeply excavate and beneath bears two slight angular prominences; the middle of the breast of the prosternum bears also a slight prominence; and the apex of the rostrum bears two compressed or laminate tubercles directed forwards, not downwards. The sexual structure of the front legs is the same as in *A. corvinus*.

Our figure represents a male, and the accompanying outline (fig. 5 *a*) gives the proportions of the head and rostrum of the same sex.

15. **Attelabus** —— ?

Hab. Mexico, Tierra Colorada in Guerrero (*H. H. Smith*).

A single female example. This is probably the exponent of a species very near to *A. læsicollis*; it is smaller, and has the eyes placed nearer to the thorax, but the male should be known before a decision is made about it.

16. **Attelabus callosus,** sp. n. (Tab. I. fig. 6, ♂.)

Nigerrimus, nitidus; elytrorum humeris elevatis et lateraliter compressis; antennarum clava elongata. Long. 6 millim. (rostr. excl.).

Hab. Mexico, Toxpam (*Sallé*); Guatemala, Purula, Coban (*Champion*); Nicaragua, Chontales (*Belt*); Panama, Volcan de Chiriqui 2000 to 4000 feet (*Champion*).

Allied rather closely to *A. corvinus*, but readily recognized by the peculiarly shaped shoulders of the elytra, and the longer club of the antennæ; also with other minor, but constant, distinguishing characters. The thorax is polished, and possesses only a very scanty and quite obsolete punctuation. The elytra are rather coarsely striate-punctate at the base, but elsewhere are polished and nearly destitute of sculpture. The club of the antennæ is elongate, its first joint in the male being nearly twice as long as broad. In the male the thorax, head, rostrum, front legs, and antennæ are longer than in the female, the distance between the back of the eyes and the front of the thorax being more than half the length of the thorax; and the rostrum possesses at the apex beneath two small laminiform projections extending forwards: in the female these projections are wanting and the shorter front tibiæ are bimucronate at the apex.

Found freely on the Volcan de Chiriqui and at Purula; from Toxpam and Chontales *only single specimens have been received.*

17. **Attelabus conicollis,** sp. n. (Tab. I. fig. 7, ♀.)

Sanguineo-rufus, nitidus; prothorace æquali, subconico, parce obsoleteque punctato; elytris subquadratis, pone scutellum vix impressis, punctorum seriebus tantum ad basin conspicuis.
Long., ♂, 7 millim.

Hab. Mexico, San Andres Tuxtla (*Sallé*), Teapa in Tabasco (*H. H. Smith*); British Honduras, R. Hondo (*Blancaneaux*); Guatemala, El Reposo (*Champion*), Panzos (*Conradt*); Nicaragua, Chontales (*Belt*, *Janson*).

Head rather broadly but vaguely sulcate behind the eyes. Thorax with the usual curved or angulate transverse sulcus very obsolete. Scutellum very broad. Elytra less shining than the thorax, the punctures of the series very fine except at the base; the depression behind the scutellum slight, and not extending so far outwards as the scutellum itself. In the male the thorax, head, rostrum, and front legs are longer than in the female, and the rostrum bears near the extremity beneath two projecting acute tubercles; the antennæ are longer in the male, but the club is elongate in each of the sexes, and scarcely shorter in the female.

Our figure is taken from a female found at Chontales.

18. **Attelabus sedatus,** sp. n.

Sanguineo-rufus, nitidus, nudus; prothorace transversim subconico, impunctato; elytris subquadratis, pone scutellum vix impressis, ad basin seriatim punctatis, præterea fere impunctatis; antennarum clava elongata, laxe articulata.
Long. 3 millim.

Hab. Mexico, Toxpam, Tuxtla (*Sallé*), Oaxaca, Paso del Macho (*Höge*); Guatemala, Yzabal (*Sallé*).

One of the smallest species of the genus, and one in which the sculpture of the upper surface is the least distinct. Very closely allied to *A. conicollis*, but not half the size of the smallest individuals I have seen of that species. The thorax is remarkably smooth and even, there being, however, a slight depression or constriction across it behind the front margin. The series of punctures on the elytra are distinct only at the base and near the scutellum. In the male the club of the antennæ is slender and elongate, its first and second joints being each longer than broad; the rostrum is furnished with two acute tubercles at the apex beneath; the head is not sulcate behind the eyes; and the front tibiæ are slender and elongate, and armed with a single mucro at the apex. The female differs in the shorter, bimucronate tibiæ, and the absence of the denticles on the rostrum.

Eight examples.

19. **Attelabus angulipennis,** sp. n.

Brevis, testaceus; oculis parum distantibus; prothorace conico-transverso, impunctato; elytris ad latera pone humeros angulatis, ad basin subtiliter striato-punctatis.
Long. 3 millim.

Hab. Guatemala (*Champion*).

Eyes rather elongate, the space between them not broad, feebly sulcate. Thorax with an obsolete transverse depression across it behind the front margin. Scutellum rather narrow. Elytra with a prominent minute angle directed outwards just behind the shoulder, not impressed behind the scutellum; at the base with distinct series of punctures which become very fine and obsolete behind.

We have received only one example of this obscure insect. It resembles *A. sedatus*, but is distinguished by the angulated sides to the elytra. It was mounted by its captor on the same card with a specimen of *A. corallinus*, to which it is also extremely similar, though that species belongs to another group of the genus.

20. **Attelabus brevicollis,** sp. n.

♀. Piceo-sanguineus, nudus, nitidus, antennis nigris; prothorace transverso, parce punctato, subinæquali; elytris pone scutellum vix impressis, subtiliter seriatim punctatis, punctis basin versus minus subtilibus.
Long. 4 millim.

Hab. MEXICO, Tapachula in Chiapas (*Höge*); GUATEMALA, El Reposo (*Champion*).

Although we have received only two females of this species there can be no doubt it is distinct from *A. conicollis* and *A. sedatus*, owing to its shorter, less smooth thorax. The head is bisulcate and rugose between the eyes; the thorax is shining, sparingly punctate, broadly but vaguely transversely depressed behind the front margin, and bears some small irregular depressions. In other respects *A. brevicollis* is very similar to the corresponding sex of the two species named. The summit of the vertex is rather deeply impressed, which leads to the supposition that the male may have a peculiarly formed head as in *A. læsicollis*.

The localities for this species are both situate on the lower part of the Pacific slope, and not very far distant from each other.

21. **Attelabus melanopygus,** sp. n.

♀. Parvus, brevis, convexus, nitidus, rufus, capite cum rostro antennisque, pedibus, scutello pectoreque nigris, femoribus basi rufa; prothorace transverso, lævigato; elytris ad basin seriatim punctatis, ad apicem lævigatis.
Long. cum rostro 3 millim.

Hab. MEXICO, Amula in Guerrero 6000 feet (*H. H. Smith*).

Head short, the eyes very near to the thorax, rather widely separated, with a channel along the inner margin of each, and a groove along the middle of the front part of the space separating the channels; antennæ short, with rather large club of three subequal joints. Thorax about twice as broad as long, rounded at the sides and narrowed in front, smooth and shining. Scutellum moderate, a little broader than long. Elytra short and broad, with series of distant punctures, which are distinct only at the base and near the suture. Ventral segments and bases of the femora red, the pygidium black.

This species, of which only one female example has been obtained, is allied to the North-American *A. analis*, but by no means closely.

22. **Attelabus longiclava,** sp. n.

♀. Rufus, nitidus, rostro, antennis, pedibus elytrorumque parte posteriore nigris; antennarum clava gracili, perelongata; prothorace transverso, leviter inæquali, parce punctato; elytris brevibus, ad basin subtiliter striatis, pone scutellum obsolete depresso.

Long. 4 millim.

Hab. Panama, Bugaba 1000 feet (*Champion*).

Although we have only a single female example in a bad state of preservation, and it is closely allied to both *A. sedatus* and *A. brevicollis*, there is no doubt it is quite distinct from either. It is at once distinguished from *A. brevicollis* by the eyes being separated only by a smooth carina instead of a broad rugose space; from *A. sedatus* it may be identified by the more approximate eyes, and by the shorter, more uneven, less smooth thorax. The club of the antenna is remarkably elongate and slender, and on this account the species is best placed near *A. sedatus*. The eyes are only very slightly convex; the thorax is foveolate on each side of the middle, sparingly punctate; the scutellum is very broad; and the elytra are very feebly depressed behind the scutellum, striate at the base and towards the suture, elsewhere with series of very fine punctures.

The dark colour of the legs and antennæ may possibly be due to decomposition, but the black posterior part of the wing-cases is no doubt natural.

23. **Attelabus ligulatus,** sp. n.

Sanguineo-rufus, nudus, nitidus; oculis convexis; prothorace transverso, inæquali; elytris ad latera utrinque angulatim prominulis, pone scutellum anguste impressis, striatis, striis ad basin sat profundis.

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

Hab. Mexico, Playa Vicente (*Sallé*, *Höge*), Cordova (*Sallé*); Guatemala, Coban (*Conradt*); Panama, Bugaba (*Champion*).

In this species the male exhibits characters analogous to those of *A. læsicollis*, and possesses a further remarkable peculiarity, inasmuch as the two tubercles of the under surface of the rostrum are largely developed and amalgamated together, forming a ligula divided at the extremity only, and projecting considerably beyond the mouth. The head is deeply bisulcate between the prominent eyes, rugose in the female, but little sculptured in the male; the vertex in the male is very elongate and curvate, and is transversely and longitudinally impressed. The thorax is short, sparingly and feebly punctured in the female, almost impunctate in the male; but in this sex it bears two longitudinal impressions on the disc, and the oblique lateral impressions are deeper than in the female. The elytra have an angular projection on each side just behind the shoulders, and the inner striæ are very deep at the base. The scutellum is very broad and short. The club of the antennæ is moderately long. The front femora in the male are angulate beneath; in the female they are formed as in the corresponding sex of the allied species.

Four examples. The only specimen found at Bugaba is a female.

24. **Attelabus quadratus,** sp. n.

♀. Rufo-sanguineus, nudus, nitidus; prothorace conico, transversim bi-impresso: elytris brevibus, latis, lateribus pone humeros elevatis et lateraliter compressis.
Long. 5 millim.

Hab. NICARAGUA, Chontales (*Janson*).

Head elongate, the summit of the vertex canaliculate; eyes convex, widely separated, the space between them bisulcate, the interval between the sulci broad, uneven. Thorax almost impunctate, transversely impressed towards the front, and also with an angulate transverse impression extending completely across it. Scutellum extremely broad. Elytra with an obtuse elevation on each side behind the shoulder; near the base and towards the suture with deep striæ, which are continued backwards as series of extremely fine punctures; behind the scutellum there is a slight depression.

Two females.

Allied by the form of the elytra to *A. callosus*; but, besides differing much in size and colour, the head is differently formed, the eyes in *A. quadratus* being prominent and the grooves between them separated by a broad interval.

II. *Anterior femora irregularly serrate; form extremely short and broad.*
(Hybolabus, *Jekel.*)

25. **Attelabus ater.** (Tab. I. fig. 8, var. *sallæi.*)

Attelabus ater, Oliv. Encycl. Méth., Ins. iv. p. 278[1]; Ent. v. no. 81, p. 8, t. 1. f. 6[2].
? *Attelabus atratus,* Fabr. Syst. Eleuth. ii. p. 419[3].
Attelabus ignitus, Schönh. Curc. disp. Meth. p. 44[4].
Attelabus variabilis, Gyll. in Schönh. Gen. et Spec. Curc. i. p. 201[5].
Attelabus (*Hybolabus*) *sallei,* Jekel, Ins. Saund. ii. p. 208[6] (n. syn.).

Hab. MEXICO[6], Toxpam (*Sallé*); GUATEMALA, Panzos (*Champion*), Coban (*Conradt*). —SOUTH AMERICA[3], Cayenne[1 4 5], Brazil[5], Monte Video (*coll. Sharp*).

Jekel considered a specimen from Mexico sent to him by Sallé as distinct; but I am not able to find any satisfactory characters to distinguish individuals of our region from examples found at Monte Video, these localities being apparently the extreme points of its distribution; the characters relied on by Jekel are but slight, and some of them are not confirmed by the examples before me.

A. ater appears rare in our region, only five examples having come under my observation. We figure the example found in Guatemala by Mr. Champion.

III. *Anterior femora unidentate or bidentate.* (Euscelus, *Germ.*)

A. *Thorax without constriction behind front margin.*

26. **Attelabus corallinus.**

Attelabus corallinus, Gyll. in Schönh. Gen. et Spec. Curc. v. p. 317 [1].

Hab. Mexico (*Chevrolat* [1]), Teapa (*H. H. Smith*, *Sallé*), Oaxaca, Chilpancingo (*Höge*), Rio Papagaio (*H. H. Smith*); Guatemala, Las Mercedes, Mirandilla, Panima, Senahu (*Champion*).

Gyllenhal's description was based on a male example; the female has two small tubercles instead of one tooth on the front femur. The examples I refer to *A. corallinus* show a good deal of variation, and there may be more than one species among them; but as we have only received one or two examples from each locality, I can form no certain opinion on this point.

27. **Attelabus bullatus,** sp. n.

Sat elongatus, rufus; prothorace, elytris, tibiis omnibus femoribusque quatuor posterioribus testaceis; elytris ad suturam rufo-signatis, ad basin utrinque bulla elongata elevata, fere impunctatis.

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

Hab. Guatemala, Sinanja in Vera Paz (*Champion*).

Rostrum short, punctate; eyes not very remote from the thorax, moderately prominent, the space separating them rather broad, sulcate in the middle. Thorax shining, smooth, of a livid yellow colour above, with an angulate depression extending completely across it and on each flank with an oblique impression. Scutellum large, triangular, with the apex truncate. Elytra rather elongate, of a yellow colour, red along the suture, and with an indistinct red transverse mark in front of the posterior declivity; at the base on each side of the scutellum is an oval elevation, and between the elevations are some obscure punctures, elsewhere impunctate. Legs yellow, with the front femora red, except at the base, the middle and hind femora marked with red beneath.

Described from a single example of the male sex. The front femur has a rather long tooth near the extremity, and a tubercle near the middle; the ventral segments are deplanate and densely covered with pubescence.

28. **Attelabus auratus,** sp. n. (Tab. I. fig. 9, ♂.)

Sat elongatus, rufus; pedibus testaceis, femoribus anterioribus late rufescentibus; elytris testaceis (in vita auratis), rufo-marginatis signatisque, ad basin utrinque bulla elevata, pone scutellum punctatis.

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

Hab. Guatemala, Cerro Zunil 4000 feet (*Champion*).

Antennæ pale red, the club elongate. Rostrum short, the head moderately long, the eyes convex, separated by a narrow space which is deeply sulcate above. Thorax rather

short; surface finely rugose, with an angulated impression extending across the middle; on each flank deeply obliquely impressed. Elytra rather long, of a yellow colour (when wetted this becomes golden, and is no doubt of that colour during life), margined with dark red at the sides and suture, with a raised oval space at the base on each side of the scutellum; behind these elevations is a transverse band of dark red colour, which is coarsely punctate, the parts behind being nearly smooth.

Also described from a single male example. The upper surface of the anterior femur is shagreened; on the front edge towards the extremity there is a tooth, and near the middle are two tubercles placed one above the other. The ventral segments are deplanate on a rather small space, and pubescent, the pubescence at the sides being long and erect.

B. *Thorax with constriction behind the front margin.*

29. **Attelabus breviceps,** sp. n. (Tab. I. fig. 10.)

Rufus; elytris sulcatis, plagis plurimis testaceis (in vita auratis), lateribus ad medium angulo elevato; capite inter oculos sulcato; pedibus testaceis, femoribus anterioribus ex parte majore rufis, in utroque sexu bidentatis.

Long. 4 millim.

Hab. PANAMA, Bugaba 1000 feet (*Champion*).

Head and rostrum very short, the eyes short, very convex, separated by only a small space, which is deeply sulcate. Thorax pale red, with a transverse depression behind the front margin and a deep angulated impression across the middle, the angle of this impression prolonged backwards as a short longitudinal impression, impunctate. Elytra moderately long, with a small angular elevation on each side about the middle; rather deeply sulcate, the sulci at the base coarsely punctate; of a dark red colour, with a yellow space on each side of the scutellum, an elongate yellow mark behind the shoulder, a large geminate one before the extremity, and between these and the base four other marks placed transversely.

The sexual characters in this very distinct species are only slight, but in the male the front tibiæ are a little longer and there is only one mucro at their extremity, in the female there is a rather obscure second mucro.

30. **Attelabus binotatus.** (Tab. I. fig. 11, ♀.)

Attelabus binotatus, Gyll. in Schönh. Gen. et Spec. Curc. v. p. 316[1].

Hab. MEXICO, Vera Cruz (*Chevrolat*[1]), Toxpam, Cordova, Playa Vicente (*Sallé*), Jalapa (*Höge*); BRITISH HONDURAS, R. Sarstoon (*Blancaneaux*); GUATEMALA, Cerro Zunil, San Gerónimo, San Juan, La Tinta, Panzos, Cubilguitz (*Champion*), Coban (*Conradt*); NICARAGUA, Chontales (*Janson*); PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

Although so widely distributed in our region this is apparently not a common insect;

from many of the above localities we have received only one example, but Mr. Champion procured a fair series at San Gerónimo. The only important sexual distinctions are to be found in the front legs: in the male the front femora are bidentate, the tooth placed on the middle being long and slender, much longer than the other nearer the apex, and the tibiæ are slender and possess a single mucro at the apex; in the female the femora are also bidentate, the tooth on the middle being, however, quite short, shorter than the other, and the tibiæ are stouter and bimucronate at the apex. There is some variation in size, the specimens from Panama and Nicaragua being smaller than most of the others; the peculiar spot on the wing-cases is also rather larger in some specimens, but the difference in this respect is not great. We figure the female example from Nicaragua.

31. **Attelabus fenestratus,** sp. n. (Tab. I. fig. 12, ♀.)

Rufus; capite prothoraceque æneo-micantibus; abdomine, pedibus quatuor posterioribus femoribus anterioribus ad basin pallide flavis, tibiis tarsisque anterioribus rufo-testaceis; elytris plagis duabus magnis, eburnaceis ornatis.

Long. 4 millim.

Hab. Panama, Bugaba 1000 feet (*Champion*).

Closely allied to *A. binotatus*, but easily distinguished by the colour-characters, and the remarkably conspicuous ivory-like marks on the middle of the elytra; it is also a shorter insect.

Described from a single female. The front femora are bidentate as in *A. binotatus*, but the outer tooth is strongly sinuous externally.

32. **Attelabus championi,** sp. n.

Sat elongatus, rufus; abdomine pedibusque quatuor posterioribus minus saturatis, femoribus anterioribus ad basin flavis; elytris fortiter punctatis, guttis duabus testaceis, pellucidis, rotundatis ornatis.

Long. 5 millim.

Hab. Panama, Bugaba (*Champion*).

Of this species also we have received only one female: it is very similar to the more elongate examples of *A. binotatus*, but is no doubt quite distinct; the antennal club is elongate; the front legs are dark sanguineous-red, the tibiæ being concolorous with the femora, and these last having the slender basal portion clear yellow. The thorax is very polished and has a brassy tinge; the elytra are long and slender, their sculpture very coarse and irregular, but much less deep than in *A. binotatus*; the apical tooth of the front femur is longer and more slender than it is in *A. binotatus*.

33. **Attelabus cruralis,** sp. n. (Tab. I. fig. 13, ♂.)

Elongatus, piceus; antennis pedibusque elongatis; elytris grosse punctatis, medio guttula testacea pellucida ornatis.

Long. 7–8 millim.

Hab. Mexico, Toxpam (*Sallé*); Guatemala, Las Mercedes, Cerro Zunil, Purula (*Champion*); Panama, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

Joints 3 to 7 of the antennæ long; head elongate; eyes very distant from the thorax, the space between them convex, bearing a short groove. Median groove of the thorax moderately deep. Scutellum rather narrow, triangular, with the apex truncate. Elytra with coarse impressions of irregular form, subseriately arranged, deeply sulcate on the præ-apical declivity, each in front of the middle with a small, round, pellucid yellow spot. Front legs very long: in the male the tooth on the middle of the front femur is extremely elongate, and is curved; in the female there is in its place merely a tubercle, but the apical tooth is longer than it is in the male.

Mr. Champion procured a series of twelve examples at Purula, and these exhibit very little variation; we have only one or two representatives from each of the other localities, and each of them differs more or less from the typical examples, so it is probable there may be considerable local variation in the species. The two specimens from the State of Panama have the sculpture of the elytra much less deep, the pellucid spots a little larger, and the middle groove of the thorax subobsolete.

34. **Attelabus mundanus,** sp. n.

Sat elongatus, rufo-piceus, nitidus; antennis pedibusque anterioribus elongatis; elytris grosse irregulariterque punctatis.

Long. 6½ millim.

Hab. Mexico, Cordova (*Sallé*); Panama, Bugaba (*Champion*).

Intermediate in some respects between *A. binotatus* and *A. cruralis*, but differing from both by the complete absence of the pellucid spot on the wing-cases; the sculpture of these parts is remarkably coarse, deep, and irregular. The armature of the front legs in the two sexes differs but little from that of *A. binotatus*.

Three examples from Mexico, one from the State of Panama.

35. **Attelabus inæqualis,** sp. n. (Tab. I. fig. 14, ♀.)

Elongatus, æneus, rugosus; elytrorum lateribus utrinque spina grande ornatis; femoribus ad basin flavis.

Long. 6½ millim.

Hab. Mexico, Playa Vicente (*Sallé*); British Honduras, R. Hondo (*Blancaneux*); Guatemala, Coban (*Conradt*); Nicaragua, Chontales (*Janson*).

Head elongate, rugose. Thorax with the anterior and posterior transverse grooves definite, the middle ones more indefinite, the surface rugose. Scutellum subtriangular, its apical portion convex, obscurely truncate. Elytra coarsely and irregularly sculptured, brassy, shining; each about the middle of the length of the side furnished with a very large spine directed outwards and very slightly upwards, and between this and the suture is an angular elevation. Front legs longer in the male than in the female, the femora bidentate in each sex; in the male the tooth on the middle is equal to that nearer the apex, but in the female this tooth is represented by a tubercle.

Twelve examples. The figure is taken from a female example found at Chontales.

This species belongs to a group the representatives of which are chiefly Antillean.

Subfam. *RHYNCHITINÆ.*

RHYNCHITES.

Rhynchites, Herbst, Natursyst. Käf. vii. p. 123 (1797).
Lasiorhynchites, Jekel, Ins. Saund. ii. p. 227, note.

This genus consists at present of about 100 species, distributed in the continental regions of both the Old and New Worlds, but there are very few representatives described from South America. The North-American species are moderately numerous, but they are not yet very well elucidated.

We have obtained a fair series of species from our region which may be arranged in three groups, besides an aberrant species which may form ultimately another genus. Jekel, when describing a species of one of these groups, proposed for it the name of *Lasiorhynchites*, stating, however, that the European *Rhynchites pubescens* was the type of the group or subgenus. This association is, however, an unnatural one, as *R. pubescens* cannot be placed in the same subgenus as *R. rufiventris*, which is a member of a group peculiar to the tropical regions of the New World. So far as the species of our region are concerned *Lasiorhynchites*, Jekel, is therefore a synonym of *Rhynchites*.

§ 1. *Pygidium almost entirely covered; rostrum nearly always much sculptured, but little curved.*

1. **Rhynchites mexicanus.** (Tab. I. fig. 15.)

Rhynchites mexicanus, Gyll. in Schönh. Gen. et Spec. Curc. i. p. 227 [1]; Lec. Rhync. N. Am.[2]

Hab. North America, Arizona [2].—Mexico [1], Ventanas in Durango (*Forrer*), San Luis Potosi, Hacienda de Bleados (*Dr. Palmer*), Santa Clara in Chihuahua, Aguas Calientes, Acapulco, Chilpancingo, Matamoros Izucar, Mexico city (*Höge*), Rincon, Tepetlapa, and Acaguizotla in Guerrero (*H. H. Smith*), Orizaba (*F. D. G., H. H. Smith, Sallé*), Puebla, Cuernavaca, Guanajuato (*Sallé*).

This is apparently the least rare of the Mexican species of the genus, and a good series was procured by Herr Höge at Aguas Calientes, and by Dr. Palmer at San Luis Potosi, but from each of the other localities we have only one or two examples. The species is no doubt a variable one, and if all the examples I am considering be really referable to one species, then it is a very variable one, and may probably not be distinct from the North-American *R. æneus*. Most of the examples may be described as belonging to a large variety with slight striation of the elytra, and with great development of the interstitial punctuation, the colour being usually green; specimens of a blue colour with regular striation and serial punctuation on the interstices as described by Boheman are rare, and seem to be quite connected by intermediate specimens with the commoner form; a black or blue-black variety occurs with still deeper striation; and

near the City of Mexico Höge obtained a single example of very small size (long. $4\frac{1}{4}$ millim. incl. rostr.) and approaching in punctuation the Guatemalan *R. distans*. It is probable, however, that this latter variety may prove to be distinct. The male of *R. mexicanus* possesses a peculiar sexual character that has not hitherto been noticed: on the posterior part of the suture of the elytra the erect hairs are more numerous, and are so placed as to form two short divergent rows on each of the margins of the elytral suture. In the males of the deeply striate varieties this character, however, does not exist.

2. **Rhynchites zunilensis,** sp. n. (Tab. I. fig. 16.)

Æneus, densissime punctatus, griseo-hispidus.
Long. cum rostro 3 millim.

Hab. GUATEMALA, Cerro Zunil 5000 feet (*Champion*).

A very distinct little insect, allied to *R. æneus*, of which we have received only one specimen that is doubtless of the male sex. Antennæ inserted at the middle of the rostrum, brassy-black, with short, very broad, and abrupt club. Rostrum about as long as the thorax, very rugose; head coarsely, extremely densely punctate. Thorax small, scarcely so long as broad, very densely punctate. Elytra densely punctate, the serial punctuation scarcely distinguishable from the dense interstitial punctuation. Legs brassy-black.

3. **Rhynchites distans,** sp. n.

Æneus, vel cyaneo-æneus, rostro, antennis pedibusque nigris, nitidus, setis nigris erectis parce vestitus; elytris seriatim distanter punctatis, interstitiis subtilius fere parcius punctatis.
Long. cum rostro 4–5 millim.

Hab. GUATEMALA, San Joaquin and San Gerónimo in Vera Paz (*Champion*).

Closely allied to *R. æneus*, but of much smaller size than the smallest varieties of that species, and with the elytra very differently punctuated and setose. In form and sculpture the head and rostrum are in each sex similar to those of the corresponding sex of *R. æneus*. The thorax is small, rounded at the sides, sparingly punctate, with a short, fine channel on the disc. Elytra with regular series of punctures, but with the punctures very far from one another, and with the interstices also serially punctate, the punctures being fine and even more distant than those of the series. Four specimens.

4. **Rhynchites abnormalis,** sp. n. (Tab. I. figg. 17, 17 *a*, ♂.)

Niger, nitidus, parce hispidus; elytris cyaneis, seriatim haud fortiter punctatis.
Mas antennis articulis 9° et 10° longioribus, articulo ultimo parvo, asymmetrice sito.
Long. cum rostro 4 millim.

Hab. MEXICO, Parada (*Sallé*), Oaxaca (*Höge*).

Eyes moderately distant, the space between them punctate-rugose. Thorax narrow,

nearly as long as broad, sparingly punctate. Elytra with series of moderately distant, not coarse punctures, and with the interstices sparingly and finely seriate-punctate. The construction of the club of the antennæ in the male is very peculiar: the ninth joint is quite as long as broad, the tenth is rather longer, and oblique at its extremity, while the terminal joint is small and placed on the oblique truncature, so that in certain positions it has the appearance of being inserted on the posterior aspect of the preceding joint (fig. 17 *a*). Four examples, three males and one female.

5. **Rhynchites læticulus,** sp. n.

Viridi-auratus, nitidissimus, parcissime breviter hispidus, rostro, antennis pedibusque nigris; prothorace parcissime punctato; elytris seriatim grosse punctatis.
Long. cum rostro circiter 5 millim.

Hab. Mexico, Chilpancingo and Acapulco in Guerrero (*Höge*).

Club of the antennæ short, broad, very abrupt. Rostrum with a few coarse longitudinal rugæ. Head narrow, with an impression between the eyes, very sparingly punctate in front, impunctate behind. Thorax narrow, about as long as broad, slightly rounded at the sides, very sparingly punctate, with a fine abbreviated channel on the disc. Scutellum narrow. Elytra with series of very large punctures, and with a few minute punctures on the interstices. In the female the rostrum is slightly longer than the head and thorax; in the male it is a little shorter.

This brilliant little insect has a very small amount of sculpture on the thorax and is very scantily setiferous on the wing-cases. We have received only three examples.

6. **Rhynchites subauratus,** sp. n.

Viridis, supra auratus, nitidus, hispidus, rostro antennisque nigris, pedibus nigro-viridis; vertice prothoraceque profunde punctatis; elytris seriatim fortiter punctatis, interstitiis parce punctatis.
Long. cum rostro $3\frac{1}{2}$–4 millim.

Hab. Mexico, San Luis Potosi, Saltillo in Coahuila (*Palmer*), Guanajuato (*Sallé*).

Var. Minus læte auratus, prothorace densius punctato, rugoso.

Hab. Mexico (*Truqui*).

Allied to *R. læticulus*, but smaller, differently sculptured, and more densely hispid. Head without depression between the eyes, coarsely, deeply, and closely punctate. Thorax small, slightly rounded at the sides, very coarsely punctate. Elytra clothed with long, erect, not dense, hairs, and bearing regular series of coarse deep punctures, and with a scanty, rather coarse, punctuation on the interstices.

The two examples from Guanajuato and the single one from San Luis Potosi agree well with each other; the single specimen from Saltillo is a female of large size, with rather more scanty punctuation, but is, I expect, referable to the same species. The individual found by Truqui may be distinct.

7. **Rhynchites mollis,** sp. n.

Niger, longius parciusque griseo-hirtus ; capite sat lato, rostro fortius rugoso ; prothorace subcylindrico ; elytris seriatim fortiter punctatis, interstitiis haud omnino planis.
Long. cum rostro 4 millim.

Hab. MEXICO, Oaxaca, Zacualtipan in Hidalgo (*Höge*).

Antennæ short, with short, extremely broad club. Thorax small, subcylindrical, very slightly curved at the sides, closely and coarsely punctate, the punctuation on the disc less. Scutellum quite narrow. Elytra with regular series of closely placed coarse punctures, the interstitial punctures few and obsolete. In the female the rostrum is about as long as the head and thorax, the antennæ are inserted a little behind the middle of the rostrum, and the rostrum is not so coarsely rugose in front. In the male the rostrum is considerably shorter, the antennæ are inserted just in the middle, and the eyes are larger, so that the head is broader. Seven specimens.

A distinct species, easily recognized; the erect pubescence appears in certain lights quite white.

8. **Rhynchites scutellaris,** sp. n.

Nigerrimus, nitidus, nigro-hirtus, scutello albido-piloso, corpore subtus griseo-pubescens ; capite prothoraceque parce punctatis ; elytris seriatim punctatis, interstitiis seriatim remote punctatis.
Long. cum rostro $3\frac{1}{2}$–$4\frac{1}{2}$ millim.

Hab. GUATEMALA, Capetillo (*Champion*).

Var. (?) Major, elytris fortiter punctatis, interstitiis haud omnino planis.

Hab. MEXICO, Juquila (*Höge*).

This species is closely allied to *R. mollis*, but on the upper surface the pubescence does not appear white, except that the scutellum is more densely clothed with long white hairs parted along the middle ; the punctuation of the head and thorax is much scantier ; on the elytra the serial punctures become quite fine on the posterior half—they consist of a large puncture alternating with a very fine puncture—and the broad, quite flat interstices bear also a few fine setigerous punctures. The rostrum is coarsely sculptured ; the space between the eyes is impunctate, except laterally ; and the vertex, like the slender thorax, is moderately finely, not closely punctate. Four specimens. The example from Juquila that I have treated as a variety will, I think, prove to be distinct.

9. **Rhynchites basalis,** sp. n.

Nigerrimus, supra haud dense hispidus, nitidus ; prothorace elongato, cylindrico, parce punctato ; elytris seriatim punctatis, punctis in parte posteriore omnino subtilibus, ad basin fere grossis.
Long. cum rostro $3\frac{1}{2}$ millim.

Hab. PANAMA, Bugaba (*Champion*).

A species similar to *R. mollis*, but easily distinguished by the cylindrical thorax

and the peculiar punctuation of the wing-cases, the punctures on the basal portion of the latter being very large, while nearer the apex they are as minute as the interstitial punctures. The head and thorax are only sparingly punctate, and the pallid pubescence on the scutellum is not conspicuous. On the under surface the elongate pubescence is partly white. Two examples.

10. **Rhynchites auletoides,** sp. n.

Nigerrimus, nitidus, sublævigatus, parcius hispidus.
Long. cum rostro 3 millim.

Hab. GUATEMALA, Dueñas (*Champion*).

Rostrum rugose, not so long as the head and thorax. Antennæ short, with broad, rather long club. Head rather broad, with only a few distant, extremely fine punctures, very shining. Thorax slender, cylindrical, longer than broad, remotely, very finely punctate. Elytra broad and short, with the punctuation very fine and remote, but consisting nevertheless of a serial punctuation, and of a serial interstitial punctuation still finer and more remote. Five specimens. I observe no distinction that I can consider sexual.

§ 2. *Pygidium entirely exposed; rostrum obsoletely sculptured, but little curved; eyes widely separated; size very small.* (*Allies of the European* R. nanus.)

11. **Rhynchites regularis,** sp. n.

Æneus, densissime fortiter punctatus, minus nitidus, glaber, rostro nigro; elytris fortiter denseque seriatim punctatis, interstitiis sat convexis.
Long. cum rostro 3 millim.

Hab. MEXICO, Zacualtipan in Hidalgo (*Höge*).

Rostrum black, punctulate. Vertex with a silky opacity, finely punctulate; eyes moderately distant, separated from the thorax by a considerable space. Thorax elongate, rounded at the sides and narrowed in front, extremely densely and coarsely punctured. Elytra with very regular series of deep, coarse punctures, which are scarcely, if at all, finer at the extremity; the interstices are narrow, somewhat elevated, scarcely pubescent.

Of this little insect, remarkable on account of its greatly developed sculpture, we have received only two specimens.

12. **Rhynchites confertus,** sp. n.

Æneus, dense punctatus, minus nitidus, pube depressa tenuiter vestitus; rostro minus elongato, vertice lato.
Long. cum rostro 3 millim.

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

Antennæ slender, with rather long slender club. Rostrum short, broad, black, feebly

punctate, but little shining; vertex with a silky opacity, viridescent, obsoletely punctate; eyes widely separated, convex, close to the thorax. Thorax rather broad, rounded at the sides, viridescent, densely, coarsely, and deeply punctured. Scutellum minute. Elytra with very regular series of distinct punctures, which are setigerous; the interstices not punctate, but with the minute pubescence serially arranged. Two specimens.

13. **Rhynchites oculatus,** sp. n.

Æneo-niger, supra æneus, sat nitidus, tenuissime pubescens; prothorace densius fortissime punctato, elongato; elytris fortiter profundeque seriatim punctatis, interstitiis angustis subelevatis.
Long. cum rostro 2 millim.

Hab. GUATEMALA, near the city 5000 feet (*Champion*).

Head and rostrum dull and opaque, silky. Head brassy, with a few rather large, but quite obsolete punctures; eyes very convex, widely separated. Thorax longer than broad, very long and narrow, the sides very slightly rounded, distinctly contracted at the base, extremely densely and very coarsely punctured. Elytra with quite regular series of deep coarse punctures, as deep at the extremity as at the base. Two specimens.

14. **Rhynchites guatemalenus,** sp. n.

Niger, supra subcyaneus, tenuissime pubescens, sat nitidus; prothorace fortiter crebre sat profunde punctato, elongato; elytris seriatim punctatis, punctis pone medium subobsoletis, interstitiis planis, latis.
Long. cum rostro 2–3 millim.

Hab. GUATEMALA, Chiacam, Tamahu, San Juan, San Gerónimo (*Champion*).

Rostrum dull, entirely black; head also quite dull, nearly black, being very slightly tinted with bluish colour, with a few very obsolete punctures between the widely separated eyes. Thorax elongate and narrow, longer than broad, but little rounded at the sides, moderately closely, coarsely, and deeply punctate. Elytra with regular series of punctures, the punctures rather coarse at the base, subobsolete towards the apex, but again rather coarser and deeper on the declivous apex.

We have only either one or two specimens from each locality, but I believe I have the sexes before me; the rostrum and thorax being rather longer in one, which I presume is the female.

15. **Rhynchites debilis,** sp. n.

Niger, supra æneus, nitidus, omnino parcissime pubescens; prothorace elongato, sat crebre et sat fortiter punctato; elytris seriatim punctatis, punctis pone medium subobsoletis, interstitiis planis, latis.
Long. cum rostro $2\frac{1}{2}$ millim.

Hab. MEXICO, Jalapa (*Höge*), Teapa in Tabasco (*H. H. Smith*).

This insect is very closely allied to *R. guatemalenus*, though the brassy colour is very

different from the dull blue colour of that species, and the punctuation of the thorax is rather more scanty. There is but little difference in the punctuation of the elytra; the legs are brassy-black in colour.

16. **Rhynchites pusillus,** sp. n. (Tab. I. fig. 18.)

Niger, supra subcyaneus, tenuiter pubescens, sat nitidus; prothorace dense fortiterque punctato, elongato; elytris seriatim sat fortiter punctatis, interstitiis minus angustis.
Long. cum rostro $2\frac{1}{2}$ millim.

Hab. PANAMA, Bugaba (*Champion*).

This species is in sculpture rather similar to *R. confertus*, but differs in its dark blue-black colour and in the longer and more slender thorax. At first sight it is still more like the European *R. nanus*, but the thorax is longer and narrower and much more densely punctate. From *R. guatemalenus* the species is chiefly distinguished by the very dense punctuation of the thorax, and by the less obsolete punctuation of the elytra. Two examples.

17. **Rhynchites thesaurus,** sp. n.

Auratus, nitidus, tenuissime pubescens; rostro, antennis, pedibus, pectore abdomineque nigro-subæneis; prothorace elongato, crebrius fortiter profundeque punctato; elytris seriatim fortiter punctatis, interstitiis latis, haud omnino planis.
Long. cum rostro vix $2\frac{1}{2}$ millim.

Hab. MEXICO, Teapa in Tabasco (*H. H. Smith*).

This insect is very closely allied to *R. debilis*, but it does not agree in colour or punctuation with it or with any other species of the group; and, besides this, it has the vertex less sparingly and obsoletely punctate. The punctuation of the elytra on the disc is not obsolete. The only two examples received have a short rostrum; yet I fancy they are of opposite sexes, as there are some slight differences in the form and punctuation of the thorax, as well as a small distinction in the length of the front part of the rostrum.

18. **Rhynchites chiriquensis,** sp. n.

Læte cyaneus, nitidiusculus, pedibus æneis, rostro anterius antennisque nigricantibus; parce obsoleteque punctatus, fere lævigatus.
Long. cum rostro $2\frac{1}{2}$ millim.

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

Of this distinct and beautiful little insect we have received only one example, probably a female. It differs from all the other allied species by the diminished sculpture, more polished surface, and beautiful colour. The rostrum is long and slender, about equal in length to the head and thorax; shining black in front, behind the antennæ ænescent, the vertex cyaneous. Antennæ small, slightly brassy. Thorax

elongate and slender, slightly rounded at the sides, very remotely and not coarsely punctured. Elytra with series of distant fine punctures, which, however, are rather more distinct at the base.

§ 3. *Pygidium covered; rostrum strongly curved; head and thorax dissimilar in form in the two sexes; punctuation of the elytra minute and remote; size moderate.*

19. **Rhynchites rufiventris.**

Rhynchites rufiventris, Jekel, Ins. Saund. ii. p. 226 [1].

Hab. Mexico [1], Toxpam, San Andres Tuxtla (*Sallé*), Playa Vicente, Oaxaca (*Höge*), Atoyac in Vera Cruz (*H. H. Smith*); Guatemala, Coban (*Conradt*).

This is apparently not a common insect, as we have received only thirteen examples of it. It varies a little in colour, punctuation, and size, but I cannot distinguish more than one species. The peculiar colour of the ventral segments is probably a constant character.

20. **Rhynchites flaviventris,** sp. n.

Nigerrimus, nitidus, abdomine flavo, setis erectis nigris minus dense vestitus, corpore subtus griseo-pubescente; sutura elytrorum ante medium fascicula acuminata pubescentiæ albidæ.

Long. corp. absque rostro 5–5½ millim.; long. rostri 2 millim.

Hab. Mexico, El Mirador (*Sallé*).

Rostrum elongate, curvate. Head rather closely punctured. Thorax rather closely punctate. Scutellum with a scanty white pubescence. Elytra shining black, with numerous very distinct punctures, subserial in their arrangement, a small patch of white hairs on the suture, and a few white hairs at the sides near the shoulders. Under surface with a feeble white pubescence. In the male the rostrum is more densely sculptured than it is in the female, the head is narrower, and the thorax is more rounded at the sides.

This is the only one of our species, besides *R. rufiventris*, that has the ventral segments rufescent; and *R. flaviventris* is readily distinguished by the black colour, by the greater punctuation of the upper surface, by the white hairs on the suture being limited to a small space, and by the feeble white pubescence of the lower surface, the lateral band of white pubescence being absent. One pair.

21. **Rhynchites championi,** sp. n.

Niger, nitidus, elytris violaceis; parce punctatus, nigro-setosus, scutello elytrorumque sutura in parte basali, elytris apicem versus, pectorisque lateribus albido-pubescentibus.

Long. cum rostro 6–7 millim.

Hab. Mexico, Tapachula in Chiapas (*Höge*); Guatemala, Zapote, Dueñas (*Champion*).

Var. Niger, vix violaceo-tinctus, elytris parcius punctatis.

Hab. GUATEMALA, Senahu (*Champion*).

This species is similar to *R. rufiventris*, but the ventral segments are quite black, and the thorax is a little more slender. The punctuation is much the same in the two species, and there is but little difference in their sexual distinctions. I include a pair nearly black in colour as a variety, though it may probably prove distinct. Like *R. rufiventris*, this insect does not appear to be common, but I have seen eleven specimens from the various localities.

22. **Rhynchites centralis,** sp. n. (Tab. I. fig. 19.)

Violaceo-niger, nitidus, elytris violaceis; crebre punctatus, nigro-setosus, scutello elytrorumque sutura in parte basali, pectorisque lateribus albido-pubescentibus.

Long. cum rostro 7 millim.

Hab. GUATEMALA, Capetillo (*Champion*), Aceytuno 5100 feet (*Salvin*).

We have only two examples (of the male sex) of this species; though very similar to *R. championi* it may be easily enough distinguished by the less scanty punctuation. The vertex is densely punctured, and the thorax is finely and rather closely punctured; the elytra have a very distinct evenly distributed punctuation, which, though not dense, is more numerous and distinct than it is in *R. championi*, and the white pubescence at the apex is conspicuous, as also is the white hair on the under surface.

23. **Rhynchites mixtus,** sp. n.

Nigro-violaceus, nitidus, crebre punctatus, griseo-setosus, corpore subtus griseo-pubescente, pectore ad latera minus argute albido-cincto; scutello elytrorumque sutura albido-pubescentibus.

Long. cum rostro 8 millim.

Hab. MEXICO, Juquila (*Sallé*, *Höge*).

We have only two females of this species; it appears to be nearest to *R. centralis*, but has the white hair on the upper surface much more largely developed. The setæ consist to a great extent of upright white hairs, and the white pubescence on the suture, instead of being condensed on the basal part, is evenly distributed along the whole length; the white pubescence of the under surface is similarly diffuse.

24. **Rhynchites inermis,** sp. n.

Nigro-violaceus, nitidus, minus dense hirsutus, parcius obsoletiusque punctulatus, scutello elytrorumque sutura in parte basali, elytris apicem versus, pectorisque lateribus albido-pubescentibus.

Long. cum rostro 6–7 millim.

Hab. COSTA RICA, Cache (*Rogers*); PANAMA, Volcan de Chiriqui 3000 to 4000 feet (*Champion*).

Var.? Major, vix violaceo-tinctus, prothorace ad latera parcius punctato.
Long. cum rostro $8\frac{1}{4}$ millim.

Hab. PANAMA, Bugaba (*Champion*).

I should have treated this as only a variety of *R. championi*, but it has a more slender thorax, and this part is but little dilated in the male; it differs, moreover, in various other slight particulars from that insect. The punctuation of the thorax is very fine, but is numerous at the sides. The elytra are flat, and become a good deal broader behind, very little punctate, and the white pubescence on the suture and scutellum is neither dense nor conspicuous; on the other hand, the white fascia on the side of the breast is remarkably distinct.

We have received seven examples. The variety (?) from Bugaba very likely belongs to a different species.

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§ 4. *Aberrant species, with rugose sculpture and elongate club to the antennæ.*

25. **Rhynchites addendus,** sp. n. (Tab. I. fig. 20.)

Parvus, angustus, subtus viridi-niger; supra æneus, antennis pedibusque sordide testaceis; capite prothoraceque dense rugoso-punctatis; elytris omnino fortissime denseque rugoso-punctatis.
Long. cum rostro $3\frac{1}{4}$ millim.

Hab. MEXICO, Jalapa, Oaxaca (*Höge*).

Rostrum longer than the head, shorter than the head and thorax, punctate-rugose; head elongate; the eyes not large, very distant from the thorax, the surface between them very densely and deeply punctate. Antennæ inserted at the middle of the rostrum, obscure yellow, with the terminal joint darker, the club elongate, each of its joints being considerably longer than broad; ninth and tenth joints equal in length, the terminal joint a little shorter. Thorax slender, cylindric, slightly longer than broad, excessively densely deeply punctate. Elytra with a very deep irregular sculpture, at the base in the form of serial punctures, but beyond consisting of deep grooves, interrupted here and there in an irregular manner, the interstices narrow. Legs slender.

We have received only two specimens of this peculiar little species, and they are in a very mutilated condition. So far as I can see the characters, they do not fit well into any established genus; the pygidium is exposed; the prosternum seems to be formed as in *Eugnamptus*, except that I think the apices of the epimera are contiguous and conjoined; the form of the head is very different from that of *Eugnamptus*; and the basal joint of the hind tarsus is about as long as the following two joints together.

RHYNCHITOBIUS, gen. nov.

Caput elongatum. Prosterni epimera in medio a parte centro-sternali minute separata. Coxæ intermediæ latius distantes. Pectus prominulum. Pygidium obtectum. Unguiculi longius appendiculati.

The wide separation of the middle coxæ allows this genus to be identified at a glance. The rostrum is thick and elongate; the prosternum excessively short, the front coxæ very elongate. Each elytron is much rounded at the inner apical angle, and in consequence of this a small part of the middle of the apex of the pygidium can be seen between them.

1. **Rhynchitobius longicollis,** sp. n. (Tab. I. fig. 21.)

Piceus, subvariegatus, pube depressa grisescente irregulariter dense vestitus; antennis rufis; pedibus lanuginosis, tibiis ex parte majore flavescentibus.
Long. cum rostro 5 millim.

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

Antennæ with broad club, the terminal joint quite acuminate. Rostrum thick, straight, finely punctulate in front of the insertion of the antennæ. Eyes widely separated, the space between them rather convex, hairy. Thorax slender, very elongate, densely clothed with a pale griseous pubescence, and also bearing a few slender erect setæ. Elytra also clothed with pale depressed pubescence, which conceals the colour and sculpture, the former probably somewhat variegate, the humeral part being, at any rate, considerably paler, the sculpture apparently coarse and serial but irregular. Tarsi very thick.

Of this remarkable insect we have received only three examples, all in a very fragile condition. They apparently represent the two sexes, one having the rostrum rather longer than the others. I think this individual may be a male; our figure is taken from it.

HEMILYPUS, gen. nov.

Caput post oculos haud constrictum; rostrum breve, crassum. Antennæ graciles. Tarsi articulo basali sequente duplo longiore. Prosternum post coxas minus abbreviatum, epimerorum apicibus haud conjunctis. Abdomen sutura prima ventrali profunda.

This genus resembles the eastern *Aderorhinus* in appearance; the prosternum behind exhibits a triangular piece, the apex of which separates more or less widely the apices of the epimera. It differs from *Eugnamptus* by the head being elongate and less constricted; the prosternum longer behind the coxæ; the first ventral suture deep; the basal joint of the feet shorter; and the pygidium not so completely covered. It should be placed between *Aderorhinus* and *Eugnamptus*.

1. **Hemilypus latipes,** sp. n. (Tab. I. fig. 22.)

Niger, nitidus, parce pilosus; antennis fusco-testaceis, clava nigro-fusca; prothorace sat angustato, crebrius punctato; elytris regulariter seriatim punctatis.
Long. cum rostro 7 millim.

Hab. Mexico, Tuxtla (*Sallé*), Juquila (*Höge*).

Rostrum short, about as long as the head, the latter between the eyes, also the vertex, sparingly punctate. Antennæ very slender, infuscate yellow, with the slender club darker, the terminal joint not quite so long as the tenth. Thorax narrow, rather longer than broad, moderately coarsely and closely punctate, shining. Elytra with regular series of distant punctures, which on the declivous apex are very fine, and with a few excessively fine punctures on the interstices; the upright setosity is very conspicuous but scanty. Legs broad, very hairy. Under surface feebly cyaneous; femora with white hairs; sides of the breast clothed with some white hair.

I do not see any striking sexual distinctions among the three individuals we have received. One specimen has the thorax a little broader and the eyes slightly smaller, and may be a female.

2. **Hemilypus sallæi,** sp. n.

Nigerrimus, nitidus, parce pilosus; antennis fusco-testaceis, clava nigro-fusca; prothorace angustiore, anterius leviter angustato, parce punctato; elytris regulariter seriatim punctatis, punctis subtilioribus, tantum ad basin sat magnis.
Long. cum rostro 6 millim.

Hab. Mexico, Toxpam (*Sallé*).

Very closely allied to *H. latipes*, but differing as follows:—The size is smaller, the thorax is narrower and more sparingly punctate, and the vertex and the head between the eyes are also sparingly punctate; the punctures in the series of the elytra are finer, and the pallid pubescence of the under surface is less. Three specimens, in bad preservation.

3. **Hemilypus hondurensis,** sp. n.

Nigerrimus, nitidus, parce pilosus, antennis medio fusco-testaceis; prothorace conico-cylindrico, parcius obsolete punctato; elytris seriatim subtiliter punctatis.
Long. cum rostro $4\frac{1}{4}$ millim.

Hab. British Honduras, R. Hondo (*Blancaneaux*).

This insect is very similar to *H. latipes* and to *H. sallæi*, except that it is much smaller and has more slender legs. The rostrum is quite short, not so long as the head; the terminal joint of the antennæ is not so long as the tenth joint. The eyes are large, and in front are strongly convergent, the space between them sparingly and finely punctate. The thorax is long and narrow, a good deal narrowed in front; its punctuation

is obsolete. The serial punctures of the elytra are very fine, but more distinct at the base. The griseous hair on the femora is not conspicuous.

The specimen described is no doubt a male, the middle tibia being incurvate at the apex; the first ventral suture is quite deep. A very immature example found by Conradt at Coban in Guatemala may perhaps be referable to this species.

4. **Hemilypus obliteratus,** sp. n. (Tab. I. fig. 23, var.)

Niger, nitidus, capite cyanescente, antennis fusco-rufis; supra parcissime setosus, pedibus corporeque ad margines albido-pilosis; elytris subtilissime remoteque seriatim punctatis.

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

Hab. PANAMA, Bugaba (*Champion*).

Var.? an *mas*? antennarum clava valde elongata, articulo ultimo elongato.

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

Antennæ rather long, obscure red, the terminal joint slightly longer than the tenth. Rostrum broad, very short, not longer than the head; eyes not very large, the space between them, also the vertex, finely punctate. Thorax longer than broad, a little rounded at the sides, sparingly punctate. Scutellum small, with white pubescence. Elytra with very obliterated series of punctures; the punctures are quite fine, even at the base, and at the apex can scarcely be detected. The white pubescence on the legs is very conspicuous.

Two examples: in one the blue colour of the head is not very distinct. I suspect the specimen with long antennæ may be a male of another species, but it may be only a variety; it is in beautiful condition, and we figure it.

5. **Hemilypus ——?**

Hab. GUATEMALA, Cerro Zunil 4000 feet (*Champion*).

A species closely allied to *H. obliteratus*, but evidently distinct, is represented by a single example that is too immature for description.

ESSODIUS, gen. nov.

Rootrum elongatum, tenue, curvatum. Caput post oculos haud constrictum. Prosternum epimerorum apicibus haud conjunctis. Abdomen sutura prima ventrali obsoleta.

This genus is established for an anomalous Rhynchitid, agreeing with *Eugnamptus* in the prosternal structure, but differing greatly therefrom in the form of the rostrum and head, and possessing a much shorter basal joint on the feet. So that if *Essodius* be not separated, I do not see how *Eugnamptus* could be defined.

1. **Essodius unicolor,** sp. n. (Tab. I. fig. 24.)

Fulvus, prothorace leviter inaurato, parce pilosus, crebre punctato ; elytris seriatim subtiliter punctatis, interstitiis parce subtilissime seriatim punctatis.

Long. cum rostro 5 millim..

Hab. Mexico, Zacualtipan in Hidalgo (*Höge*).

Rostrum rather longer than the head and thorax, slender, almost without sculpture, the antennæ inserted near, but not at, the base, elongate, with slender club, consisting of three joints of about equal length, and each quite twice as long as broad ; eyes widely separated, rather small but very prominent, the space between them finely punctate. Thorax narrow, but not cylindric, a little rounded at the sides, moderately closely and deeply punctate. Scutellum very small. Elytra with very regular serial punctuation, which becomes quite obsolete at the apex, the serial interstitial punctuation very fine, except that at the base there are a few larger punctures interposed between the first and second series; the erect pilosity is rather scanty and of the same colour as the surface. The legs are slender, the basal joint of the hind foot about as long as the second and third joints together.

We have received seven examples of this species. I do not detect any sexual distinctions.

EUGNAMPTUS.

Eugnamptus, Schönherr, Gen. Curc. v. p. 339 (1839) ; Sharp, Trans. Ent. Soc. Lond. 1889, p. 69.

This genus has comprised hitherto some half-dozen North-American species, and three or four others from Eastern Asia. It is evidently destined to prove very numerous in species from tropical America, and it is doubtful whether the Old-World forms will be retained in the genus. The species are very difficult to describe and some exhibit much variation in colour, this being sometimes in part sexual. The prosternal structure is somewhat variable, but the apices of the epimera are always free ; though I think I have observed in one species that one minutely overlaps the other, the apices in this case not being united but separated by a small space. A readily observed character for the recognition of the genus exists in the extremely peculiar club of the antennæ, which is always very long and fragile, but varies much in the form and proportion of the joints.

In addition to the series of species here described, I have evidence of the existence of eight or ten other species in our region, each of which is represented by a single example in too decayed condition for examination.

§ 1. *Pubescence of the body elongate and erect.*

1. **Eugnamptus validus,** sp. n. (Tab. I. fig. 25.)

Fulvo-rufus, flavo-setosus; rostro, antennis, tibiis tarsisque nigris.
Long. cum rostro $7\frac{1}{2}$ millim.

Hab. GUATEMALA, Sinanja in Vera Paz (*Champion*).

Rostrum elongate, longer than the thorax, shining black. Antennæ black, inserted at one third of the length in front of the eyes; the club very long, the terminal joint much shorter than the tenth, acuminate, three or four times as long as broad. Head sparingly and finely punctate. Thorax rather longer than broad, rather finely and sparingly punctate, the punctures extremely shallow. Elytra with regular series of punctures which are fine and as large at the apex as at the base, the interstices very broad, and with an excessively fine serial punctuation. The upright setosity is serial in arrangement, and is slightly paler than the colour of the surface.

Of this distinct species we have received only one specimen; it is rather immature, and will not bear much manipulation, but from its size and proportions I judge it will come near to the genus *Rhynchites*.

2. **Eugnamptus divisus,** sp. n. (Tab. II. fig. 1.)

Fulvo-rufus, flavo-setosus; antennis pedibusque nigris, femoribus basi rufa.
Long. cum rostro 5 millim.

Hab. GUATEMALA, Panajachel 5000 feet, Cerro Zunil 4000 feet (*Champion*); PANAMA, David (*Champion*).

Rostrum very short, only as long as the head (in the male). Antennæ black, slender and elongate, with very long, linear club, the terminal joint of which is much shorter than the tenth. Head sparingly punctate. Thorax sparingly punctate, slender, longer than broad. Elytra with regular series of definite, rather remote punctures, and with a fine, serial interstitial punctuation. Legs black, with the base of the femora pallid red.

We have received three examples of this species; the apex of the middle tibia is strongly incurved in the male, in the female the rostrum is rather longer. This insect is very similar in its proportions to *Hemilypus obliteratus*, but the much longer basal joint to the hind feet and the obliterated first ventral suture of *Eugnamptus divisus* are sufficient for generic distinction. The figure is taken from the female found in the State of Panama.

3. **Eugnamptus diabroticus,** sp. n. (Tab. II. fig. 2, ♂.)

Flavus, rostro, antennis prothoraceque pallide rufis, elytris nigro-fasciatis, tibiis metatarsoque nigris.
Long. 7–$7\frac{1}{2}$ millim.

Hab. GUATEMALA, Volcan de Atitlan 2500 to 3500 feet, Cerro Zunil 4000 feet (*Champion*).

Rostrum slender, in the male quite as long as the thorax, in the female a good deal longer. Antennæ very long, the club very long and slender, the terminal joint but little shorter than the tenth. Head finely punctate. Thorax rather finely punctate. Elytra with regular series of punctures, obliterated at the apex, the interstices very broad, their remote serial punctuation very obsolete; there is a black basal fascia interrupted at the suture, and a second fascia just in front of the middle, interrupted at the suture and each half more or less distinctly divided into two spots; the erect setosity is not very long. The legs are yellow with black tibiæ, and the basal joint of the tarsus more or less deeply black.

We have received three examples of this remarkable species; we figure the male from Cerro Zunil, which has the rostrum shorter, the eyes larger, and the apex of the middle tibia a little more prolonged inwardly.

4. **Eugnamptus maculatus,** sp. n. (Tab. II. fig. 3.)

Rufus, parce setosus; antennis, pedibus elytrorumque maculis quatuor nigris, femoribus omnibus ex parte majore flavis; capite prothoraceque parcissime punctatis, sublævigatis; elytris seriatim subremote punctatis, interstitiis fere impunctatis.

Long. cum rostro 4–4½ millim.

Hab. MEXICO, Oaxaca (*Höge*), Atoyac and Fortin in Vera Cruz, Teapa in Tabasco (*H. H. Smith*).

Rostrum very short, broad; head nearly impunctate, the eyes very large, the vertex short. Antennæ very long, quite black, the terminal joint only half as broad as the tenth. Thorax slender, longer than broad, obsoletely and sparingly punctate. Elytra with quite regular series of distant punctures, obsolete at the apex. The tibiæ and tarsi in larger part and the apices of the femora black. Male with the extremity of the middle tibia incurved at the apex.

We have received seven examples of this species, and apparently all are males. The black spots vary greatly in size, and possibly they may be sometimes entirely absent; but, independently of the black spots, the species is easily recognizable by the diminished punctuation of the head and thorax.

5. **Eugnamptus basalis,** sp. n.

Fulvus, setosus; elytris ad basin nigro-bimaculatis; antennis nigris, valde elongatis; prothorace fortiter punctato; elytris seriatim fortiter punctatis.

Long. 4½ millim.

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

Rostrum very short, scarcely so long as the head; the latter almost impunctate. Thorax slender, very coarsely punctate. Elytra with an oblong black spot on each side

of the scutellum; with regular series of coarse punctures, finer on the apex, and with a remote serial punctuation on the interstices.

The five examples received of this species are in a very fragmentary state, and the terminal joint of the antenna is not present in any of them; but the club is evidently of excessive length, the tenth joint being nearly as long as the rostrum. The specimens are, I think, all of the male sex.

6. **Eugnamptus latirostris,** sp. n.

Testaceus, setosus; capite, prothorace femoribusque pallide rufis, antennis, tibiis, tarsis elytrorumque fascia basali, et maculis duabus transversis in medio, nigris; elytris seriatim sat fortiter punctatis.
Long. cum rostro 6 millim.

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

♀. Rostrum broad, moderately long, greatly dilated at the extremity. Antennæ extremely long, inserted just behind the middle of the rostrum; head almost impunctate. Thorax small, not longer than broad, moderately closely punctate. Elytra with very regular series of distant, moderately large punctures, finer at the apex, the interstitial punctuation scarcely visible.

The only example received is in very decayed and discoloured condition; the male has probably a shorter and more slender rostrum.

7. **Eugnamptus godmani,** sp. n. (Tab. II. fig. 4.)

Testaceus, setosus, dense punctatus; capite, prothorace antennisque fuscis, his apicem versus testaceis; elytris ex parte majore nigris, fascia postbasali apiceque testaceis.
Long. cum rostro $5\frac{1}{2}$ millim.

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

♀. Antennæ elongate, the club very slender, the terminal joint more than half as long as the tenth. Rostrum rather longer than the head, the latter closely and finely punctate. Thorax rather longer than broad, coarsely, densely, and deeply punctate, with a short deep channel on the disc. Elytra with a basal uninterrupted fascia black, and a second fascia, extremely large and slightly interrupted at the suture, of the same colour; they bear very regular series of coarse closely placed punctures, and have a distinct interstitial punctuation, the interstices being rather narrow and somewhat elevated.

The only example received is in a somewhat discoloured condition from decay. The species is very distinct owing to the very coarse thoracic punctuation; the elongation of the antennæ is due not only to the club, but to the joints preceding it being also elongate.

8. **Eugnamptus sexmaculatus,** sp. n.

Rufo-testaceus, elytris testaceis, nigro sexmaculatis; antennis fuscis, clava elongata, articulo ultimo pallidiore.
Long. cum rostro $4\frac{1}{2}$ millim.

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

Eyes very large, not distant from the thorax, the space between them almost impunctate. Thorax coarsely punctate, with a short channel on the disc. Elytra with very regular series of large, closely-placed punctures, the interstices rather narrow, subconvex, seriately, finely punctate; each with three black marks, one at the base, one on the middle, and one just before the apex.

Three specimens; all females, having the rostrum a good deal dilated at the apex.

9. **Eugnamptus seriatus,** sp. n.

Parvus, testaceus, setosus, elytris ad basin et ultra medium nigro-signatis; antennis fuscis, articulo ultimo flavo; elytris seriatim punctatis, interstitiis subconvexis, minus latis.

Long. cum rostro $3\frac{1}{4}$ millim.

Hab. MEXICO, Teapa in Tabasco (*H. H. Smith*).

Rostrum very short, not so long as the head, the latter short, with extremely large eyes. Antennæ moderately long, the terminal joint yellow, much shorter than the tenth. Thorax very slender, sparingly and coarsely but very lightly punctate. Elytra with a black mark at the base close to the scutellum, and a lateral mark on the outer margin, these two connected by a slender black line along the extreme base; there is also a small black spot just behind the middle of each; the serial punctures are very regular, deep, and rather closely placed.

One specimen; probably of the male sex.

10. **Eugnamptus dispar,** sp. n.

Rufo-testaceus, breviter setosus, prothoracis elytrorumque lateribus plus minusve late nigro-signatis; capite parce subtilissime punctato; prothorace dense fortiterque punctato; elytris seriatim profunde punctatis, interstitiis subconvexis.

Long. cum rostro 5 millim.

Hab. GUATEMALA, Mirandilla 1700 feet (*Champion*); PANAMA, Volcan de Chiriqui 2500 to 3000 feet (*Champion*).

♀. Antennæ moderately long, the terminal joint about as long as the tenth. Rostrum short and broad, much dilated at the apex; eyes large, rather widely separated, the space between them shining, very sparingly punctate. Thorax rather short, slightly longer than broad, a little rounded at the sides, very coarsely punctate. Elytra with series of deep, rather closely placed punctures, the interstices rather narrow, very indistinctly punctate; the colour is yellow, but very broadly black at the base and sides, and with the rudiments of an obsolete black fascia across the middle.

Three examples agree closely; a fourth though considerably different is, I have no doubt, the male. Its form is more slender, the antennæ more elongate, the eyes very large and approximate, the thorax more slender, and the black marks on it and on the wing-cases only faintly indicated.

11. **Eugnamptus cinctus,** sp. n. (Tab. II. figg. 5, ♂; 6, ♀.)

Rufo-testaceus, setosus, antennis fuscis, clava nigra, elytris ad latera nigro-viridi cinctis; prothorace crebrius fortiter punctato.

Long. cum rostro 5½–6 millim.

Hab. MEXICO, Zacualtipan in Hidalgo (*Höge*).

Var. elytris nigro-viridis, circa scutellum vage rufescentibus.

Antennæ with only moderately long club, the terminal joint slightly shorter than the tenth. Rostrum short, the head very finely punctate. Thorax coarsely and closely punctate. Elytra with regular series of rather fine and distant punctures, the interstices broad, flat, and with only an extremely fine, remote punctuation.

We have received a good series of this species; the colour of the elytra is variable owing to the lateral cincture being developed to a greater or less extent, and sometimes nearly covering the surface; the sexual disparity is very great, the male being a rather longer, more fragile insect, with much larger and more approximate eyes, and slightly shorter rostrum.

12. **Eugnamptus longipes,** sp. n.

Longulus, testaceus, setosus, antennis valde elongatis, nigricantibus, basi fusco-testacea; prothorace sat crebre et fortiter punctato; elytris seriatim sat fortiter punctatis, interstitiis subtiliter seriatim punctatis.

Long. 5–6 millim.

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

Var. elytris ex parte majore nigro-viridi-tinctis.

This insect is very closely allied to *E. cinctus*, but is more elongate, has a considerably longer club to the antennæ, and the lateral cincture of dark colour on the wing-cases is absent. The variety suffused with green is usually, if not always, of the female sex, and differs from the corresponding variety of *E. cinctus* in having the lateral margins of the elytra pale, the dark colour extending forwards from the apex. The distinctions of the sexes are much the same as in *E. cinctus*, with the exception that in the female of *E. longipes* the eyes are larger and less widely separated than they are in the corresponding sex of *E. cinctus*.

Twelve examples have been received. A very mutilated specimen found in Mexico by Truqui may possibly be referable to this species.

13. **Eugnamptus tibialis,** sp. n.

Longulus, testaceus, breviter setosus, minus nitidus, antennis valde elongatis; vertice prothoraceque densius punctatis; elytris seriatim profunde punctatis, interstitiis minus latis, convexis.

Long. cum rostro 5 millim.

Hab. MEXICO, Oaxaca (*Höge*).

♂. Antennæ very elongate, the club long and slender, unicolorous, the terminal joint

quite as long as the tenth. Eyes very large, the surface of the vertex closely and finely punctate. Thorax rounded at the sides, coarsely and very densely punctate, with a short channel on the disc. Elytra with series of closely placed punctures; the accessory punctures near the scutellum forming a very definite, short series. Middle tibia rather broad, its outer edge densely ciliate with dark, short hair, the inner angle much produced.

Although similar to *E. cinctus* and *E. longipes*, this species is very distinct owing to its sculpture. We have received only two examples. A third specimen from Toxpam (*Sallé*) may possibly be a female of it, but more probably is a male of another allied species.

14. **Eugnamptus hirtellus,** sp. n.

Longulus, testaceus, longius setosus; capite prothoraceque dense fortiter punctatis; elytris seriatim punctatis, punctis valde approximatis, plus minusve confluentibus, interstitiis sat latis, sutura anguste fuscescente.
Long. cum rostro 5 millim.

Hab. GUATEMALA, Volcan de Agua 10,000 feet (*Champion*).

♀. Rostrum as long as the thorax, rugose; eyes rather large, moderately distant, the space between them very coarsely and closely punctured. Antennæ very long. Thorax slender, but not cylindric, deplanate above, extremely coarsely punctate, streaked with black at each side. Elytra with the punctures in the series large, and so closely placed as to have only irregular interstices between the punctures of each particular series, the serial interstices rather broad, but irregular, little convex.

The only example of this species is in bad condition, but the species will be easily recognized by its coarse sculpture, which is less regular than usual, and by its elongate setæ.

15. **Eugnamptus nigricornis,** sp. n.

Longulus, fulvo-rufus, setosus, nitidus; antennis valde elongatis pedibusque nigris, femoribus rufis; prothorace parce punctato, nitido; elytris seriatim sat subtiliter punctatis, interstitiis remote subtilissime punctatis.
Long. cum rostro 6 millim.

Hab. MEXICO, Juquila (*Sallé*).

♂. Antennæ very long, with very slender club, the terminal joint of which is slightly shorter than the tenth joint. Rostrum very short, not so long as the head, the latter almost impunctate. Thorax slender, much longer than broad. Elytra with very regular series of not distant punctures, the interstices broad and quite flat.

We have obtained only one specimen of this species, but I believe it to be a male, though there is nothing to indicate this with certainty. It is allied to *E. cinctus*, from which it differs in colour, and in this respect resembles *E. divisus*, from which it may be readily distinguished by its elongate form and numerous other details.

16. **Eugnamptus rufifrons,** sp. n. (Tab. II. fig. 7.)

Longulus, parce setosus, niger, elytris cyaneis, vertice rufo; elytris subtiliter seriatim punctatis.
Long. cum rostro $4\frac{1}{4}$ millim.

Hab. Mexico, Totosinapam (*Sallé*).

Antennæ black, very slender, with the long club rather less slender, each joint of the club narrowed towards the base, the terminal joint much shorter than the tenth. Rostrum short, as long as the head, the eyes very prominent, the head almost impunctate. Thorax very slender, but slightly conical, sparingly subobsoletely punctate, shining. Elytra very elongate, with very regular series of fine punctures, the interstices broad, flat, without any distinct punctuation. Legs very slender, the middle tibiæ of the male strongly curved. In the female the eyes are rather smaller and more distant.

One of the most slenderly-formed members of the genus. It was labelled in Sallé's collection *E. rufifrons*, Chevr. Three examples.

17. **Eugnamptus niger,** sp. n.

Niger, nitidus, griseo-setosus, elytris nigro-subcyaneus; prothorace parce punctato; elytris seriatim crebre sat fortiter punctatis, interstitiis modice angustis, haud omnino planis.
Long. cum rostro $4\frac{1}{4}$ millim.

Hab. Mexico, Ventanas and Refugio in Durango (*Höge*).

Antennæ moderately long, the club not linear, each joint being narrowed towards the base, the terminal joint quite acuminate, shorter than the tenth. Rostrum rather longer than the head; eyes large, approximate to the neck, the space between them finely punctate at the sides, smooth and shining on the middle. Thorax rather slender, moderately finely and not closely punctate. Elytra blue-black, shining, the punctures in the series rather closely placed. Legs very slender.

Allied to *E. rufifrons*, but independently of the colour of the head it differs in numerous details. We have received only two specimens, which I presume are males, the apex of the middle tibia being slightly produced internally and acuminate.

18. **Eugnamptus longulus,** sp. n.

Longulus, cyaneus, griseo-setosus, nitidus, antennis pedibusque nigris; prothorace gracili, parce, haud subtiliter sed levissime punctato; elytris elongatis, seriatim crebre sat fortiter punctatis, interstitiis modice angustis, haud omnino planis.
Long. cum rostro 5–6 millim.

Hab. Mexico, Parada, Juquila (*Sallé*), Oaxaca (*Höge*).

Closely allied to *E. niger*, but more elongate in form, with the surface of a beautiful blue colour, and with the punctures of the thorax so slightly impressed that they are indefinite and the surface irregular. The four examples received include both sexes, the male having the middle tibia incurved and strongly acuminate at the inner angle.

19. **Eugnamptus semivittatus,** sp. n.

Testaceus, setosus, elytris longitudinaliter nigro-signatis, antennis fuscis, apice flavo; elytris crebre fortiter profundeque seriatim punctatis.
Long. cum rostro 4 millim.

Hab. PANAMA, Bugaba (*Champion*).

Rostrum about as long as the thorax. Club of the antennæ elongate and very slender, the terminal joint more than half as long as the tenth, the apical portion of the latter joint, as well as the following one, yellow. Head short, the eyes very large, the space between them almost impunctate. Thorax very slender, coarsely and rather closely punctate. Elytra yellow, with a black lateral stripe, and a second dark stripe near the suture, this inner stripe indefinitely prolonged beyond the middle and imperfectly connected with a black mark joining the outer stripe; the punctures of the series are large, very deep, and closely placed. Legs red, the hinder and middle tibiæ a little infuscate at the apex externally. Two specimens.

20. **Eugnamptus obscurus,** sp. n. (Tab. II. fig. 8.)

Longulus, gracilis, niger, supra fuscus, opacus, elytris fusco-testaceis, antennis pedibusque fusco-rufis; capite prothoraceque omnino densissime punctatis, rugosis.
Long. cum rostro $4\frac{1}{2}$ millim.

Hab. GUATEMALA, Panajachel 5000 feet (*Champion*).

Club of the antennæ slender, but with each of the joints narrowed towards the base, the joints preceding the club very long, the terminal joint only a little shorter than the tenth. Rostrum very short, shorter than the head, densely rugose. Eyes large, the space between them very densely rugose. Thorax slender, with excessively dense, coarse, rugose sculpture. Elytra with deep striation and rugose interstices, the intercalated series at the base of the first interstice unusually elongate. Legs long and slender.

Only one specimen has been obtained of this extremely distinct species; this was found upon the margin of the Lake of Atitlan.

21. **Eugnamptus varius,** sp. n. (Tab. II. fig. 9.)

Gracilis, subtus fusco-niger, nitidus, supra opacus, setosus, fuscescens; elytris irregulariter fusco testaceoque variegatis; antennis pedibusque testaceis, fusco-variegatis.
Long. $3\frac{1}{4}$ millim.

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

Antennæ with moderately long club, each joint of which is narrowed to the base, the terminal two joints darker than the ninth, which is yellow. Rostrum minute, densely rugose. Eyes rather large, distant from the neck, the space between them excessively densely and coarsely punctured. Thorax slender, longer than broad, excessively densely and coarsely punctured. Elytra very deeply striate, the striæ densely and coarsely punctured. Legs yellow, vaguely marked with fuscous. The only speci-

men known has the middle tibiæ acuminate at the apex internally, and is probably a male.

A very peculiar insect whose genus is somewhat doubtful, but at present it cannot be placed elsewhere than in *Eugnamptus*.

22. **Eugnamptus nigripennis,** sp. n. (Tab. II. fig. 10.)

Rufus, griseo-setosus; antennis valde elongatis elytrisque nigris, his seriatim fortiter denseque punctatis, interstitiis perangustis.
Long. cum rostro $5\frac{1}{4}$ millim.

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

Rostrum somewhat longer than usual. Head short, the constriction of the neck being near to the eyes, these large, widely separated, the space between them very sparingly punctate. Antennæ quite black, with extremely long club, the joints of which are linear, the terminal joint only about half as long as the tenth. Thorax coarsely, rather deeply, and closely punctate. Elytra black, the lateral margin red, bearing a long griseous setosity; the punctuation deep, coarse, and very close, but not perfectly regular as in *E. brevicollis*, the interstices very narrow and rendered somewhat indefinite by the interstitial punctures being only imperfectly separated from the coarse serial sculpture. Legs red, with the tips of the femora a little infuscate.

I do not detect any sexual distinction among the four specimens from which I describe this species; they are probably all of the female sex.

23. **Eugnamptus suturalis,** sp. n.

Rufus, griseo-setosus; antennis, pedibus ex parte majore elytrisque nigris, his vitta suturali anterius latiore rufa, densius, fortius profundiusque seriatim punctatis.
Long. cum rostro 5 millim.

Hab. PANAMA, Volcan de Chiriqui, Boquete, Caldera (*Champion*).

Closely allied to *E. nigripennis*, but with the club of the antennæ rather less elongate; the elytra with the sculpture rather less deep and rugulose, especially on the apical portion, and the suture, as well as the outer margin, red; the tibiæ and tarsi quite black, the femora black at the extremities, the black colour extending nearer to the base on the upper than it does on the lower aspect. Four examples.

Our collections also contain an example of another species from Bugaba allied to this and to *E. nigripennis*, but it is in too decayed a condition to describe from.

24. **Eugnamptus plebeius.**

Angustus, nigerrimus, pube grisea erecta vestitus, fortiter punctatus.
Long. cum rostro $4\frac{1}{2}$ millim.

Hab. MEXICO, Amula 6000 feet, and Chilpancingo in Guerrero 4000 feet (*H. H. Smith*, June 1888).

Club of the antennæ moderately long, its three joints subequal in length. Rostrum

rather longer than the thorax in one sex, shorter in the other. Eyes not very large, rather widely separated. Head elongate. Thorax very narrow, subcylindric, closely, very coarsely punctate. Elytra slender, with very regular series of coarse deep punctures. Legs slender, clothed with erect hairs.

This insect has somewhat the appearance of the more slender of the species of *Deporaus*. It differs in many respects from *E. niger*, our only other black *Eugnamptus* without spots or marks. We have received only two mutilated examples.

25. **Eugnamptus brevicollis,** sp. n. (Tab. II. fig. 11.)

Niger, griseo-setosus, elytris subpurpureo-tinctis, rostro, capite, prothorace femoribusque basi rufis; elytris densissime fortissimeque regulariter seriatim punctatis, interstitiis perangustis.

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

Var. rostro prothoracisque marginibus nigris.

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

Antennæ intensely black, pilose, the club very elongate, quite linear, the terminal joint a good deal shorter than the tenth. Rostrum very broad, quite short, the eyes moderately large; head sparingly punctate. Thorax short, about as broad as long, very coarsely, not densely punctate. Elytra with regular rows of very densely packed large and deep punctures. Legs black, the base of femora bright red, the tarsi obscure red.

We have received eight examples of this very distinct species.

26. **Eugnamptus cornutus,** sp. n. (Tab. III. fig. 1.)

Elongatus, nigerrimus, prothorace læte rufo; setis erectis concoloribus parce vestitus; rostro (maris ?) superne apicem versus incrassato, parte anteriore in cornu reclinato, apice furcato, producto.

Long. cum rostro 6 millim.

Hab. MEXICO, Chilpancingo in Guerrero 4600 feet (*H. H. Smith*).

Antennæ quite black, long, the club not very long. Head elongate, quite sparingly punctate. Thorax bright red, rounded at the sides, sparingly punctured. Elytra with quite regular series of coarse punctures, the interstices not punctate but setose, the first at the base with about seven intercalated punctures.

We have received only one example of this species; it is probably a male. The structure of the front of the rostrum is unique, but the curious horn is not conspicuous owing to its being depressed.

§ 2. *Pubescence of the body shorter, very fine, reclined.*

27. **Eugnamptus salvini,** sp. n. (Tab. II. fig. 12.)

Brevior, testaceus, pubescens; capite prothoraceque densissime punctatis; elytris profunde lateque striatis, striis dense et fortiter punctatis.

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

Hab. GUATEMALA, Pantaleon, Mirandilla, Zapote, La Tinta (*Champion*).

Var.? prosterno, pectore, prothorace in medio elytrisque ad summam basin nigricantibus.

Hab. Mexico, Teapa in Tabasco (*H. H. Smith*).

Antennæ flavous, rather short, the club with each joint narrowed to the base, the terminal joint a good deal shorter than the tenth. Rostrum very short, not so long as the head; eyes very large, but little separated, placed near to the thorax, the space between them very densely punctate. Thorax very slender, conico-cylindric, extremely densely punctate, quite dull. Elytra with deep broad striæ, which are closely and coarsely punctate. Legs rather short, quite pale; middle tibiæ of the male distinctly curvate. The four specimens obtained are possibly all males. The Mexican insect will probably prove to be a distinct species, but only one specimen has been received of it.

28. **Eugnamptus antennalis,** sp. n.

Testaceus, pubescens, antennarum clava elongata fusco-testacea, prothorace elytrisque indeterminate fusco-signatis; elytris seriatim fortiter punctatis, interstitiis sat latis, haud omnino planis.

Long. cum rostro $3\frac{3}{4}$ millim.

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

Antennæ with very long club, the terminal joint of which is, however, scarcely half as long as the tenth. Rostrum short; eyes very large, the space between them sparingly and finely punctate. Thorax very slender, conico-cylindric, densely, moderately coarsely punctured, with a vague darker mark on each side. Elytra short, the punctures of their series moderately large and close.

This insect is similar to *E. salvini*, but is distinguished from it and the other species of this group by the more elongate ninth and tenth joints of the antennæ, and by the less distinct striation of the elytra. We have received only two examples, and I am not sure whether the vague marks of infuscation may not be due to decay.

29. **Eugnamptus latifrons,** sp. n. (Tab. II. fig. 13.)

Brevior, testaceus, breviter pubescens, antennarum clava fuscescente; elytris profunde lateque striatis, striis dense et fortiter punctatis; capite prothoraceque crebrius fortiusque punctatis.

Long. cum rostro 4 millim.

Hab. Guatemala, Panajachel 5000 feet (*Champion*).

This differs from *E. salvini* in having a broader thorax and a more coarsely and less densely punctured head and thorax, and antennæ with fuscescent club. The only specimen obtained is no doubt a female; it has the rostrum quite as long as the thorax, the eyes rather large, widely separated. The species is really nearer to *E. truncatus*, but has a broader thorax and a more densely punctured head.

30. **Eugnamptus truncatus,** n. sp.

Brevior, testaceus, pubescens, antennarum clava fuscescente, pectore abdomineque nigricantibus, elytris fuscescentibus disco vage testaceo; capite fortiter sat crebre punctato; prothorace subcylindrico, dense fortiterque punctato; elytris profunde lateque striatis, striis dense et fortiter punctatis.

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

Hab. GUATEMALA, Volcan de Atitlan (*Champion*).

Rostrum rather longer than the thorax; eyes moderately large, widely separated, the space between them rather coarsely, but not closely punctate. Antennæ with rather long club, the tenth joint somewhat shorter than the ninth, the terminal joint not very long, a good deal shorter than the tenth. Thorax very densely punctate, but shining. The colour is probably variable, as the extent of yellow on the disc of the elytra is not quite the same in the two individuals.

Two specimens of uncertain sex.

31. **Eugnamptus germanus,** sp. n.

Angustus, testaceus, breviter pubescens, elytris externe fuscescentibus; capite parce punctato; prothorace cylindrico, crebrius punctato; elytris profunde lateque striatis, striis dense et fortiter punctatis, interstitiis perangustis.

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

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

This insect has a much narrower head than *E. latifrons* and *E. truncatus*, and also entirely yellow antennæ, but it appears to be very closely allied to them. The club of the antennæ is rather long; the eyes are moderately large and somewhat distant, the space between them coarsely and sparingly punctate; the thorax is quite slender, closely and coarsely punctate. Two specimens.

32. **Eugnamptus picticollis,** sp. n.

Niger, subtilissime pubescens, prothorace rufo, elytris cyaneo-nigris.

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

Hab. MEXICO, Omilteme in Guerrero 8000 feet (*H. H. Smith*, July 1888).

Antennæ elongate, but with rather short club of three slender, subequal joints. Rostrum broad at the apex, only about half as wide near the eyes, longer than the thorax in one sex, rather shorter in the other; head elongate, subglobose, rather regularly and deeply punctate; eyes not very large. Thorax slender, rather long, nearly cylindrical, bright red, somewhat coarsely, but not densely or rugosely, punctate. Elytra with regular series of coarse punctures, and with an intercalated series at the base of the first interstice, interstitial punctuation imperceptible. Tarsal lobes dilute piceous.

We have received only two specimens, but they no doubt are male and female, as in one individual the rostrum is broader and much longer than in the other.

DEPORAUS.

Deporaus, Samouelle, Ent. Comp. p. 201 (1819); Bedel, Faune Col. Seine, vi. p. 23; Sharp, Trans. Ent. Soc. Lond. 1889, p. 70.

This genus has only recently been distinguished in a satisfactory manner, and con-

tains at present two or three European and two or three Asiatic species, in addition to the American insect mentioned below.

1. **Deporaus glastinus.**

Rhynchites glastinus, Lec. Pacific R. R. Exp. and Surv., Ins. p. 52 [1], and Rhynch. N. Am. p. 7 [2].

Hab. North America, California [1 2], Arizona.—Mexico, Northern Sonora (*Morrison*).

AULETOBIUS.

Auletobius, Desbrochers, L'Abeille, v. p. 396 (1869); Sharp, Trans. Ent. Soc. Lond. 1889, p. 73.

This genus has not been accepted by entomologists, but it is certain that *Auletes*, with which it is usually associated, must be divided; for if not, the other genera of the subfamily cannot be distinguished by any definable characters. The species of *Auletes* and *Auletobius* are all minute insects, and are scattered over most parts of the world, but are much neglected.

1. **Auletobius nudus,** sp. n.

Nigerrimus, tibiis versus apicem, tarsis antennarumque funiculo piceis; absque pubescentia; prothorace nitido, fortiter sat crebre punctato; elytris subnitidis, obsoletissime punctulatis.

Long. cum rostro 3 millim.

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

Rostrum rather slender, sublævigate, canaliculate at the insertion of the antennæ; head very broad; eyes rather small, but very convex, the space between them sparingly punctate. Thorax rather longer than broad, much dilated at the sides in the middle, sparingly punctate. Elytra short and broad, sparingly and very obsoletely punctate, with very distinct sutural stria. Legs slender.

Four specimens; also one of a variety of small size, and with almost impunctate head.

2. **Auletobius rostralis,** sp. n. (Tab. II. fig. 14.)

Nigricans, elytris pedibusque piceo-rufis, pube depressa tenuiter vestitus; prothorace valde elongato, lateribus in medio subrotundatis; elytris parce obsolete punctulatis.

Long. cum rostro 3 millim.

Hab. Guatemala, El Tumbador (*Champion*).

Antennæ piceous, the club rather slender. Head and rostrum punctate, the latter thick. Thorax very long, a little convex in the middle so as to appear somewhat constricted in front and behind, its punctuation rather sparse, similar to that of the head. Elytra short, sparingly and finely punctate, with a short, scanty pubescence, and an obsolete sutural stria. Four examples.

3. **Auletobius affinis,** sp. n.

Niger, pube depressa tenuiter vestitus; capite prothoraceque dense fortiterque punctatis; elytris fortiter minus dense punctatis; tibiis tarsisque piceis.
Long. cum rostro $3\frac{1}{4}$ millim.

Hab. GUATEMALA, Rio Maria Linda (*Champion*).

Rostrum rather long, moderately stout; antennæ inserted a little behind its middle, their club rather slender; eyes contiguous with the thorax, the space between them very densely and coarsely punctured. Thorax slender, very elongate, a little rounded at the sides, deeply and very densely and coarsely punctured. Elytra rather long, of a leaden-black colour, much more sparingly and a little less coarsely punctured than the thorax. Legs rather short and stout.

This insect has quite the facies of our European species. Only one example has been procured.

4. **Auletobius optatus,** sp. n. (Tab. II. fig. 15.)

Pubescens, dense punctatus, opacus, fusco-rufus, capite subænescens, elytris basin versus rufescentibus; antennis pedibusque rufo-testaceis, harum clava fusca.
Long. cum rostro 3 millim.

Hab. PANAMA, Volcan de Chiriqui 8000 feet (*Champion*).

Antennæ short, rather stout, the basal two joints of the club strongly transverse. Rostrum stout, rugose-punctate, opaque; eyes very convex, well separated from the thorax, the space between them faintly ænescent, flavo-pubescent, closely punctate. Thorax slightly longer than broad, rounded at the sides, densely punctate, quite dull. Elytra sparingly punctate, obscurely variegate, the colour being more red near the base, fuscous towards the extremity; the pubescence is closer and denser on the basal region. Legs yellow. Under surface clothed with pale griseous hairs. Three specimens; in the female the rostrum is a little longer and less rugose.

Subfam. *PTEROCOLINÆ.*

This subfamily has hitherto consisted of a single species found in North America. Its position has been much disputed, Schönherr placing it with the Attelabidæ, Lacordaire treating it as a separate tribe placed next Ceuthorhynchides, while Leconte placed it as a subdivision of Rhynchitidæ. In reality it is a very isolated form, linking the Attelabidæ satisfactorily with the Baridiidæ. The prosternum has the apices of the epimera widely separated by a broad process as in Baridiidæ and Attelabidæ. From the former group it differs by its straight antennæ, but is connected with it by a peculiar undescribed genus from our region; from Attelabidæ the subfamily differs by the small coxæ and the large mesosternum with extraordinarily developed side-pieces.

PTEROCOLUS.

Pterocolus, Schönherr, Gen. Curc. i. p. 238 (1833).
Apotomus, Kirby, Fauna Bor.-Am. iv. p. 205 (1837).

1. **Pterocolus auricollis,** sp. n. (Tab. II. fig. 16.)

Subrotundatus, nigro-cyaneus, prothorace aurato, elytris cyaneis, antennis, tibiis anterioribus tarsisque piceis. Long. cum rostro $2\frac{1}{2}$ millim.

Hab. Panama, Bugaba (*Champion*).

Antennæ with the very loosely articulated club as long as the rest of the joints. Head brassy; rostrum very short, not longer than the head. Thorax of a dark golden colour, densely punctate, finely pubescent. Elytra rather closely punctate, and with series of punctures placed in very shallow grooves that become quite obsolete behind; about the epipleuræ with some golden pubescence. Underside of a pallid steel-blue colour. Pygidium brassy. The front tibiæ in greater part rufescent, the middle pair rufescent at the extremity.

2. **Pterocolus grossus,** sp. n.

Niger, supra cyaneus, tenuissime pubescens, fortiter sculpturatus.

Hab. Mexico, Yolotepec, Parada (*Sallé*), Acapulco (*Höge*).

Rostrum black, shining, longer than the head; antennæ with broad club, the first two joints of which are transverse. Thorax much narrowed in front, densely and coarsely punctured, the punctuation substrigose longitudinally. Elytra with deep, broad grooves, which are coarsely sculptured; interstices impunctate.

Only one example has been procured in each locality. These do not exhibit any sexual distinctions on the ventral segments, but the individual from Acapulco is smaller and has a shorter rostrum; it may be the male, if not it must belong to another species. *P. grossus* is a little larger than *P. auricollis*.

APTEROCOLUS, gen. nov.

Elytra ad suturam valde abbreviata, segmentis dorsalibus abdominis quinque visibilibus.

This genus is closely allied to *Pterocolus*, but has five of the dorsal segments exposed instead of three, the posterior coxæ very widely separated, though the anterior pair are more approximate, and the rostrum furnished with very deep lateral scrobes, which are not visible from the front, as the edge of the rostrum projects over them; similar scrobes exist really in *Pterocolus*, but owing to the antennæ being inserted nearer to the eyes the scrobes are much less conspicuous than in *Apterocolus*.

1. **Apterocolus gravidus,** sp. n. (Tab. II. fig. 17, ♂.)

Latissimus, chalybeo-niger, fortiter sculpturatus, antennis articulis 2° ad 5^m^ piceis.
Long. cum rostro subporrecto $4\frac{1}{2}$ millim.

Hab. MEXICO, Cuernavaca (*Sallé*, *Höge*).

Antennæ short, with large broad three-jointed club, the eighth joint transverse, the first two joints of the club each strongly transverse. Rostrum moderately long, much longer than the head. Thorax elongate, much narrowed in front, coarsely and closely punctured. Elytra with broad, deep grooves, which are coarsely sculptured; interstices narrow and shining. Exposed parts of the dorsal segments coarsely punctured, the terminal segment so much deflexed as to be not visible from above. Legs thick; the spurs of the hind tibiæ conspicuous.

Only two examples have been received of this remarkable Curculionid. The male has the ventral plates deplanate on the middle and covered with long white pubescence. In the female the apical portion of the rostrum is slightly longer than it is in the male. Our figure represents this latter sex.

Subfam. nov. *ALLOCORYNINÆ.*

The rostrum is very slender, quite cylindrical, a little curved, somewhat longer in one sex than in the other. The antennæ are inserted close to the eyes on the underside of the rostrum; they are not in the least geniculate, and bear a very laxly articulated three-jointed club; the basal joint is as long as the following three together. The parts of the mouth are very small, but there is a very elongate peduncle to the mentum, the palpi are extremely minute, and the very small mandibles exhibit no trace of any angles or projections on their outer surface. The pronotum is flat, but has not lateral margins; the prosternum is very short, nearly all its length being occupied by the anterior coxæ; these latter are subglobose, but extend somewhat in the lateral direction, and project very little perpendicularly. The sutures of the prosternum behind the coxæ are minute, much consolidated, and very difficult to see; but I think there is a very small centrosternal piece, and that the apices of the epimera very nearly but not quite meet behind it. The middle coxæ are round, rather large, not at all exserted, distinctly but not widely separated. Metasternum of moderate length. Hind coxæ contiguous, transverse, rather large. Abdominal ventral segments five in number, subequal in length; in addition there is a very minute, frequently retracted, terminal segment. The sides of the ventral plates do not form any edge in apposition with the elytra, but are much infolded on the dorsal surface, and the side-margins of the elytra are free. The epipleuræ become gradually narrower from the shoulders to one half of the length of the elytra and there disappear altogether. The apices of the elytra are separately rounded and leave the pygidial segment exposed. The tarsi are broad, and

in form more like those of a Clavicorn than of a Rhynchophorous insect, the first and second joints being short and broad, the third bilobed, the fourth joint small but quite visible between the lobes of the third joint; the terminal joint large, with rather large claws; each of the joints 1–3 is furnished on either side with rather long hairs, which project laterally as well as downwards. Hind femora very broad, their upper margin strongly arcuate, crenulate.

I am compelled to establish a new subfamily for the abnormal weevil from which the above characters are taken, the best place for which is near Rhynchitinæ, although no affinity is exhibited with any particular genus of that subfamily, and it differs strongly from the aberrant forms of Rhynchitinæ by the minute palpi and trophi.

In appearance this singular insect is not at all similar to any other Curculionidæ known to me, though it has several characters of the Oxycorynides of Lacordaire, from which it differs by the unmargined sides of the pronotum, by the largely developed basal joint of the tarsi, and the exposed pygidium.

ALLOCORYNUS, gen. nov.

Antennæ rectæ, basales. Rostrum gracile, cylindricum. Coxæ anteriores contiguæ, subglobosæ, parum exsertæ. Tarsi dilatati, subtus longius hirtelli. Pygidium ab elytris haud obtectum. Oris partes minutæ, mandibulæ extus rotundatæ.

1. **Allocorynus mollis,** sp. n. (Tab. II. fig. 18, ♂.)

Testaceus, antennis pedibusque flavo-testaceis, subdepressus, parce subtiliterque punctatus, subopacus; rostro cylindrico, subcurvato.

Long. cum rostro $3\frac{1}{2}$–4 millim.

Hab. Mexico, Ventanas in Durango, Tapachula in Chiapas (*Höge*).

Rostrum of the male slightly longer than the thorax, punctulate, not shining; of the female as long as the head and thorax, more slender, impunctate, shining. Eyes coarsely granulate, large, and prominent; the space between them somewhat coarsely punctate. Antennæ rather longer and more slender in the female than in the male; second joint shorter than the first; terminal three joints forming a large, very loosely articulated club, the first joint of which is the largest, the apical joint being much smaller, acuminate, without any trace of division or constriction. Thorax strongly transverse, rounded at the sides and narrowed in front, finely and rather sparingly punctate. Scutellum subquadrate. Elytra elongate, but leaving the terminal segment quite exposed, punctured like the thorax; the apices separately rounded.

Herr Höge procured a small series of this obscure, unattractive, but interesting little insect. Unfortunately nearly all of them are so immature as to be nearly valueless.

Subfam. *APIONINÆ.*

APION.

Apion, Herbst, Natursyst. Käf. vii. p. 100 (1797).

This familiar genus is one of the most extensive in the order; fully 500 species have been described, notwithstanding the fact that owing to their minute size they are usually neglected both by the collector and describer. Although the majority of the species that have been catalogued belong to the European region, yet it is ascertained that the genus is of very wide distribution, and it is probable that it is really as rich in species in tropical regions as it is in Europe. Only three species have been described previously from Mexico or Central America, and I now add upwards of eighty others to this number, though I have left undescribed a large number of specimens that appear to represent different species, only one or two examples of each being present; so that it may be said that evidence has already been obtained of the existence of about 200 species of *Apion* in our region.

The difficulties in the way of a satisfactory treatment of the genus have been frequently alluded to, but have never been overcome, and no satisfactory way of grouping the species or of sectionizing the genus has been discovered. In order to facilitate the determination of the species here described, I have placed together all those with black legs in one group, and those in which the legs are not entirely black in another; and I have commenced each of these two divisions with the species that have the antennæ inserted quite at the base of the rostrum, placing at the end of each division those that have the antennæ most distant from the base. Although this arrangement is very far from satisfactory, I think it less likely to mislead than any other I can at present devise.

As a rule, the colour of the legs is very constant in each species, but still there are one or two in which it is variable, and also one or two in which it is doubtful whether the legs are entirely black or not; and there are even a small number of cases in which allied species are by this character referred to different divisions.

Division A.

Legs entirely black (in one or two species the tibiæ are dark piceous).

Species 1–36.

The species placed at the commencement have the antennæ inserted at the base of the rostrum very near to the eyes, those at the end of the division have the antennæ inserted near the middle of the rostrum.

1. **Apion submetallicum.**

Apion submetallicum, Boh. in Schönh. Gen. Curc. v. p. 376 [1].

Hab. MEXICO [1].

For the identification of this species an inspection of the type—which is in Chevrolat's collection—is necessary. Having black legs and the antennæ inserted at the base of the rostrum, I place it here.

2. **Apion spretissimum,** sp. n.

Minutum, breve, nigrum, opacum, parce minute albido-setosum; rostro brevi, antennis basi fuscescente; prothorace brevi, sat fortiter et crebre punctato; elytris sulcatis, interstitiis angustis vix planis.

Long. $1\frac{1}{3}$ millim. absque rostro.

Hab. MEXICO, Teapa in February and March, Atoyac in April and May, Cuernavaca in June (*H. H. Smith*); GUATEMALA, near the city, Aceituno (*Champion*); NICARAGUA, Chontales (*Janson*); PANAMA, Volcan de Chiriqui, San Feliz (*Champion*).

One of the smallest and most obscure species of the genus, and without any salient distinctive character. The rostrum is not very different in the two sexes, but in the male is a little shorter—not much longer than the thorax—and not so smooth and shining as in the female; it is curved and strongly deflexed. The eyes are scarcely at all prominent, the interval between them is rather narrow; the antennæ are inserted near the eyes, only about as far in front of them as the width of the interval between them. The thorax is rather strongly transverse, not much narrowed in front, feebly constricted in front of and behind the middle. The elytra are short, much broader than the thorax, deeply sulcate, with narrow interstices. There are no distinct white setæ round the eyes, and none on the sides or front angles of the breast.

This minute insect is probably the most abundant of the genus in our region; a good series was found at Teapa, at Chontales, and on the Volcan de Chiriqui.

3. **Apion præditum,** sp. n.

Minutum, minus breve, nigrum, opacum, parce, minute griseo-setosum; rostro mediocri, antennis basi fuscescente; prothorace subtransverso, antrorsum angustato, obsolete sed haud subtiliter punctato; elytris sat profunde sulcatis, interstitiis subplanis.

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

Mas abdomine segmento ultimo ventrali apice impresso, ante impressionem dense griseo-squamoso, squamulis ad angulum utrinque prominulis.

Hab. GUATEMALA, Aceituno, Dueñas (*Champion*), Coban (*Conradt*).

This insect is very similar to *A. spretissimum*, but will be readily distinguished by the peculiar male structure at the extremity of the hind body; it has, too, the rostrum rather longer—its length in the female being equal to that of the head and thorax; the form is narrower, and the hairs or scales of the upper surface are not of so pure a white colour. The eyes are slightly prominent. The rostrum in the female is slender-cylindrical, and

shining from the insertion of the antennæ forwards; while in the male it is less cylindrical, and only becomes shining in front. The prothorax is a good deal narrowed in front, not so long as it is wide at the base, with the punctures rather distant and very ill-defined; it has a short obsolete channel at the base on the middle.

4. **Apion dissimilipes,** sp. n.

Parum elongatum, nigrum, peropacum, parcius minute griseo-setosum; antennis tibiisque sordide subfuscentibus; rostro minus gracili; prothorace transverso, transversim bis subconstricto, parce punctato; elytris brevibus, profunde sulcatis.

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

Mas tarsis intermediis articulo basali subtus mucrone armato.

Hab. GUATEMALA, near the city, San Gerónimo (*Champion*).

Rostrum in the male rather thick and about as long as head and thorax, in the female rather more slender and elongate; the eyes are small and very little prominent, placed very near the thorax; the antennæ are short, inserted quite as far in front of the eyes as the width of the interocular space, they are of a dark fuscous colour, with the club black. The thorax is rather broad and short, a good deal narrowed in front, very dull, with distant, rather large punctures, and in front of the scutellum a minute canaliculiform fovea. Elytra with the sculpture deep, the interstices narrow, convex. Under surface with no condensation of setæ on the breast or beneath the orbits.

Two pairs of this species were obtained; the peculiar structure of the basal joint of the middle tarsus will enable it to be identified with certainty so far as the male sex is concerned.

5. **Apion nitidirostre,** sp. n.

Breve, coleopteris subglobosis, nigrum, nitidum, nudum; rostro gracili, polito; prothorace parce obsolete punctato; elytris striatis.

Long. $1\frac{3}{5}$ millim.

Hab. PANAMA, Bugaba (*Champion*).

Rostrum in the male as long as head and thorax, in the female a little longer; free from sculpture and very shining; eyes convex, placed very near the thorax, the interval between them moderately wide; antennæ inserted very near to the eyes. Thorax short, greatly narrowed in front, sparingly and obsoletely punctate, without impression in front of the scutellum. Elytra short, broad and convex, finely striate. Legs short.

A species not closely allied to any other from our region; the very shining rostrum, with antennæ inserted near the base, the sublævigate thorax, and the finely striate elytra are sufficient to distinguish it. Only three specimens have been obtained.

6. **Apion erythropterum,** sp. n. (Tab. III. fig. 2.)

Angustum, opacum, nigrum, elytris rufescentibus, sutura lateribusque obscuris; tenuiter setosum, elytris ad basin utrinque macula minuta pubescentiæ albidæ.

Long. vix 2 millim.

Hab. MEXICO, Chilpancingo in Guerrero (*H. H. Smith*).

Rostrum short and stout, curved, little punctate and feebly pubescent; eyes not prominent, moderately widely separated, delicately margined with white setæ; antennæ short, inserted very near to the eyes. Thorax small, slender, distinctly narrowed towards the front, moderately closely, subobsoletely punctate. Elytra deeply sulcate, with convex interstices. Under surface sparingly pubescent; middle coxæ well separated. Three specimens.

The red colour of the elytra appears to be a ready means of identifying this insect, which in other respects is a very obscure species.

7. **Apion ægrotum,** sp. n. (Tab. III. fig. 3, ♀.)

Minutum, breviusculum, nigrum, subnitidum, fere nudum; rostro maris brevi, parum sculpturato, feminæ elongato, cylindrico, lævigato, antennis basi flavo; prothorace brevi, dense fortiterque sculpturato; elytris sat profunde sulcatis, interstitiis planis.

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

Hab. PANAMA, Bugaba, Tolé (*Champion*).

Rostrum of the male dull, somewhat finely punctate, rather thick, a little shorter than the head and thorax; of the female impunctate, slender, curvate, but little shining, a good deal longer than the head and thorax; eyes convex, rather large, the interval between them coarsely punctate, narrow; antennæ short, obscure yellow, with the club dark, inserted near the base but at a rather greater distance in front of it than the width of the interocular space. Thorax short and broad, greatly narrowed in front, rugosely and coarsely punctate, with a very short channel or fovea in front of the scutellum. Elytra short and broad, moderately deeply sulcate, the interstices quite flat. Under surface with very little setosity; middle coxæ rather widely separated.

We have received thirteen examples of this obscure little insect; it most resembles *A. vetustum*, but is not closely allied thereto, and is readily distinguished therefrom by the broader head and more convex eyes, as well as by the insertion of the antennæ nearer to the base of the rostrum.

8. **Apion guatemalenum,** sp. n.

Minus elongatum, nigrum, supra ænescens, fere nudum, nitidum; rostro gracili, cylindrico, elongato; prothorace transverso, sat crebre et fortiter punctato; elytris anguste sed sat profunde sulcatis, interstitiis latis, planis.

Long. 2 millim.

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

Rostrum elongate, slender, smooth, and shining, rather longer in the female than in

the male, in each sex much longer than the head and thorax; eyes moderately prominent, rather widely separated; antennæ long and slender, with elongate pointed club. Thorax a good deal narrowed anteriorly, with a short channel in front of the scutellum. Elytra with the punctures in the striæ deep and approximate, the interstices much broader than the grooves. Legs elongate and slender. Male with the hind tibia furnished at the apex beneath with a strong mucro, and there is a less conspicuous mucro on the middle tibia. The shining, metallic thorax and elytra, with only very scanty and minute hairs, and the long rostrum, legs, and antennæ, will lead to the recognition of this species. Ten examples have been met with.

9. **Apion acupunctatum,** sp. n.

Breviusculum, nigrum, subnitidum, fere nudum; rostro mediocri, cylindrico, polito, antennis paullo ante rostri basin insertis, oculis prominulis; prothorace crebre fortiterque punctato; elytris striatis, striis punctis elongatis munitis.

Long. 2 millim.

Hab. Panama, David (*Champion*).

We have received five examples of this *Apion*, but I do not detect any sexual distinctions; it is allied to *A. guatemalenum*, but has the elytra differently sculptured. The rostrum is slender, moderately curved, shining black, rather longer than the head and thorax; the eyes are very prominent, the interval between them wide; the antennæ are inserted about as far in front of the eyes as the width of the ocular interspace. The thorax is small, narrowed in front, coarsely but not rugosely punctate, with a shallow depression at the base in front of the scutellum. The elytra are short, not sulcate, but with strongly marked striæ, which have an interrupted appearance due to the punctures in them. The middle coxæ are approximate.

10. **Apion stabile,** sp. n.

Angustulum, elongatum, nigrum, opacum, setulis albidis sparsum; rostro mediocri, minus gracili, antennis fuscis, bene ante basin insertis; prothorace conico-cylindrico, sat crebre parum argute punctato; elytris angustis, convexis, sat profunde sulcatis, sulcis punctis approximatis munitis.

Long. 2 millim.

Hab. Guatemala, San Gerónimo 3000 feet (*Champion*).

This differs from *A. præditum* and *A. spretissimum* by the thicker rostrum and more cylindrical thorax, and by the antennæ being inserted a little farther from the eyes. The sexes seem to differ very little from one another. The rostrum is curved, black, shining, but quite distinctly punctate in each sex, in the male its length is slightly less and the punctuation is slightly more defined than in the female; the eyes are small, rather widely separated, and are placed at a considerable distance from the front of the thorax. The thorax is slender, scarcely at all narrowed in front, and has a canaliculiform fovea in front of the scutellum. The little white setæ on the elytra and on the surface generally are very conspicuous, and the front of the breast on each side anterior to the middle coxæ is covered with them. Ten examples.

11. **Apion glyphicum,** sp. n.

Robustum, nigrum, supra parce subtiliusque albido-setosum, opacum, elytris subæneis ; rostro robusto, capite inter oculos striato ; prothorace fortiter punctato ; elytris tenuiter minus profunde sulcatis, interstitiis planis.

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

Hab. Mexico, Jalapa (*Höge*).

There is but little difference between the sexes in this species ; but the male has the middle and hind tibiæ mucronate at the apex, and the rostrum not quite so long as the head and thorax, while in the female it is about as long as the head and thorax. Rostrum stout, sulcate on each side ; antennæ inserted near to the eyes, these latter convex, the interval separating them only moderately broad, and bearing three or four fine striæ. Thorax greatly narrowed from the base to the front, very coarsely punctate, with a very short channel in front of the scutellum. Elytra convex, much broader than the thorax ; the grooves rather fine and not very deep, bearing distant, remote punctures, the intervals flat and rather broad. Legs stout. The pubescence of the under surface less scanty than that above, but still not close. Three specimens.

12. **Apion tabogense,** sp. n.

Breve, robustum, nigrum, subopacum, parcissime albido-setosum ; rostro (maris) crassiusculo, rugoso ; prothorace lato, conico, dense punctato ; elytris striatis, interstitiis latis, planis.

Long. 2 millim.

Hab. Panama, Taboga Island (*Champion*).

We have received only two males of this species, but as it will be recognized without much difficulty—not being very near to any other—I have described it. The middle and hind tibiæ are mucronate at the apex, but the mucrones are slender spurs directed straight downwards, not inwards as in most of the other species. The rostrum is rather thick, curvate, densely sculptured except at the tip ; the antennæ are inserted not very far from the eyes, being separated from them by not quite one fourth of the length of the rostrum ; the eyes are rather large and prominent, placed close to the thorax, the interval between them moderately broad. The thorax is rather broad, much narrowed towards the front, scarcely at all impressed at the sides, moderately closely and coarsely but obsoletely punctate, with a small fovea in front of the scutellum. Elytra short and broad, coarsely striate, though the striæ are scarcely deep enough to be called sulci, the interstices rather broad, flat. The white setosity is not quite so scanty on the under surface as it is above, and under the orbits is a little more conspicuous.

13. **Apion championi,** sp. n. (Tab. III. fig. 4.)

Robustum, nigrum, sat nitidum, fere nudum ; rostro mediocri, sculpturato, basi incrassato ; prothorace conico, parce subtiliterque punctato ; elytris convexis, striatis, interstitiis latis, planis.

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

Hab. Panama, Volcan de Chiriqui, David, Caldera, Los Remedios (*Champion*).

Rostrum about as long as the head and thorax, rather stout, punctate above, beneath deeply bisulcate in front of the insertion of the antennæ; eyes not convex, the interval between them rather narrow, bisulcate; antennæ stout, inserted much on the under surface, about as far in front of the eyes as the width of the interval between these. Thorax greatly narrowed in front, not polished, but with a silky lustre, and only remotely and very finely punctate, without channel or fovea. Elytra shining, deeply striate, but with the striæ scarcely deep enough to be called sulci, deeply punctate. Legs stout.

We have received a series of about twenty specimens of this species, but I am not able to distinguish the sexes with certainty; it is not likely to be confused with any other of our *Apions*, its size being much larger than that of the following species.

14. **Apion davidis,** sp. n.

Breve, nigrum, subnitidum, nudum; rostro mediocri, maris sculpturato opaco, feminæ lævigato, nitido; prothorace conico, transverso, sat fortiter haud dense punctato; elytris subtiliter striatis.

Long. 2–2$\frac{1}{4}$ millim.

Hab. PANAMA, David (*Champion*).

Rostrum a little attenuate in front, in the male as long as the head and thorax, in the female a little longer; eyes rather small and but little prominent, the interocular space narrow, biseriately punctate; antennæ flavescent at the base, inserted near to the eyes, but at a greater distance from them than the width of the interocular space. Thorax rather short and broad, very strongly narrowed in front, very definitely, but neither closely nor coarsely, punctate, with a minute channel in front of the scutellum. Elytra short and broad, somewhat deplanate at the base, very distinctly striate, the striæ with very fine remote punctures, and thus appearing crenate. Legs short; middle coxæ rather widely separated. Six specimens.

15. **Apion derasum,** sp. n.

Angustum, convexum, nigrum, sat nitidum, nudum; rostro mediocri, curvato; prothorace conico, parce obsolete punctato; elytris leviter striatis.

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

Hab. GUATEMALA, Cerro Zunil, Aceituno (*Champion*); NICARAGUA, Chontales (*Janson*).

Besides differing from *A. championi* in its much smaller size, this insect has no dilatation of the basal portion of the rostrum. This organ is about as long as the head and thorax, only moderately stout, shining, feebly sculptured; the eyes are rather small, slightly convex, the interval between them moderately wide; the antennæ have the base of the first joint yellow, they are inserted considerably behind the middle of the rostrum, but at a greater distance from the eyes than the width of the interocular space. The thorax is rather long and narrow, a good deal narrowed in front, sparingly and subobsoletely punctured, slightly shining, without impression in front of the

scutellum. Elytra rather long and narrow, somewhat finely striate, the striæ only indistinctly punctured. Legs short; breast very protuberant.

We have received four specimens of *A. derasum*; the sexes appear to be represented, but if so they differ very little from each other.

16. **Apion panamense,** sp. n.

Nigerrimum, sat nitidum, nudum; rostro mediocri, punctulato; prothorace subcylindrico, sat crebre et fortiter punctato; elytris leviter striatis.

Long. 2 millim.

Hab. PANAMA, Bugaba, San Feliz (*Champion*).

Rostrum in the male a little shorter than, in the female about as long as, the head and thorax, otherwise similar in the two sexes, moderately stout, cylindrical, punctate; eyes rather small, but prominent, the interval between them moderately broad, biseriately punctate; antennæ small, not stout, inserted near the base of the rostrum, but at a greater distance from it than the width of the interocular interval, the basal joint tawny. Thorax nearly as long as broad, a little rounded at the sides, not narrowed in front; the surface almost dull, with numerous rather large but not deep punctures; without any distinct channel in front of the scutellum, but with a small smooth space there. Elytra lightly striate; middle coxæ approximate. Four specimens.

Though similar to *A. derasum*, this is well distinguished therefrom by the form and punctuation of the prothorax.

17. **Apion pauper,** sp. n.

Angustum, subopacum, nigrum, supra subæneum, tenuissime setosum; rostro mediocri, valde curvato; prothorace subcylindrico, crebre fortiter punctato; elytris anguste, minus profunde, sulcatis, interstitiis planis.

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

Hab. MEXICO, Cuernavaca in Morelos in June (*H. H. Smith*); GUATEMALA, near the city (*Champion*).

Rostrum rather slender, dull, curved and deflexed, scarcely so long as the head and thorax; antennæ inserted about as far from the base as the distance between the eyes, black, with the basal joint piceous-yellow; head narrow; eyes not convex, the space between them moderately broad, quite dull, but only obsoletely sculptured. Thorax narrow, subcylindrical, but slightly narrowed in front, rather coarsely but moderately closely punctate, with a short canaliculiform impression at the base. Elytra narrow, somewhat flat on the disc, with rather fine, moderately deep, punctate grooves, feebly shining, more distinctly brassy than the thorax; interstices quite flat. Under surface without white setæ beneath the eyes, with a slight white pubescence at the sides of the breast.

One example from Mexico, three from Guatemala; if I have the sexes before me,

as I suppose, the male differs from the female only in having the rostrum rather shorter.

This is a very obscure little *Apion*, but its form is more slender than that of most of the species whose descriptions resemble it.

18. **Apion tantillum,** sp. n.

Angustum, nigrum, subnitidum, elytris subænescentibus; rostro opaco, sculpturato, basi lato; prothorace angusto, subcylindrico, dense fortiter punctato; elytris sat profunde, anguste sulcatis.
Long. $1\frac{2}{3}$ millim.

Hab. GUATEMALA, near the city (*Champion*).

Rostrum nearly as long as the head and thorax, curved, thick, broad and flat at the base, unusually dull owing to a dense, fine sculpture; antennæ inserted rather farther from the eyes than the width of the interval between these; eyes not prominent, small, the head narrow, though the space between the eyes is rather broad; this space is quite flat, densely and indistinctly punctured. Thorax slender, not narrowed in front, the punctuation close, coarse, and distinct. Elytra narrow, but much broader than the thorax, their grooves moderately deep, rather narrow, indistinctly punctured. Middle coxæ contiguous.

We have received three examples of this obscure *Apion*; they do not exhibit any sexual distinctions. The broad, flat base of the rostrum, its peculiar dull surface and fine sculpture are rather peculiar.

19. **Apion lassum,** sp. n.

Angustum, subnitidum, nigrum, elytris subænescentibus; rostro mediocri, cylindrico, sat nitido; prothorace minus gracili, subcylindrico, fortiter punctato; elytris sat profunde sulcatis.
Long. 2 millim.

Hab. GUATEMALA, Chiacam (*Champion*).

Rostrum a little longer than the head and thorax, moderately stout, cylindrical, shining, except at the base; antennæ inserted a little farther from the eyes than the width of the space between them; eyes a little prominent, the interocular space moderately broad, feebly striate. Thorax only very slightly narrowed in front, closely and coarsely punctured, with a short channel in front of the scutellum. Elytra narrow, rather deeply sulcate, the grooves distinctly punctured, the interstices rather narrow. Middle coxæ distinctly separated. Two examples.

This bears some resemblance to *Apion guatemalenum*, but is a narrower insect and less shining; the two are not likely to be confounded when seen side by side. *A. lassum* is, however, probably a species intermediate as regards the colour of the legs between the two divisions into which I have divided the genus, as there is a slight deficiency of black colour on the anterior tibiæ, so that the expression "legs entirely black" is not quite satisfactory in the case of this insect.

20. **Apion mediocre,** sp. n.

Angustulum, nigrum, opacum, sat sparse griseo-setosum; rostro subelongato, cylindrico, nitido; prothorace crebre, fortiter, parum argute, punctato; elytris profunde sulcatis, interstitiis subplanis.

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

Hab. MEXICO, Omilteme in Guerrero in July (*H. H. Smith*).

Rostrum in the male scarcely so long as, in the female a little longer than, the head and thorax; head moderately short and broad; eyes somewhat prominent, separated by a rather wide space; antennæ inserted very near to the eyes, not farther in front of them than the width of the interocular space. Thorax rather slender, a good deal narrowed in front, feebly constricted anteriorly and near the base, somewhat coarsely and moderately closely, but vaguely, punctured, with a moderately elongate channel on the middle. Elytra rather long and narrow, quite dull, moderately broadly and deeply sulcate. Under surface with but little concentration of pubescence on the sides of the breast or under the eyes. Male with a large mucro at the apex of the hind tibiæ, and a rather smaller one on the intermediate tibiæ.

This insect is destitute of any salient characters; there are apparently several other species closely allied to it, of which we have received only single specimens, and which I therefore do not think it proper to describe.

21. **Apion hystriculum,** sp. n.

Elongatum, nigrum, haud perspicue subænescens, opacum, minus tenuiter griseo-setosum, utrinque prope scutellum pubescentiæ pallidæ macula parva; rostro mediocri, maris hirsuto; prothorace sat crebre, fortiter punctato; elytris interstitiis latis, planis; subtus dense pallido-setosum.

Long. $2\frac{1}{2}$–3 millim.

Hab. MEXICO, Xucumanatlan 7000 feet and Omilteme 8000 feet, both in Guerrero (*H. H. Smith*).

This differs from *A. mediocre* by the more dense clothing of hairs, by the fact that at the base of the elytra on the second interstice they are concentrated so as to form a small pallid spot, and by the rostrum of the male being densely setose except at the tip. The antennæ are quite black, and are inserted very near the base of the rostrum; this latter in the male is but little longer than the thorax, rather stout, in the female it is as long as head and thorax, slender, and nearly free from hairs; the eyes are moderately large, somewhat distant from the thorax, and the interval between them is comparatively broad. The thorax is rather narrow, much narrowed anteriorly, and feebly transversely constricted in front, its punctuation is rather close and deep. Elytra elongate, finely sulcate, the sulci not deep, the interstices broad and flat. Under surface bearing much white setosity; this is dense and conspicuous under the orbits. Middle and hind tibiæ of the male with a rather long mucro at the inner margin of the extremity.

22. **Apion gracilirostre,** sp. n. (Tab. II. fig. 22.)

Elongatum, nigrum, opacum, tenuissime setosum; rostro elongato, gracili, polito; oculis sat prominulis; prothorace transverso, fortiter punctato, anterius et posterius leviter transversim constricto; elytris sulcatis, sulcis profunde punctatis, interstitiis subconvexis.

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

Hab. MEXICO, Amula in Guerrero in August, Chilpancingo in July (*H. H. Smith*); GUATEMALA, San Gerónimo (*Champion*).

Rostrum slender, without sculpture, polished, curvate, much longer than the head and thorax; eyes rather prominent, a little distant from the thorax, and separated by a moderately wide interval; antennæ elongate, inserted about as far in front of the eyes as the width of the neck, the basal joint dark yellow. Thorax with coarse, rugose punctuation, and with a fine, short channel in front of the scutellum. Elytra deeply grooved, and with very definite large impressions in the grooves. Legs elongate; middle coxæ but little separate.

The five examples received of this species are, I presume, all of the female sex.

Mr. Champion procured two or three very similar specimens at Cerro Zunil, having, however, the sides of the rostrum punctate: these may possibly be males of *A. gracilirostre*, but I think they are more probably females of an allied species.

23. **Apion punctulirostre,** sp. n.

Sat elongatum, nigrum, subopacum, tenuiter albido-setosum; rostro elongato, gracili, cylindrico, punctulato; prothorace anterius angustato, crebrius fortiter punctato; elytris sat profunde sulcatis, interstitiis subconvexis.

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

Hab. MEXICO, Cuernavaca in Morelos in June (*H. H. Smith*).

This insect certainly comes very close to *A. gracilirostre*; the rostrum, however, is not very smooth and polished as in that species, but bears a distinct punctuation. This is almost all I can see of importance to distinguish the two, though *A. punctulirostre* is a little more slender, and has a distinct sprinkling of minute hairs or setosity on the upper surface even on the elytra.

Two specimens. It may be well to say that there are in the collection three or four other individuals very closely allied to this and to *A. gracilirostre*, but representing, I believe, as many distinct species.

24. **Apion colon,** sp. n. (Tab. III. fig. 5.)

Angustum, nigrum, subopacum, tenuiter albido-setosum, elytris ad basin utrinque albido-maculatis, pectore ad latera dense albido-setoso; rostro mediocri; prothorace subcylindrico, dense fortiter punctato; elytris sat profunde sulcatis.

Long. 2 millim.

Hab. MEXICO, Cuernavaca and Chilpancingo in June, Tepetlapa in October (*H. H. Smith*); GUATEMALA, Zapote (*Champion*); PANAMA, Taboga Island (*Champion*).

Rostrum about as long as the head and thorax, dull, rather slender, a little thicker at the base; antennæ inserted about as far in front of the base as the width of the interval between the eyes, the basal joint yellow; eyes rather large, but only slightly prominent, the orbit delicately margined with white ciliæ above, more coarsely so below; interocular space moderately broad, striate; neck rather elongate. Thorax slender, subcylindrical, but still a good deal narrowed in front, coarsely, deeply, and very closely punctate, with an obscure canaliculiform impression in front of the scutellum. Elytra long and narrow, moderately deeply and broadly sulcate, the interstices nearly flat, at the base on each side with some conspicuous white setæ placed chiefly on the third interstice. Sides of the breast quite white with hairs.

This species will be recognized by the narrow form, black colour, and the white hairs at the base of the elytra on each side. Five specimens have been received from Mexico, one from each of the localities more to the south: these latter examples have the white hairs on the elytra less conspicuous, and they may not belong to the same species.

25. **Apion laminatum,** sp. n. (Tab. III. figg. 6; 6 *a*, profile of head.)

Nigrum, opacum, parcissime setosum; rostro sat crasso, subtus lamina elongata munito; elytris sat profunde punctatis, interstitiis planis.

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

Hab. Mexico, Amula in Guerrero 6000 feet, in September (*H. H. Smith*).

We have only received one example of this species, but it has the structure of the rostrum so peculiar that I have thought proper to describe it. Possibly the character may be confined to one sex, which in that case may prove to be the male, as this example has a small mucro at the inner margin of the apex of the middle tibia. The rostrum is scarcely so long as the head and thorax, rather stout and curvate, and is provided beneath with a large lamina extending from the insertion of the antennæ to the apex; the antennæ are short, quite black, with unusually abrupt club, and are inserted very near to the eyes; these latter are moderately large and are separated by a wide interval. The thorax is rather small and narrow, much narrowed in front, closely and coarsely punctured, with a very short inconspicuous channel in front of the scutellum. The elytra are rather narrow, somewhat deeply but not broadly sulcate. The clothing of the surface is very inconspicuous.

26. **Apion vetustum,** sp. n.

Minor, breviusculum, nigrum, subopacum, fere nudum; rostro parum elongato, sculpturato; capite angusto; prothorace dense fortiterque punctato; elytris leviter sulcatis, interstitiis planis.

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

Hab. Mexico, Teapa in January and February, Tierra Colorada in Guerrero in October, Rincon in September (*H. H. Smith*); Guatemala, San Gerónimo (*Champion*).

Rostrum about as long as the head and thorax, moderately stout, deflexed, a little incrassate at the insertion of the antennæ, slightly narrowed at the tip; eyes small, not prominent, the space between them rather narrow, bearing two or three raised lines; antennæ short, inserted a little behind the middle of the rostrum. Thorax short, transverse, a good deal narrowed from the middle to the front, densely, rugosely sculptured, with a fine short channel in front of the scutellum. Elytra short and broad, slightly shining, moderately finely, not deeply sulcate, the sulci deeply punctate, the interstices quite flat. Under surface with scarcely any pubescence. Middle coxæ more widely separated than usual.

We have received sixteen examples of this species, but I cannot detect any indication of the sexes.

27. **Apion constricticolle,** sp. n. (Tab. II. fig. 21.)

Angustum, nigerrimum, nitidum, nudum; rostro brevi, cylindrico; prothorace elongato, cylindrico, anterius et posterius transversim impresso, fere impunctato; elytris elongatis, leviter striatis.

Long. 2–2$\frac{1}{4}$ millim.

Hab. Mexico, Atoyac in Vera Cruz in April and May (*H. H. Smith*); Guatemala, near the City, Purula (*Champion*); Panama, Volcan de Chiriqui, Caldera (*Champion*).

Rostrum short, thick, not curvate, scarcely longer than the head, the antennæ inserted just behind the middle; eyes rather small, but convex and prominent, placed much in front of the thorax, the space between them rather broad, feebly impressed. Thorax narrow and elongate, cylindrical, but rendered irregular in outline by the two broad depressions, which are more distinct at the sides. Elytra long and narrow, black, shining, finely striate, the interstices broad and flat.

I can see no sexual distinctions among the extensive series obtained of this very distinct species. Extremely little variation of any kind is exhibited, except that the large series of examples from Purula have a very obsolete bituberculation of the rostrum between the insertion of the antennæ. In immature specimens the legs are more or less piceous. *A. longicolle* and *A. terminale* are allied to *A. constricticolle*, but as the legs are not entirely black they are placed in the next division.

28. **Apion heterogeneum,** sp. n. (Tab. III. fig. 7.)

♂. Latiusculum, nigrum, opacum, superne fere nudum; rostro crassiusculo, anterius tenuiore; antennis elongatis, hirsutis; prothorace lato, lateribus rotundatis, fortiter rugoso-punctato; elytris sulcatis, interstitiis convexis; pedibus difformibus.

Long. 3 millim. absque rostro.

Hab. Mexico, Omilteme in Guerrero 8000 feet, in August (*H. H. Smith*).

Antennæ elongate and thick, armed with long setæ, inserted about the middle of the rostrum; the base of this latter thick, sculptured, the apical portion cylindrical, smooth, and shining; eyes convex, the interval between them wide, with a short, shallow

channel on the middle. Thorax broader than long, greatly rounded at the sides, feebly constricted near the front and near the base, densely and coarsely punctate, with a moderately long channel in the middle in front of the base. Elytra broad, deeply sulcate, with a large depression in the sulci, these depressions separated only by small intervals, the interstices moderately broad, rather convex, quite dull. Anterior legs elongate; tibiæ dilated and compressed, set with hairs along the inner margin behind; middle tarsi with the second joint broad, the third very broad, its lobes divergent, so as to receive the very short, broad fourth joint, the claws of this latter abruptly bent and applied to the under surface of the joint; middle and hind tibiæ armed with a short mucro at the apex internally.

Only one specimen of this very abnormal insect has been obtained.

29. **Apion seriatum,** sp. n. (Tab. III. fig. 8.)

Robustum, nigrum, opacum; rostro sat elongato, crassiusculo, punctato et striato; prothorace subconico, crebrius fortiter punctato; elytris parum profunde sulcatis, interstitiis uniseriatim punctatis.

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

Hab. British Honduras, Belize (*Blancaneaux*).

We have only received one specimen of this species; it is not like any other, and will be easily recognized by the unusual character of a punctuation on the interstices of the elytra. Rostrum rather longer than the head and thorax, stout, dull, punctate, carinate at the sides; antennæ short and stout, inserted about as far in front of the eyes as the width of the head (including the eyes); these latter rather large, slightly prominent, the interval between them narrow, tricarinate. Thorax large, almost as broad behind as the base of the elytra, much narrowed in front, deeply and coarsely as well as closely punctured, with a deep distinct impression in front of the scutellum. Elytra quite dull, very definitely, moderately deeply grooved; interstices very slightly concave, each with a series of closely placed, rather large, but obsolete punctures. Legs stout. Middle coxæ very widely separated.

A. seriatum is really more allied to *A. juno* and the species near that, all of which have the femora more or less variegate with red, and are consequently placed in the next division.

30. **Apion quercicola,** sp. n.

Angustulum, nigrum, opacum, parce griseo-setosum; rostro gracili, maris mediocri, feminæ elongato; capite angusto et brevi, oculis haud prominulis; prothorace conico-cylindrico, crebre fortiter punctato; elytris elongatis, sat profunde sulcatis, sulcis profunde punctatis, interstitiis planis.

Long. $1\frac{3}{4}$–2 millim.

Hab. Mexico, near the city (*Flohr*).

This insect resembles *A. spretissimum* and *A. præditum*, but the antennæ are inserted farther in front of the base, their distance in front of the eyes being as great as the

length of the head. The rostrum in the male is curved, quite slender, rather longer than the head and thorax; in the female it is nearly straight, much longer, quite one millim. in length. The punctuation of the thorax is coarse and close. The elytra are long and narrow, with rather deep grooves or striæ, the large punctures in which are quite distinct and approximate, the interstices flat. The griseous clothing of the surface is scanty, and there is no condensation of white hairs around the eyes or at the sides of the breast.

A pair of this species was sent by Mr. Flohr, with the information that the insect was obtained by beating small oaks near Mexico City. Although there is a considerable difference between the two examples, yet they agree in the important character of the point of insertion of the antennæ.

31. **Apion spectator,** sp. n.

Sat elongatum, nigrum, subnitidum, parum setosum; rostro elongato, gracili, nitido, maris tenuiter pubescente; prothorace fortiter denseque rugoso; elytris profunde sulcatis, interstitiis subconvexis.

Long. 2–2$\frac{1}{4}$ millim.

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

Rostrum cylindrical, shining, in the male delicately pubescent, rather longer than the head and thorax, in the female much longer, slender, and quite shining, though evidently punctate; eyes moderately large and convex, the interval between them rather broad; antennæ quite black, inserted about as far in front of the eyes as the width of the head and eyes. Thorax short and broad, greatly narrowed in front, very coarsely sculptured, with a deep short impression in front of the scutellum. Elytra rather elongate, deeply and broadly sulcate, the interstices narrow and a little convex. Under surface sparingly clothed with white setosity. Middle coxæ closely approximate. Male with the middle tibiæ mucronate at the inner margin of the apex. Eleven specimens.

The male of this species bears some resemblance to *A. mediocre*, but has the antennæ inserted farther from the eyes, and the hind tibiæ are not mucronate. *A. guatemalenum* is more shining, and has a very differently sculptured thorax; while *A. quercicola* is more slender, very dull, and has a much narrower head.

32. **Apion fuscimanum,** sp. n.

Sat elongatum, nigrum, parum nitidum, nudum, tarsis anterioribus fuscis; rostro in sexibus dissimile, maris robusto, mediocri, punctulato, feminæ elongato, nitido; oculis haud prominulis; prothorace fortiter punctato; elytris ad basin deplanatis, sulcatis.

Long. 2–2$\frac{1}{8}$ millim.

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

Rostrum curvate, in the male dull, stout, as long as the head and thorax, in the female more slender, shining, longer than the head and thorax; eyes not at all prominent, the space between them somewhat narrow; antennæ short and rather stout,

inserted as far in front of the eyes as the length of the head. Thorax dull, elongate, narrowed in front, strongly punctate, with a short, but remarkably deep and definite canaliculiform fovea at the base. Elytra with the basal region flat, sulcate, but not deeply so; punctuation of the sulci indistinct; interstices narrow, flat. Front feet and the tip of the tibia infuscate-yellow. Middle coxæ rather widely separated.

This is not at all closely allied to any other of the species here described, but Mr. Champion found single examples of what appear to be three species very near to this in different localities.

33. **Apion altum,** sp. n.

Sat elongatum, nigrum, supra ænescens, nitidum, nudum; rostro curvato, punctato, mediocri; antennis pone medium rostri insertis; prothorace conico, crebre sat fortiter punctato; elytris striatis, striis remote punctatis, interstitiis parce obsoleteque punctatis.

Long. 3 millim.

Hab. Panama, Bugaba (*Champion*).

Rostrum moderately stout, cylindrical, much curved, strongly punctate at the sides of the base, rather longer than the head and thorax; eyes small, not prominent, the interval between them moderately broad, coarsely punctate; antennæ small, inserted behind the middle of the rostrum, but at a distance from the eyes equal to slightly more than one third of the length of the rostrum. Thorax regularly narrowed from the base to the apex, definitely and moderately coarsely punctate, with a larger deep puncture forming a minute fovea in front of the scutellum. Elytra rather elongate and more than usually parallel-sided, very distinctly striate; looked at from the side the inner margins of the striæ appear to be raised, and the punctures they bear seem to extend over and render irregular the outer margins of the striæ.

We have received only two specimens of this distinct species. I think they are of the two sexes, but if so the differences are only very slight.

34. **Apion longimanum,** sp. n. (Tab. III. fig. 9.)

Sat elongatum, nigrum, subopacum, antennis pedibusque elongatis; rostro maris mediocri; prothorace lato, anterius fortiter angustato, fortiter punctato; elytris profunde sulcatis, interstitiis convexiusculis.

Long. 2 millim.

Hab. Guatemala, Cahabon (*Champion*).

Only one male of this species has been obtained, but the species is—in that sex at any rate—very easy to distinguish, the antennæ and legs being slender, with the club of the former and the basal joint of the front tarsus unusually elongate; the front and middle tibiæ are mucronate internally at the apex. The rostrum is moderately stout, just as long as the head and thorax, the antennal insertion slightly in front of the middle. The eyes are not large, the interval between them moderately broad, feebly sculptured. The thorax is very coarsely sculptured, and has a small deep fovea in

front of the scutellum. The grooves of the elytra are deep, and are deeply punctate, the interstices being only about as broad as the sulci. There is but little setosity on the under surface, and the middle coxæ are closely approximate. The mucro on the front tibia is very conspicuous, being directed strongly inwards.

35. **Apion paradoxum.** (Tab. III. fig. 10.)

Apion paradoxum, Gerst. Stett. ent. Zeit. 1854, p. 274[1].

♂. Angustulum, nigrum, subnitidum, parcissime minute setosum; rostro cylindrico, sat elongato; prothorace conico, rugoso-punctato; elytris profunde sulcatis, interstitiis convexiusculis; tibiis intermediis dilatatis, facie posteriore longe pilosa; femoribus posterioribus incrassatis.

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

Hab. Mexico[1], Chilpancingo in Guerrero 4600 feet in June (*H. H. Smith*).

Antennæ long and slender, the basal joint elongate, inserted slightly behind the middle of the rostrum; this latter cylindrical, somewhat longer than the head and thorax; eyes rather large and convex, placed but little away from the thorax, the interval between them only moderately wide. Thorax long and narrow, much narrowed in front, densely and coarsely punctured, with an abbreviate channel in front of the base in the middle. Elytra convex and narrow, deeply sulcate. Middle tibiæ dilated and flattened, their posterior face clothed with long, dense, pallid hair. Hind femora greatly incrassate.

Only one example of this extraordinary insect was obtained by Mr. Smith. Gerstäcker described the species from a unique example, also of the male sex.

36. **Apion murinum.**

Apion murinum, Gerst. Stett. ent. Zeit. 1854, p. 241[1].

Hab. Mexico (*mus. Berol*[1].).

As I cannot at all determine from the description to what species this is allied, I place it at the end of this division, though the antennæ are said to be inserted close to the eyes.

Division B.

Legs variously coloured, but never entirely black. Species 37–86.

The species placed at the commencement have the antennæ inserted at the base of the rostrum very near to the eyes; those at the end of the division have the antennæ inserted near the middle of the rostrum.

37. **Apion chalceum.**

Apion chalceum, Gerst. Stett. ent. Zeit. 1854, p. 240[1].

Hab. Mexico (*mus. Berol.*[1]).

I do not find anything agreeing with Gerstäcker's description among our specimens; it is probable, however, that *A. chalceum* is allied to *A. oscillator*.

38. **Apion oscillator,** sp. n.

Nigrum, supra fere nudum, subnitidum; rostro mediocri, cylindrico, curvato, polito; prothorace dense fortiterque punctato; elytris sat profunde sulcatis, interstitiis nitidis; pedibus fere nigris, tibiis piceo-testaceis.

Long. 2 millim.

Hab. Mexico, Frontera in Tabasco (*Höge*).

Rostrum as long as the head and thorax, curved, cylindrical, polished; head short; eyes convex, moderately widely separated, the space between them obsoletely trisulcate; antennæ inserted close to the base. Thorax rather short, very coarsely punctate, with a short fovea in front of the base. Elytra rather deeply sulcate, the sulci very coarsely punctate and bearing some very minute white setæ, the interstices shining, subconvex. Under surface with white pubescence outside the middle coxæ and along the sides of the metasternum; intermediate coxæ moderately distant. Legs slender.

This species would be naturally placed next *A. guatemalenum*; but it has the tibiæ pallid, though only obscurely so, the antennæ inserted close to the base of the rostrum, and the thorax densely and coarsely punctured, so that it is unmistakably distinct from its ally placed in the first division. The fact that the setæ are placed in the grooves of the elytra and not on the interstices distinguishes it from most other species, but unfortunately they are very minute and are detected only by careful observation. Four specimens were obtained, of uncertain sex.

39. **Apion acarinum,** sp. n.

Minutum, obesulum, nigrum, peropacum, tenuiter griseo-pubescens; antennis pedibusque rufo-testaceis; rostro parvo, interdum picescente vel flavescente; prothorace brevi, minus argute punctato; elytris profunde sulcatis.

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

Hab. Guatemala, Senahu (*Champion*).

Rostrum small, smooth in front of the insertion of the antennæ, which is quite basal; eyes convex, the space between them punctured and dull; antennæ yellow, short, about as long as the rostrum, the second joint globular. Thorax strongly transverse, narrowed in front, its punctuation indistinct and rather distant, but not fine. Elytra somewhat deeply sulcate, the interstices rather narrow, not quite flat. Middle coxæ moderately separated.

This tiny *Apion* is of somewhat unusual proportions, the hinder portion of the body being large and obese in comparison with the small anterior parts. Mr. Champion procured a good series of examples, but I cannot find any sexual characters to distinguish them. The colour of the rostrum appears to be variable, passing from nearly black to yellow; but most of the specimens are intermediate in this respect, so that I do not think it can be a mark of the sexes.

40. **Apion conicicolle,** sp. n.

Piceum, setosum, pedibus testaceis, tarsis fuscis; prothorace conico, obsolete punctato; elytris sat profunde sulcatis.

Long. 2 millim.

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

Rostrum dissimilar in the sexes, slender, not so long as the head and thorax—in the female very slender, polished, in the male broader and setose; eyes not large, but quite convex, separated by a very wide interval; antennæ inserted almost beneath the front of the eyes, at the base infuscate-yellow. Thorax conical, without punctuation, but with a very distinct setosity. Elytra moderately deeply sulcate, the interstices not much broader than the grooves, rather densely setose. Legs pale yellow; tarsi dusky red, rather broad; middle coxæ slightly separated.

Ten examples were procured of this species; they are precisely alike, except in the sexual distinctions.

41. **Apion picturatum,** sp. n. (Tab. III. fig. 11, ♀.)

Breve, convexum, subopacum, rufescens, setosum, elytrorum disco guttulis ornato, antennarum basi pedibusque flavis.

Long. 2 millim.

Hab. PANAMA, David (*Champion*).

Rostrum almost as long as the head and thorax, dissimilar in the sexes—in the female with a rather large broad basal portion, and a slender cylindrical polished anterior part, while in the male the anterior part is not so slender, is not abruptly distinguished from the basal portion, and is not polished but feebly sculptured and setose, except at the tip; the eyes are rather small but convex, the antennæ inserted some distance in front of them; the space between the eyes is broad. The thorax is rather broad and short, greatly narrowed in front, not visibly punctured, but with a well-marked depressed squamosity. Elytra stout, rounded and convex, with well-marked rather deep grooves, and a pallid squamosity distributed irregularly so as to give a spotted appearance, the spots being most distinct around the discoidal area. The legs are rather stout, pale yellow, with the tarsi reddish; the coxæ and trochanters are red; the middle coxæ are not widely separated.

Four examples were obtained of this species; it is not likely to be confounded with any other owing to the spotted arrangement of the squamosity.

42. **Apion cretaceicolle,** sp. n. (Tab. II. fig. 25.)

Convexum, rufescens, squamosum, opacum, antennarum basi pedibusque testaceis, tarsis antennarumque clava fuscis; prothorace conico, densius squamoso-setoso; elytris profunde sulcatis, squamosis, squamositate sublineatim disposita.

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

Hab. GUATEMALA, Zapote, Pantaleon (*Champion*).

Of this species three examples of the male sex were obtained. The rostrum is rather long and stout, more slender at the tip, which is bare, the rest being sculptured and setose, the basal part is thick; the antennæ are inserted very near the eyes, but still a little in front of them, they are yellow with the club darker; the eyes are widely separated and very convex. The thorax is elongate, much narrowed towards the front, and densely covered with a pale squamosity. The elytra are not very broad; they bear a good deal of squamosity, which on the first and third interstices is denser than elsewhere. The legs are stout, pale yellow, the tarsi fuscescent; the coxæ and trochanters are red; the middle coxæ are slightly separated.

The female will probably be found to possess a highly polished cylindrical rostrum, with a very short broad basal portion.

43. **Apion matricum,** sp. n.

Breve, latum, tenuiter setosum, nigrum, subopacum, pedibus rufis; rostro mediocri, polito, summo basi crassiore; prothorace conico, dense fortiterque punctato; elytris profunde sulcatis.

Long. 2 millim.

Hab. Panama, San Feliz (*Champion*).

Rostrum about as long as the head and thorax, dissimilar in the sexes—in the female slender and very polished, with the short part behind the insertion of the antennæ abruptly thicker; in the male less polished, and not so slender, the basal portion being not abruptly distinguished from the anterior portion; eyes large, convex, separated by an unusually broad space, the insertion of the antennæ at a distance in front of the eyes rather less than the ocular interval. Thorax broad at the base, greatly narrowed in front, very coarsely punctured, with a channel along the middle behind. Elytra broad, with deep and distinct grooves in which the large punctures are very distinct. Legs dusky red, with the tarsi dark; all the coxæ and the hind trochanters black, the anterior trochanters fuscescent; the middle coxæ widely separated. One pair.

Not at all closely allied to any other species of the genus. *A. sancti-felicis* is the most similar, but has no incrassation of the base of the rostrum, and the head and eyes in it are very much narrower.

44. **Apion basirostre,** sp. n. (Tab. III. fig. 12.)

Latum, anterius attenuatum, nigrum, minutissime setosum, sat nitidum; pedibus crassis, rufo-testaceis, tarsis nigris; antennarum basi rufo; prothorace conico, parce obsoleteque punctato; elytris profunde sulcatis; corpore subtus rufescente.

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

Hab. Pvnama, Tolé (*Champion*).

Of this species only two specimens have been received, and it is probable that both are females; the rostrum is very slender, elongate, and quite polished, with a very short and broad basal portion; the eyes are convex, but not very large, very widely

separated; the antennæ are inserted almost beneath the front of the eyes, and have an elongate basal joint and also a long, slender, pointed club. The thorax is large, broad at the base, regularly and considerably narrowed towards the front, with very minute pubescence and obsolete punctuation. The elytra have remarkably definite, deep grooves, with distinct punctures in them. The middle coxæ are only slightly separated. The legs are stout, with broad tarsi.

45. **Apion calcaratipes,** sp. n. (*A. calcaratum*, Tab. II. fig. 20, ♂.)

Obesum, nigrum, setis griseis depressis vestitum, capite elytrisque pone scutellum densius albido-vestitis, antennis tibiisque testaceis; rostro gracili, cylindrico, parum elongato; prothorace subconico; elytris sat profunde, minus late, sulcatis.

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

Hab. GUATEMALA, Panajachel (*Champion*).

Rostrum about as long as the head and thorax—in the female slender, cylindrical, smooth and shining, but between the eyes and the insertion of the antennæ much thicker and clothed with scales; in the male but little, if at all, shorter, and with the thick basal portion becoming gradually attenuate, so that only the apical half is slender, shining, and free from scales; the eyes are very large and prominent, and the space between them is broad; the antennæ are yellow, and are inserted just in front of the eyes on the under surface. The thorax is broad at the base, but much narrowed in front, its punctuation is indistinct, the depressed pallid setæ being on the contrary evident. The elytra are rather broad and convex, and are thickly clothed with griseous-white setæ which obscure their sculpture; there is a patch of white scales immediately behind the scutellum. The under surface is rather densely clothed with white scales, which are very conspicuous under the eyes. The middle coxæ are a little separated. Male with a small mucro on each of the middle and hind tibiæ at the inner margin of the apex. Five specimens.

46. **Apion scydmænoides,** sp. n. (Tab. III. fig. 13.)

Brunneo-ferrugineum, nitidum, antennis pedibusque testaceis; rostro prothoraceque politis, lævigatis; elytris globosis, seriatim punctatis.

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

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

Rostrum very slender, elongate, curved, very polished; eyes small but prominent, separated by a rather narrow space; antennæ inserted near to the eyes, but at a rather greater distance than the width of the ocular interval. Thorax small, subconical, very polished, and quite free from punctuation. Elytra inflated, shining, without grooves, but with series of distinct punctures. Legs slender. Metasternum short. Middle coxæ nearly, if not quite, contiguous.

Only one specimen has been received. It is one of the most distinct species of the genus: the highly polished surface of the rostrum and thorax, the absence of grooves on the elytra, the form and colour, being each of them peculiar.

47. **Apion subrufum,** sp. n.

Gracile, nitidum, subnudum, nigrum, antennis, pedibus elytrisque sordide rufis, prothorace subænescente, parce punctato; rostro mediocri, polito; elytris subtiliter sulcatis.
Long. $1\frac{3}{4}$ millim.

Hab. GUATEMALA, La Tinta in Vera Paz (*Champion*).

Rostrum rather longer than the head and thorax, polished, cylindrical; antennæ inserted about as far in front of the base as the width of the ocular interval, which is rather small, and bears a few coarse but subobsolete punctures; the eyes convex. The thorax is slender, much narrowed to the front, sparingly punctured, without channel. Elytra obscure red in colour, shining, with rather fine grooves, and very flat, broad interstices. Middle coxæ not broadly separated. Sides of the breast with a fine line of white setosity. Two examples.

The peculiar reddish colour of the elytra is somewhat similar to that of *A. subauratum* and *A. teapense*; the former has a quite different rostrum and a peculiar setosity, and the latter remarkably deep definite grooves on the elytra, while in *A. subrufum* the sulci are rather fine.

48. **Apion hastifer,** sp. n.

Gracile, nigrum, nitidum, tenuissime pubescens, antennis pedibusque flavis, maris rostro anterius flavescente; oculis prominulis, inter sese distantibus; rostro gracili, parte anteriore tenui, subrecto, parte basali crassiore.
Long. 2 millim.

Hab. PANAMA, Bugaba, David, San Feliz, Tolé (*Champion*).

Antennæ inserted about as far in front of the eyes as the width of the ocular interval, which is broad, the eyes being large and convex; the anterior part of the rostrum is slender and attenuate in front, in the male yellow, in the female black. Thorax slender, a little dilated in the middle so as to appear broadly but faintly constricted in front and behind, feebly punctate. Elytra rather finely sulcate, the interstices not convex. Legs moderately long, yellow, the tarsi fuscescent, at any rate towards the extremity; middle coxæ moderately distant. Male with a small mucro on the inner margin of the middle tibiæ at the extremity.

We have received eight examples that I refer to *A. hastifer*; I am not sure, however, but what they may belong to two or three species very closely allied, with considerable sexual differences in the case of each; they vary a little in size, colour, and punctuation, and in the length of the legs. As this small number of examples are from four different localities, I can come to no positive opinion about them, but the following is clearly distinct.

49. **Apion poeticum,** sp. n. (Tab. III. fig. 14, ♂.)

Elongatum, gracile, nigrum, nitidum, antennis, pedibus marisque rostri parte anteriore flavis; oculis sat prominulis, inter sese mediocriter distantibus; rostro graciliore.

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

Hab. GUATEMALA, Mirandilla (*Champion*); PANAMA, Tolé (*Champion*).

This is distinguished from *A. hastifer* by its more delicate build, longer legs and rostrum, and the narrower head and eyes; by this latter character it is easy to separate the two when they are placed side by side. We have received four examples of *A. poeticum*.

50. **Apion rufinulum,** sp. n. (Tab. II. fig. 24.)

Sat robustum, rufescens, elytris sanguineis, prothorace, capite rostroque cum antennis nigricantibus; prothorace parcissime punctato; elytris plus minusve obsolete seriatim punctatis.

Long. $2\frac{1}{4}$–3 millim.

Hab. MEXICO, Chilpancingo, Teapa (*H. H. Smith*); BRITISH HONDURAS, Belize (*Blancaneaux*); GUATEMALA, Panajachel, Mirandilla, Zapote, Aceituno, San Gerónimo, San Juan in Vera Paz, Cahabon, Chiacam (*Champion*); NICARAGUA, Chontales (*Janson*); PANAMA, David (*Champion*).

Rostrum of the male scarcely so long as the head and thorax, rather stout, punctate, but shining, of the female considerably longer, more slender, polished; eyes convex, somewhat widely separated; antennæ black, inserted a little farther in front of the eyes than the width of the interocular space. Thorax rather short, moderately broad, a good deal narrowed in front, and slightly constricted, blackish in colour, more or less feebly ænescent, shining, very sparingly punctate. Elytra dark red, smooth and shining, with series of faint distant punctures, which, however, are variable in their size; there is a marginal deeply impressed stria, and at the apex of each wing-case two or three deep impressions with convex interstices. Underside of the breast and abdomen red, the former with white hairs at the sides; middle coxæ widely separated. Legs variable in colour—usually red, but in some specimens the front femora are infuscate in the middle; sometimes they are all so much infuscate as to be nearly black. The male has a well-marked mucro at the apices of the middle and hind tibiæ.

We have received a fair series of this species, but made up from very scattered localities. If all belong to one species then it is a very variable one; the colour of the legs, as already stated, varies from clear red to nearly black; and the head, thorax, and rostrum are sometimes rufescent to a greater or less extent. But the most striking variation is in the sculpture of the elytra: the serial punctures are sometimes scarcely to be detected, while in other cases they are well marked and quite conspicuous, and in some individuals those near the suture are deep and connected together so as to form there two or even three striæ.

51. **Apion vinosum,** sp. n.

Robustum, nigrum, supra, præsertim in elytris, rufo-ænescens; rostro mediocri, capite inter oculos striato; prothorace conico, dense punctato; elytris sulcatis, sulcis profunde punctatis; pedibus rufo-obscuris.

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

Hab. GUATEMALA, near the city, Dueñas (*Champion*).

Rostrum rather stout, slightly shining, but little sculptured, in the male shorter than the head and thorax, in the female much longer; eyes large and prominent, the space between them moderately broad, bearing three short, broad grooves separated by fine carinæ; antennæ black, inserted about as far in front of the eyes as the width of the space between them. Thorax conical, much narrowed in front, densely and rather coarsely punctate, with a short deep channel in front of the scutellum. Elytra broad and short, much broader than the thorax, with deep distinct grooves and flat interstices. Legs red, the coxæ and trochanters black. Under surface sparingly clothed with white pubescence, which is dense at the sides of the breast, on the front of the anterior coxæ, and at the sides of the rostral scrobes. Male with a short mucro at the apex of each of the middle and hind tibiæ.

The dull reddish-æneous colour of the elytra is almost peculiar to this species.

52. **Apion chiriquense,** sp. n.

Sat elongatum, nigrum, subnudum, pedibus rufo-testaceis, femoribus posterioribus fuscescentibus; rostro crassiusculo, fortiter punctato; prothorace angusto, fortiter parce punctato; elytris late et profunde punctatis, interstitiis planis.

Long. 2–$2\frac{1}{4}$ millim.

Hab. MEXICO, Chilpancingo, Cuernavaca, Atoyac (*H. H. Smith*); GUATEMALA, Zapote, Tamahu (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

Rostrum stout, curved, not at all thinner towards the extremity, coarsely punctate all over, in the male scarcely so long as the head and thorax, in the female distinctly longer: eyes not large, slightly prominent; antennæ inserted only about as far in front of the eyes as the width of the ocular space. Thorax narrow, a little narrowed in front, very feebly transversely impressed immediately behind the front margin; coarsely and somewhat sparingly punctured, quite black. Elytra rather long and narrow, with deep and definite grooves, which are very distinctly punctate; at the base of the third interstice there is a very minute patch of three or four white hairs. Legs reddish-yellow, the hind femora dark, the coxæ and trochanters black; middle coxæ rather widely separated.

53 **Apion relictum,** sp. n.

Minus elongatum, nigrum, subnitidum, pedibus rufo-testaceis, elytris ad basin albido-bimaculatis; rostro crassiusculo, fortiter rugoso; prothorace fere brevi, fortiter punctato; elytris profunde sulcatis.

Long. 2 millim.

Hab. MEXICO, Cuernavaca in June, Amula in August, Teapa in March (*H. H. Smith*),

Jalapa (*Höge*); GUATEMALA, Zapote, Capetillo, Aceituno, San Gerónimo, San Juan in Vera Paz, Senahu (*Champion*).

This is closely allied to *A. chiriquense*, but is of less elongate form, and the hind femora are clear yellow-red in colour; these two characters seem quite sufficient to distinguish the species from *A. chiriquense*. The upper surface bears a few scattered hairs, and there is a condensation of them at the base of the third interstice of the elytra so as to form a white spot on each side; and there is also a condensation of white setæ at the sides of the breast beneath. The sexual difference in the rostrum is not great, but that of the female is a little longer and more slender.

54. **Apion maceratum,** sp. n.

Nigrum, subopacum, fere nudum, elytris subænescentibus, pedibus rufis; rostro mediocri, opaco, obsolete sculpturato; prothorace conico-cylindrico, fortiter punctato; elytris profunde sulcatis, subnitidis.

Long. 2 millim.

Hab. PANAMA, Tolé, San Feliz (*Champion*).

Rostrum moderately stout, curvate, not elongate, rather shorter than the head and thorax, dull, but the apical portion without distinct sculpture; eyes not large, only slightly prominent, somewhat widely separated; antennæ inserted quite as far in front of the eyes as the width of the ocular interval. Thorax rather narrow, much narrowed in front, coarsely and moderately closely punctured, with a short deep channel in front of the scutellum. Elytra rather narrow, the interstices somewhat narrow but flat. Legs short and stout, red, the tarsi blackish, broad, the coxæ and trochanters black. Under surface almost destitute of pubescence; middle coxæ slightly separated. Four specimens.

In this species the legs are shorter and more robust than they are in *A. relictum*, to which it is similar in appearance.

55. **Apion pulchripes,** sp. n.

Angustulum, nigrum, opacum, minutissime setoso, antennis pedibusque testaceo-fusco variegatis; rostro parum elongato, opaco; prothorace anterius subconstricto, dense, minus argute punctato; elytris profunde sulcatis.

Long. 2 millim.

Hab. MEXICO, Northern Sonora (*Morrison*); PANAMA, Volcan de Chiriqui (*Champion*).

Rostrum a little shorter than the head and thorax, moderately stout, rather more slender towards the apex, dull, indistinctly sculptured; eyes but little prominent, moderately widely separated, the space between them rather broad, obsoletely sculptured; antennæ flavescent at the base, the club fuscous, their distance from the eyes scarcely so great as the width of the ocular interval. Thorax rather small, not elongate, narrowed in front, and slightly transversely constricted; the punctuation dense but indistinct; a minute channel in front of the scutellum. Elytra deeply sulcate, the interstices

narrow and a little convex. Legs rather long, yellow, but varied with fuscous, the middle of the femora, the knees, and the tibiæ before the extremity being of this colour. Middle coxæ slightly separated. Under surface without any distinct pubescence; coxæ and trochanters black.

The variegate colour of the legs will be one of the best clues to the identification of this obscure insect. Only three examples have been received; the one from Northern Sonora does not differ in any important particular, so far as I can discover, from the two found on the Volcan de Chiriqui. Perhaps all are of the male sex.

56. **Apion epicum,** sp. n.

Minus elongatum, nigrum, subnitidum, fere nudum, pedibus rufo-testaceis, antennarum basi flavescente, apice fusco; rostro subgracili, mediocri, parum sculpturato; prothorace fere brevi, parce punctato; elytris sat profunde sulcatis, interstitiis planis.

Long. 2 millim.

Hab. Panama, Peña Blanca (*Champion*).

Rostrum slender, cylindrical, shining, in the male about as long as the head and thorax, in the female slightly longer; eyes convex, not widely separated, the space between them obsoletely grooved; antennæ inserted a little farther in front of the eyes than the width of the interocular space. Thorax coarsely but not closely punctured. Elytra broad and short, with moderately deep grooves and broad flat interstices. Legs clear yellow; coxæ and trochanters reddish. Under surface bare; middle coxæ rather widely separated. Seven specimens.

This is another obscure species, but differing from nearly all the Central-American allied forms with similarly-coloured legs by the more slender rostrum and the absence of pubescence on the under surface.

57. **Apion errabundum,** sp. n.

Angustum, nigrum, opacum, antennarum basi pedibusque rufis, femoribus intermediis et posterioribus nigricantibus; rostro mediocri, gracili; prothorace brevi, fortiter punctato; elytris minus profunde sulcatis, sulcis fortiter punctatis, interstitiis planis.

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

Hab. Mexico, Chilpancingo in June and July (*H. H. Smith*).

Rostrum slender, cylindrical, curved, nearly as long as the head and thorax, shining, except at the base; eyes convex, the space between them rather small, obscurely bisulcate; antennæ inserted quite as far in front of the eyes as the width of the ocular interval. Thorax transverse, narrowed in front, rounded at the sides, rather coarsely punctate, with a very feeble white setosity, the channel in front of the base in the middle scarcely visible. Elytra dull, black, with conspicuous but shallow grooves, the punctures in which are very evident; the interstices flat and rather broad. Legs reddish, the middle and hind femora black. Middle coxæ distinctly separated. Two specimens.

This insect is nearly allied to *A. epicum*, but differs in numerous details, especially in the short, very opaque thorax and the dark posterior femora.

58. **Apion solitare,** sp. n.

Nigrum, opacum, fere nudum, antennis pedibusque flavis; rostro brevi; elytris late profundeque sulcatis, interstitiis angustis, convexis.

Long. 2 millim.

Hab. MEXICO, Atoyac in April, Chilpancingo in July, Teapa in February (*H. H. Smith*).

Rostrum shorter than the head and thorax, rather stout, cylindrical, rugose; antennæ inserted about as far in front of the eyes as the width of the ocular interval, this being moderately broad and coarsely sculptured; eyes convex, though small. Thorax rather small, much narrowed anteriorly, and constricted behind the front, densely and somewhat finely rugose-punctate, quite dull. Elytra rather short, deeply and broadly sulcate, with raised, narrow interstices, the grooves with deep distinct punctures. Legs pale yellow, all the coxæ black, the trochanters piceous. Middle coxæ slightly separated.

This little *Apion* somewhat resembles *A. acarinum*, but has the antennæ inserted in front of the base of the rostrum, instead of at the base. Only one individual was procured in each locality.

59. **Apion filipes,** sp. n.

Gracile, nigrum, sat nitidum, fere nudum, antennis pedibusque rufis, his fusco-variegatis; rostro mediocri, cylindrico; prothorace parvo, conico-cylindrico, obsolete sed haud subtiliter punctato; elytris subtiliter sulcatis.

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

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

Rostrum rather slender, cylindrical, but little curved, shining, almost without sculpture, in the female about as long as the head and thorax, in the male a little shorter; eyes not large, but convex, rather widely separated, the space between them obscurely sculptured; antennæ yellow, slender, inserted about one-third of the length of the rostrum in front of the eyes. Thorax slender, but a good deal narrowed in front, a little irregular in outline, being transversely constricted in front of the middle; its punctuation scanty and obsolete, but not fine. Elytra finely sulcate, the grooves not distinctly punctured, the interstices flat. Legs long, very slender; coxæ dark, the trochanters red, femora darker; tibiæ yellow, more or less infuscate in the middle. Intermediate coxæ rather widely separated. Two specimens.

60. **Apion pleuriticum,** sp. n. (Tab. III. fig. 15.)

Nigerrimum, nitidum, pedibus nigro-testaceo-variegatis; rostro brevi, crassiusculo; prothorace sparsim punctato; elytris haud sulcatis, subtiliter striatis; antennis fusco-testaceis.

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

Hab. Mexico, Jalapa (*Höge*), Teapa (*H. H. Smith*); Guatemala, Tamahu, Cahabon, La Tinta (*Champion*).

Rostrum short and stout, attenuate at the tip, with a slight incrassation at the insertion of the antennæ, the insertion at about one-third of the length towards the front; eyes rather small, a little convex, somewhat widely separated, the space between them with two or three striæ; antennæ dark yellow, the first and second joints nodose. Thorax a little narrowed from the middle to the front, shining, very sparingly punctate. Elytra short, without grooves, but with series of punctures, connected by fine lines so that striæ are thus formed. Under surface black, but with a slender line of white setosity on each side of the breast. Legs yellow; coxæ and trochanters black; femora marked with black towards the apex; tibiæ at the knees and apex, together with the tarsi, fuscous; middle coxæ rather slightly separated; hind tibiæ in the male with a slight prolongation of the internal apical angle.

Eighteen examples have been received of this species. It is very distinct from all others, except the following, which is very closely allied.

61. **Apion fraudulentum,** sp. n.

Nigerrimum, nitidum, pedibus fusco-testaceis, variegatis; rostro brevi, crassiusculo; prothorace parce fortiter punctato; elytris striatis haud sulcatis.

Long. 2 millim.

Hab. Panama, Volcan de Chiriqui, David (*Champion*).

This is extremely close to *A. pleuriticum*, but the five individuals obtained differ as follows:—They are rather larger; the antennæ are darker in colour; the thorax bears coarser punctures; the striæ of the elytra are deeper; and the femora are, to a large extent, fuscescent, only their bases being yellow.

62. **Apion pallitarse,** sp. n. (Tab. III. fig. 16.)

Angustum, nigrum, opacum, fere nudum; rostro gracili; antennis fusco-testaceis; elytris late profundeque sulcatis, interstitiis angustis, convexis; pedibus basi fusco, apicem versus pallidioribus, tarsis testaceo-pallidis.

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

Hab. Mexico, Teapa in February (*H. H. Smith*); Guatemala, Zapote (*Champion*).

Rostrum slender, subcurvate, in the male rather shorter than the head and thorax, in the female a little longer, opaque, not visibly sculptured; head narrow; eyes small, somewhat prominent, the space between them rather wide, obscurely striate; antennæ slender, inserted about as far in front of the eyes as the width of the head (including the eyes). Thorax very slender, subcylindrical, scarcely at all narrowed in front, coarsely punctate. Elytra slender, dull black, deeply and broadly sulcate, the grooves being very distinctly punctate; interstices narrow and not flat. Legs long and slender, the femora dark, the tibiæ infuscate-testaceous, their apices and the tarsi pallid testaceous. Under surface without setosity; coxæ and trochanters dark; middle coxæ slightly separated.

This is an easily recognized species: the slender form, the pallid apical parts of the legs, and the deep sculpture of the elytra being unmistakable. Only five specimens have been procured.

63. **Apion germanum,** sp. n.

Angustum, nigrum, fere opacum, nudum, antennis pedibusque fusco-testaceis, tarsis pallidioribus; rostro mediocri; prothorace conico-cylindrico, fortius minus crebre punctato; elytris profunde sulcatis, interstitiis subconvexis.

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

Hab. MEXICO, Orizaba in December (*F. D. Godman & H. H. Smith*), Teapa in February, Atoyac in April (*H. H. Smith*).

Rostrum moderately stout, in the male as long as the head and thorax, in the female longer, obscurely strigose; head narrow; eyes but little convex, the space between them somewhat coarsely bisulcate; antennæ dusky yellow, inserted at a distance in front of the eyes rather greater than that of the ocular interval. Thorax small, distinctly narrowed in front, very coarsely punctured. Elytra with deep grooves, and with interstices that are only slightly convex. Legs slender. Under surface without pubescence; middle coxæ moderately distant.

Although there is a general similarity between this species and *A. pallitarse*, the two are not at all closely allied.

64. **Apion disparatum,** sp. n.

Sat angustum, nigrum, subopacum, pallide griseo-setosum, in elytris subænescens, antennarum basi, tibiis, tarsis marisque rostro anterius rufo-testaceis; prothorace fortiter punctato, mox pone marginem anteriorem constricto.

Long. 2–$2\frac{1}{2}$ millim.

Hab. GUATEMALA, near the city (*Champion*).

Rostrum rather slender, curved, of the male scarcely so long as the head and thorax, of the female a little longer than these two parts—in the male yellow in front of the insertion of the antennæ, and above this clothed with white setæ, in the female black, subcylindrical, curved, and feebly punctate; eyes rather small, scarcely at all prominent, moderately widely separated; antennæ inserted at about one-third or one-fourth of the length of the rostrum, their first joint elongate, red. Thorax rather short, a little narrowed towards the apex, close behind the front a little constricted transversely, so that the anterior margin looks somewhat as if it were turned upwards; it is closely and coarsely punctured, dull, clothed with whitish setæ. Elytra not deeply sulcate, interstices flat; the colour is feebly ænescent, and the clothing of pallid setæ scanty. The legs are reddish-yellow, with the tarsi blackish, the knees more or less infuscate, the coxæ and trochanters black; the middle coxæ are rather widely separated.

65. **Apion subauratum,** sp. n. (Tab. III. figg. 17, ♂ ; 17 *a*, head in profile, ♀ .)

Ovale, nigrum, supra rufo-obscurum, subænescens, tenuiter aurato-setosum, antennis rufis, pedibus flavis ; prothorace subconico, obsolete punctato ; elytris leviter sulcatis.

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

Hab. GUATEMALA, near the city, Aceituno, San Gerónimo (*Champion*).

Rostrum moderately stout, cylindrical, but little sculptured—in the male scarcely so long as the head and thorax, setose nearly to the tip, and more or less broadly yellow in front ; in the female considerably longer, the apical portion glabrous and shining for one-third of the length, and not flavescent ; antennæ inserted about as far in front of the base as the width of the interocular space, this being only moderately broad and very little sculptured ; eyes rather large and prominent. Thorax regularly and considerably narrowed from the base to the front, almost impunctate, sparingly clothed with fine golden depressed setosity. Elytra with narrow, moderately deep grooves, in which punctures can scarcely be detected ; the interstices broad, with a very distinct golden-grey setosity. Legs clear yellow, with the coxæ and trochanters of the same colour. Under surface clothed with a pallid setosity. Middle coxæ not widely separated. Intermediate tibiæ of the male armed with a very minute mucro at the apex of the inner margin.

Mr. Champion procured a good series of this species ; but, unfortunately, most of the specimens are in a bad state of preservation. The peculiar colour and the golden setosity lead to the identification of this species without difficulty.

66. **Apion teapense,** sp. n.

Sat gracile, ovale, nigrum, subopacum, fere nudum, elytris rufo-obscuris, prothorace subænescente, antennis pedibusque rufis ; prothorace conico-cylindrico, parce punctato ; elytris argute sulcatis, interstitiis latis, planis.

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

Hab. MEXICO, Teapa in February (*H. H. Smith*).

Rostrum somewhat longer than the head and thorax, rather slender, cylindrical, a little curved, feebly punctate, shining ; head short and broad ; eyes convex, the space between them moderately broad, deeply biseriately punctate ; antennæ dull red, inserted quite as far in front of the eyes as the width of the interocular space. Thorax considerably narrowed in front, sparingly, moderately coarsely punctate, with a small fovea in the middle in front of the base. Elytra with remarkably sharply-marked grooves and broad flat interstices. Legs obscure red ; coxæ and trochanters black. Middle coxæ but little separated

This is another species that is easy to recognize, the peculiar colour, the absence of setosity, and the sharply-marked sulcation of the elytra being characteristic. Only two examples have been found, and it is probable that both are of the female sex.

67. **Apion sancti-felicis,** sp. n. (Tab. II. fig. 19.)

Breve, nigrum, subopacum, tenuiter setosum, antennarum basi pedibusque fusco-testaceis; rostro mediocri, cylindrico, curvato, sublævigato; prothorace conico, fortiter punctato; elytris profunde sulcatis.

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

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

Rostrum about as long as the head and thorax, slender, cylindrical, curvate, without sculpture; head short and broad; eyes convex, the space between them somewhat narrow; antennæ inserted at a rather greater distance in front of the eyes than the width of the ocular interval, slender, the four or five basal joints dusky red. Thorax rather broad, much narrowed towards the front, densely rugose-punctate, with a short channel at the base in the middle. Elytra short and broad, subglobular; the sulci moderately deep, not broad; the interstices not quite flat, finely and scantily setose. Legs rather slender; the front pair sordid testaceous, with the tarsi and the upper margin of the femora darker; the intermediate and posterior pairs still darker, with only the upper part of the tibiæ testaceous.

Only one example was obtained of this insect. Though an obscure species and without any salient characters, it is by no means closely allied to any other.

68. **Apion pedestre,** sp. n.

Robustum, nigrum, subopacum, setosum, antennarum basi pedibusque ex parte rufo-sordidis; prothorace magno, dense punctato.

Long. $2\frac{1}{2}$–3 millim.

Hab. PANAMA, Volcan de Chiriqui, Bugaba, David, Caldera (*Champion*).

Rostrum very different in the sexes—in the female slender and quite polished, cylindrical, but little curved, rather longer than the head and thorax; in the male shorter, stouter, and sculptured, sulcate at the sides; eyes rather large, a little convex, not separated by a broad space; antennæ red at the base, inserted somewhat farther from the eyes than the width of the ocular interval. Thorax large at the base, much narrowed in front, a little convex, very densely punctured, setose, with a distinct channel at the base in the middle. Elytra rather deeply, but not broadly, sulcate. Legs stout; femora, especially the hind pair, in the male somewhat incrassate; coxæ and trochanters black; front femora and tibiæ red, the former infuscate above, the latter in the middle; middle femora dull red, broadly blackish at the tip, the tibiæ dark, marked with red near the base; hind legs with the red marks still more diminished. Middle coxæ very widely separated, the junction of the meso- and metasterna forming a raised line.

Five examples were found of this species, which should be identified without difficulty.

69. **Apion rugirostre,** sp. n.

Gracile, nigrum, supra subænescens, tenuiter setosum, antennarum basi pedibusque flavis; rostro brevi, densissime subtiliter rugoso; prothorace subcylindrico, obsolete punctato.
Long. $1\frac{3}{4}$ millim.

Hab. Mexico, Acaguizotla in October, Atoyac in May, Teapa in January (*H. H. Smith*); Guatemala, Aceituno, Zapote, San Gerónimo (*Champion*); Panama, Volcan de Chiriqui, Taboga Island (*Champion*).

Head elongate and narrow; eyes but little prominent, widely separated; rostrum but little longer than the head, thick, very densely and finely sculptured and minutely setose; antennæ inserted slightly behind the middle. Thorax slender, straight at the sides, indistinctly punctured. Elytra finely and moderately deeply sulcate. Under surface densely punctured; the setosity very minute, scarcely so distinct as on the upper surface. Middle coxæ contiguous. Legs pale yellow, the trochanters of the same colour; the middle and hind coxæ infuscate. Hind margin of the first ventral segment slightly incrassate on each side of the middle; the suture between it and the second segment angulate or produced a little forwards at the spot where the incrassation is interrupted.

This little *Apion* may be identified by the short, densely sculptured rostrum, the contiguous middle coxæ, and the peculiar abdominal structure. I have not detected any certain means of distinguishing the sexes; some examples, however, seem to have the ventral peculiarities less developed than in others, and it is possible these may be of the female sex. We have received fourteen examples of *A. rugirostre*.

70. **Apion auctum,** sp. n.

Gracile, nigrum, supra subænescens, tenuiter setosum, fere opacum, antennarum basi pedibusque flavis; rostro parum elongato, densissime subtiliter rugoso; prothorace conico-cylindrico, crebre sat fortiter punctato.
Long. 2 millim.

Hab. Mexico, Orizaba in December (*F. D. Godman & H. H. Smith*), Cuernavaca in June, Chilpancingo in July (*H. H. Smith*); Guatemala, Aceituno (*Champion*).

This insect is extremely similar to *A. rugirostre*, but it is a little larger, and has the rostrum slightly longer, especially in the female; the trochanters are dark in colour; and the suture between the first and second ventral segments is simple.

We have received about twelve examples of this species from Mexico, but only one from Guatemala.

71. **Apion nodicorne,** sp. n. (Tab. III. figg. 18, ♂; 18 *a*, profile of head, ♀.)

Angustum, nigrum, griseo-setosum, ad suturam pone scutellum albido-signatum, antennis pedibusque rufo-testaceis; rostro sat elongato, cylindrico, gracili, anterius attenuato, ad basin incrassato; antennarum articulis duobus basalibus brevibus, nodosis.
Long. $2–2\frac{1}{4}$ millim.

Hab. MEXICO, Atoyac in Vera Cruz (*H. H. Smith*); GUATEMALA, San Gerónimo (*Champion*); PANAMA, Bugaba (*Champion*).

Rostrum slender, quite as long as the head and thorax, in front of the insertion of the antennæ cylindrical, behind this thicker, similar in length in the two sexes—in the female setose only at the base, the apical portion being polished, in the male setose as far as the apex; eyes large, convex, not widely separated; antennæ inserted about as far as the length of the eye in front of the eye and under a minute lateral prominence of the rostrum, yellow, the first and second joints almost equal, stout. Thorax rather large, curved at the sides and greatly narrowed in front, densely punctate, and with an extremely fine channel extending the greater part of its length. Elytra somewhat densely clothed with griseous setosity, and with a very conspicuous white patch immediately behind the scutellum, rather deeply sulcate. Legs bright yellow; apices of the tarsi fuscescent; coxæ and trochanters black. Under surface clothed with white setosity; middle coxæ rather widely separated.

Mr. Champion procured a fine series of this distinct species at San Gerónimo; the specimens do not exhibit any variation. Mexico and Panama have each yielded only one individual.

72. **Apion pacificum,** sp. n.

Sat angustum, nigrum, subopacum, breviter griseo-setosum, antennis pedibusque cum coxis rufis; rostro brevi, maris ad apicem rufo; prothorace parvo, conico-cylindrico, obsolete punctato; elytris convexis, sat profunde sulcatis, interstitiis planis.

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

Hab. GUATEMALA, near the city (*Champion*).

Rostrum short and stout, curvate, a little attenuate towards the apex, finely sculptured and feebly pubescent, dull; eyes moderately large, but not prominent, separated by a rather narrow space, which is destitute of any evident sculpture; antennæ inserted a little behind the middle. Thorax slender, a good deal narrowed towards the front, only obsoletely punctured and without channel, sparingly but distinctly clothed with white setæ. Elytra almost oval in outline, rather deeply and moderately widely sulcate, the interstices broad, flat, finely, moderately closely pubescent. Legs reddish-yellow; tarsi infuscate; middle coxæ not widely separated.

A good series was obtained of this obscure insect; the specimens exhibit very little variation, and the sexes are not very different except in the colour of the rostrum.

73. **Apion ferrugineum,** sp. n.

Ovale, ferrugineum, fere nudum, sat nitidum; rostro mediocri; elytris anguste profunde sulcatis, interstitiis subconvexis.

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

Hab. GUATEMALA, Dueñas (*Champion*).

Rostrum rather slender, punctulate, a little shining, in the male quite as long as the

head and thorax, in the female a little longer; eyes small, moderately widely separated; antennæ inserted behind the middle, nearly as far from the eyes as the width of the head and eyes. Thorax small, short, much narrowed in front, sparingly and obsoletely punctured, without channel. Elytra a good deal narrowed towards the base, deeply but rather narrowly sulcate, the interstices moderately broad, convex. Legs slender; tibiæ with a very slight infuscation in the middle; intermediate coxæ nearly contiguous. Three examples.

74. **Apion laterale,** sp. n.

Robustum, nigrum, supra ænescens, setosum, corpore ad latera albido-vestitum, antennis pedibusque pallide flavis; prothorace lato, dense punctato.

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

Hab. MEXICO, Ventanas in Durango (*Höge*); GUATEMALA, near the city (*Champion*).

Rostrum short, in the male about as long as the thorax, in the female a little longer, rather stout, slightly attenuate towards the tip, feebly punctate, dull, finely setose; eyes somewhat large, but little convex, separated by a moderately wide space; antennæ yellow, short, inserted as far in front of the eyes as the width of the ocular interval. Thorax broad and short, greatly narrowed in front, densely but rather indistinctly punctate, finely setose, with a channel at the base in the middle. Elytra finely sulcate, rather closely pubescent. Under surface densely clothed with white setosity at the sides. Legs short, pale yellow; coxæ and trochanters black; middle coxæ somewhat widely separated.

75. **Apion longicolle,** sp. n.

Angustum, nigerrimum, nitidum, antennis tibiisque testaceis vel fusco-testaceis; rostro brevi, crasso; prothorace elongato, cylindrico; elytris striatis, singulo ad basin albido-cristato, ante apicem impresso.

Long. $1\frac{3}{4}$–$2\frac{1}{8}$ millim.

Hab. GUATEMALA, Paso Antonio (*Champion*).

Rostrum not curved, shorter than the thorax, thick, feebly setose; eyes rather large, convex, somewhat widely separated, the space between them strigose; antennæ inserted just behind the middle. Thorax elongate and slender, the sides rather irregular in outline, owing to a very feeble transverse depression in front of the middle and a still more obscure one behind it; impunctate, bearing a very few, small, white hairs. Elytra narrow, finely striate; each at the base with a small patch formed by some white hairs, and just before the extremity with a depression in which there are some white hairs. Femora nearly or quite black; tibiæ either sordid yellow or strongly infuscate; middle coxæ separated by a slender lamina.

This insect is allied to *A. constricticolle*, and its location in another section, owing to the colour of the legs, is unsatisfactory, especially as this character appears to be variable; as species the two insects are, however, quite distinct.

Five specimens.

76. **Apion terminale,** sp. n.

Angustum, nigerrimum, nitidum, tenuiter albido-setosum, antennis pedibusque testaceis; rostro brevi, recto; elytris striatis, ante apicem impressis, apice subtumidulo.

Long. 2 millim.

Hab. MEXICO, Amula in Guerrero in August (*H. H. Smith*).

Closely allied to *A. longicolle*, but with the femora as well as the tibiæ and tarsi yellow; the thorax shorter, and the upper surface bearing a scanty scattered setosity, the unusual formation of the apices of the elytra more pronounced, and the sides of the breast quite covered with white setosity.

One example.

77. **Apion inflatipenne,** sp. n. (Tab. III. fig. 19.)

Breve, nigrum, nudum; elytris viridi-cyaneis, latissimis, ad basin quasi deplanatis, subtiliter sulcatis; pedibus nigris, femoribus in medio rufis.

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

Hab. GUATEMALA, El Reposo (*Champion*).

Rostrum rather stout, cylindrical, curved, longer than the head and thorax, punctate, shining; eyes somewhat convex; antennæ inserted a little behind the middle of the rostrum. Thorax rather short, greatly narrowed in front, somewhat finely but not densely punctate, with a short, deep, foveiform channel in front of the base in the middle. Elytra remarkably broad, appearing almost as if inflated, but somewhat deplanate in front, with rather fine, not deep sulci and very broad, flat interstices, somewhat dull. Under surface without any setosity. Middle coxæ well separated; hind legs black, with the larger part of the femora red.

Two specimens.

78. **Apion latipenne,** sp. n.

Breve, nigrum, nitidum; elytris viridi-cyaneis, latis, convexis, profunde minus late sulcatis; prothorace conico, parce punctato; femoribus late rufis.

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

Hab. PANAMA, Peña Blanca (*Champion*).

Rostrum rather short, cylindrical, shining, sparingly punctate, sulcate above on each side; antennæ inserted about one-third of the length from the base; eyes but little prominent. Thorax somewhat small, greatly narrowed in front, rather finely and sparingly punctured. Elytra very broad and short, very convex, much narrowed in front, with moderately deep and broad grooves. Legs not very stout; middle coxæ but little separated; femora red, except at the tips. One specimen.

Though similar in appearance to *A. inflatipenne*, this is, no doubt, distinct from that species, as it differs in numerous slight particulars, among others in having a very fine, minute, and scanty setosity on the thorax and elytra.

79. **Apion juno,** sp. n. (Tab. III. fig. 20.)

Robustum, nigrum, supra cyaneum, opacum, nudum; rostro magno, rugoso; femoribus basi late rufis.
Long. $2\frac{3}{4}$ millim.

Hab. GUATEMALA, near the city (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

Rostrum quite as long as the head and thorax, stout, rugose, with a channel on each side of the upper surface extending from the front of the eye to near the extremity; eyes very convex, the interval between them narrow, deeply bisulcate; antennæ inserted about one-fifth of the length of the rostrum in front of the eyes. Thorax large, broad at the base, elongate, greatly narrowed in front, and broadly constricted behind the anterior margin, very coarsely and very densely punctured, with a fine channel at the base in the middle. Elytra moderately deeply sulcate; interstices rather broad, a little concave. Legs black, with the basal part of the femora broadly bright red. Coxæ bearing a good deal of white setosity, the middle pair rather widely separated.

Three specimens were obtained of this species; it is well distinguished from all our others.

80. **Apion gibbosum,** sp. n. (Tab. III. figg. 21; 21 *a*, profile.)

Latum, valde convexum, opacum, rufo-brunneum, setosum, elytrorum disco griseo-signato; pedibus flavis; rostro crasso, apicem versus attenuato.
Long. $2\frac{1}{4}$ millim.

Hab. PANAMA, Tolé (*Champion*).

Rostrum subulate, longer than the thorax, the basal portion thick, dull, setose, the apex black, bare for a short distance only in the male, in the female for a longer distance; antennæ fuscous; eyes convex, very widely separated, the space between them only finely sculptured like the rest of the surface. Thorax large, greatly narrowed in front, and a little constricted behind the anterior margin, dull, obscurely punctate, setose, with a short fine channel in front of the base in the middle. Elytra short and broad, with the disc very convex, the posterior part abruptly declivous, setose, the most elevated part surrounded by a griseous mark, deeply sulcate, the interstices broad, flat, finely rugose. Legs thick, pale dull yellow; coxæ and trochanters fuscous, the sides with much pale squamosity; middle coxæ moderately separated.

Six specimens were obtained of this remarkable species; and we have received an example from Honduras which may be a variety of it, the colour being paler and the mark on the disc of the elytra different.

81. **Apion lentum,** sp. n. (Tab. III. fig. 22.)

Breve, convexum, parce setosum, nigrum, supra rufescens, elytrorum sutura nigricante, prothorace fere impunctato, elytris anguste sulcatis.
Long. $1\frac{1}{2}$ millim.

Hab. GUATEMALA (*Champion*).

Of remarkably short form and peculiar coloration, the upper surface bearing a scanty, but rather elongate, white setosity. The rostrum is red and as long as the head and thorax, somewhat slender, shining, sparingly punctate; the eyes are small but slightly convex, placed near to the thorax; antennæ inserted as near to the eyes as the width of the ocular interval, which is not great. Thorax short and broad, much narrowed in front, without distinct punctuation, but with a conspicuous depressed white setosity. Elytra pale testaceous-red, with the suture black, with rather fine moderately deep grooves and broad interstices, which have a slight convexity. Legs, including the trochanters, yellow; metasternum very short; middle coxæ slightly separated.

We have no other species at all closely allied to this one.

Three examples.

82. **Apion amœnum,** sp. n.

Nigrum, elytris viridi-cyaneis, femoribus rufis apicibus nigris; rostro gracili, anterius polito, oculis prominulis; prothorace parce punctato, canaliculato; elytris sat late profundeque sulcatis, interstitiis planis.

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

Hab. Panama, Volcan de Chiriqui (*Champion*).

Rostrum of the female longer than the head and thorax, the anterior part very polished, quite slender, the basal part considerably thicker but still slender; eyes convex, not widely separated; antennæ inserted about as far in front of the eyes as the width of the head and eyes, the two basal joints stout, piceous; in the male the rostrum is less elongate, and its anterior portion not so slender and polished. Thorax moderately large, a good deal narrowed in front, with the anterior margin somewhat elevated; sparingly and not coarsely punctured, with an elongate channel on the middle. Elytra with deep grooves, which are very distinctly punctate, and broad plane interstices. Legs rather long; femora bright red, except at the tip; front coxæ with white pubescence in front; there is a similar setosity outside the middle coxæ and along the sides of the metasternum; middle coxæ moderately distant.

This insect is perhaps nearer to *A. nodicorne* than to any other species, although the two are so different in colour and appearance.

A single pair.

83. **Apion grallarium,** sp. n. (Tab. II. fig. 23.)

Elongatum, angustum, brunneum, albido-setosum, antennis rufis, pedibus pallide flavis; elytris ad apicem angulo externo singulo quasi nodoso-dilatato.

Long. absque rostro 3 millim.

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

This curious Apion is like no other species of the genus; it is of slender form, with long, slender, pallid legs; of a dull brownish colour, bearing numerous long, depressed, white setæ. The rostrum is rather slender, narrower in front, nearly straight; the

head is elongate; the eyes remarkably long, the antennæ inserted a little behind the middle. The thorax is slender, narrowed in front. The elytra are elongate, extremely finely striated; at the apex each is slightly swollen so as to form a sort of lateral prominence, and in each prominence there is placed a very deep depression or pocket. The front coxæ are yellow, the others red, all the trochanters being of this latter colour. The breast is remarkably prominent, the first ventral segment being subperpendicular in its direction.

84. **Apion samson,** sp. n. (Tab. III. fig. 23, ♂.)

Grande, nigrum, opacum, elytris cyaneis; femoribus rufis, apice nigro.
Long. 5–5½ millim.

Hab. British Honduras, Rio Hondo (*Blancaneaux*); Panama, near the city (*Champion*).

Rostrum stout, rather long, quite as long as the head and thorax, densely punctate, in the female slightly longer and more slender than in the male; antennæ inserted just behind the middle; eyes moderately large, a little convex. Thorax much narrower than the elytra, nearly straight at the sides behind, but a good deal narrowed in front, very densely and coarsely punctate, with a deep abbreviate channel in front of the base in the middle. Elytra rather elongate, blue, dull, somewhat deeply sulcate, the interstices broad. Legs thick, the tarsi broad, the claws stout. Under surface destitute of squamosity; middle coxæ only slightly separated; metasternum with a deep fovea; the coxæ and trochanters intense black; the femora bright red nearly to the extremity; the rest with the tibiæ and tarsi deep black.

Mr. Champion obtained a large number of examples of this remarkable species; they do not exhibit any variation. The four specimens from British Honduras differ very slightly, however, the antennæ being inserted a little farther back. The Panama examples were beaten from the seed-pods of a leguminous tree.

85. **Apion latipes,** sp. n. (Tab. III. fig. 24.)

Convexum, nigrum, nudum, elytris viridi-cyaneis, femoribus late rufis, apice nigro; prothorace subtiliter punctulato, opaco; elytris subtiliter sulcatis.
Long. 3¾ millim.

Hab. Panama, Volcan de Chiriqui (*Champion*).

Rostrum scarcely so long as the head and thorax, stout, punctate but not rugose, dull; eyes slightly prominent; antennæ inserted just behind the middle of the rostrum. Thorax rather long, much narrowed in front, the surface of a silky opacity, finely and sparingly punctate. Elytra laterally subcompressed, of a greenish-blue colour, finely sulcate, with broad flat interstices, rather shining. Legs stout, black; femora bright red, except at the tip. Under surface dull; middle coxæ only slightly separated.

One specimen only.

86. **Apion basale,** sp. n. (Tab. III. fig. 25.)

Robustum, plumbeo-nigrum, setosum, corpore ad latera albido-vestito, antennis pedibusque flavis, geniculis tarsisque nigricantibus; prothorace robusto, dense fortiterque punctato.
Long. 3 millim.

Hab. Mexico, Atoyac in April (*H. H. Smith*), Jalapa (*Höge*).

Rostrum rather stout, nearly as long as the head and thorax, punctulate and finely setose, except at the tip; eyes elongate, a little prominent, separated by a somewhat narrow interval; antennæ inserted about the middle of the rostrum, yellow, darker towards the extremity. Thorax large, its base forming a sort of margin to the elytra, to which it is very closely applied, and extending outwards so as to embrace the shoulders, much narrowed in front, very coarsely punctate, finely setose, with a channel at the base in the middle. Elytra rather broadly sulcate, with flat interstices and delicate pubescence. Legs stout, reddish-yellow; coxæ, trochanters, knees, tips of the tibiæ, and the tarsi black; sides of the body densely clothed with white setosity; middle coxæ moderately separated.

Two specimens have been received of this distinct species.

HETERAPION, gen. nov.

Tarsi quasi triarticulati, articulo tertio a secundo fere occulto. Femora inflata.

This genus agrees with *Apion* in its characters except as to the points mentioned above. The tarsi have a knotted appearance: the first joint is slender at the base, broader and convex at the apex; the second joint is slender at its articulation with the basal one, and at its apex it so closely embraces the third joint that the line of demarcation between them can scarcely be detected, but when perceived it is found that only the bilobed apex of the third joint remains visible; the claw-joint is slender, the claws small and lobed at the base. The trochanters are elongate, and are interposed between the coxæ and the femora as in *Apion*; the femora are slender at the point of articulation with the trochanter, but are inflated in the middle.

1. **Heterapion femoratum,** sp. n. (Tab. III. figg. 26; 26 *a*, tarsus.)

Nigrum, pube tenui erecta vestitum, femoribus rufis; prothorace elongato, fere opaco, subsericante.
Long. $2\frac{7}{8}$ millim.

Hab. Mexico, Atoyac in Vera Cruz in April (*H. H. Smith*).

Rostrum elongate, cylindrical, slightly curved, shining, sparingly punctate; eyes elongate, rather convex, separated by a narrow space which is obsoletely bicarinate; antennæ inserted at about one-fifth of the length of the rostrum in front of the eyes, black, the club solid. Thorax elongate, without punctuation, with a silky opacity of the surface, and a short channel in the middle in front of the base. Elytra not sulcate, but striate, the striæ bearing rather large but obsolete distant punctures, the interstices feebly convex. Middle coxæ not widely separated.

Only one example was found of this interesting insect; it shares the very delicate, upright pubescence with the next species, but this character is foreign to the species of *Apion* found in our region.

2. **Heterapion infirme,** sp. n.

Nigrum, pube erecta vestitum, femoribus flavis; prothorace brevi, parce punctato.
Long. $1\frac{7}{8}$ millim.

Hab. Guatemala, Zapote (*Champion*).

Rostrum as long as the head and thorax, shining, punctulate; eyes separated by a narrow interval, which is punctate like the thorax. Thorax short, a little narrowed in front, distinctly punctate, with a small foveiform channel in the middle in front of the base. Elytra striate, with convex interstices, which are indefinitely sculptured, the upright pubescence rather long and distinct.

Except in the short thorax and small stature, this species is closely allied to *H. femoratum*. The two examples found are quite similar to one another.

Subfam. *THECESTERNINÆ*.

I propose to separate for the present the genus *Thecesternus* as a separate subfamily. It is placed by Lacordaire as a group of the tribe Byrsopsides, but Lacordaire's tribe must be wholly dissolved, as it is composed of forms having but little relation with one another. I therefore separate *Thecesternus* and place it in the position given it by Leconte and Horn.

The true position of *Thecesternus* is, however, certainly not here; it appears to have some affinities with the Australian *Euomus*—a genus of Amycterides—and with the Cryptorhynchideous division of Curculionidæ. But a dissection of the parts of the mouth and prosternum is necessary before any trustworthy opinion as to the position of the genus can be formed, Lacordaire's examination of these points being inadequate.

THECESTERNUS.

Thecesternus, Say, Descr. N. Am. Curc. p. 8 (1831); Complete Writings, i. p. 267.
Lithodus, Germar, in Schönh. Gen. Curc. ii. p. 420.

This genus is peculiar to the North-American continent, one species only being recognized in the latest catalogue of N.-American Coleoptera; this we now find to extend into Mexico.

1. **Thecesternus humeralis.**

Brachycerus humeralis, Say, Journ. Acad. Phil. v. p. 254[1].
Thecesternus humeralis, Say, Descr. N. Am. Curc. p. 8[2].
Lithodus humeralis, Germar, in Schönh. Gen. Curc. ii. p. 420[3].

Hab. North America[2 3], Arkansas[1].—Mexico, Nuevo Laredo in Tamaulipas (*Höge*).

This species formerly occurred under the dried dung of the bison, but appears to be now very rare. It must be variable, as Leconte separated it into six species at one time. Herr Höge procured only one pair; these agree with an individual from the United States kindly forwarded to me by Dr. Horn, the insect being excessively rare in European collections.

Subfam. *OTIORHYNCHINÆ.*

Otiorhynchidæ, Leconte and Horn, Rhynchophora of N. America, p. 13.
Brachyderides, Otiorhynchides (part.), Lacordaire.

This subfamily is defined in a satisfactory manner by the existence of a scar on each of the mandibles, due to the detachment of a peculiar pair of cutting instruments, supposed to be used by the insect for freeing itself when emerging from the pupal stage.

I propose to divide the subfamily into two divisions, consisting (I.) of the apterous, (II.) of the winged Otiorhynchinæ.

Series OTIORHYNCHINÆ APTERÆ.

Alæ rudimentariæ. Metanotum membraneum.

These important characters divide the Otiorhynchinæ in a natural manner, and though they cannot be directly observed without breaking up the specimen, as the elytra are frequently more or less soldered together in the apterous forms, yet it is very easy to distinguish the members of the two groups by external minor characters. In the "Otiorhynchinæ apteræ" there are no prominent shoulders to the elytra; the exposed portion of the scutellum is usually very minute, and scarcely penetrates at all between the exposed parts of the wing-cases; the metasternum is always short; and the part of the mesothoracic episterna left uncovered by the elytra is small or moderate in size. Although this latter point is very variable it is of great assistance in separating the insects of the two groups, and indeed was made use of by Horn as a means of dividing the family.

In the "Otiorhynchinæ alatæ" the shoulders of the elytra are distinct and stand out more or less laterally, the tip of the scutellum separates the exposed bases of the elytra, the metasternum is either elongate or short, and the uncovered part of the mesothoracic episterna is either moderate in size or large.

Group **OPHRYASTINA.**

This group includes all the apterous Otiorhynchinæ of our region that have ocular lobes on the prothorax. As regards this point it should be remarked that there are some species in which it is difficult at first sight to determine whether ocular lobes are present or not; but in such cases the form of the eye will determine the point, it being more

or less longitudinal in the greatest diameter when lobes are present, and transverse when they are absent.

It includes two minor groups that it is unnecessary to distinguish here by names, viz.:

I. Rostrum with scrobes that are very deep and definite, even at their termination. Genera *Ophryastes, Tosastes, Caccophryastes,* and *Eupagoderes.*

II. Rostrum with scrobes that are extremely broad and quite indefinite behind. Genus *Amphidees.*

The genera of the first subgroup may be readily distinguished as follows :—

A. Tarsi without pubescence on the third joint.
   1. Corbels of the posterior tibiæ more or less imperfectly cavernous . *Ophryastes.*
   2. Corbels of the posterior tibiæ with laminate tip bearing only one series of spinules externally ("open corbels," *Lacord.*) . . . . *Tosastes.*

B. Tarsi with adhesive pubescence on the lobes of the third joint.
   1. Mentum concealing the palpi entirely . . . . . *Eupagoderes.*
   2. Palpi projecting beyond the apex of the mentum . . . . . *Caccophryastes.*

OPHRYASTES.

Ophryastes (part.), Schönh. Gen. Curc. i. p. 508 (1833).
Dystirus, Pascoe, Journ. Linn. Soc., Zool. xi. p. 447.
Ophryastes, Leconte & Horn, Rhynchophora of N. Am. p. 30.

Although this genus cannot be defined by means of the tuberosities at the side of the thorax, yet it may be satisfactorily separated from *Eupagoderes* by the absence of adhesive pubescence from the lobes of the third tarsal joint. The tips of the hind tibiæ are cavernous, as stated by Lacordaire, though in an imperfect and variable manner.

Ophryastes is peculiar to the arid regions of the Southern United States and Northern Mexico. The species are no doubt epigeal in habits, though I have not seen any records to this effect.

A very interesting North-American form may be at present placed in the genus, though, no doubt, it will have to be ultimately separated *.

* **Ophryastes wickhami,** sp. n.

Griseus, dense squamosus, breviter hispidus ; rostro trisulcato, basi depresso ; prothorace transverso, rugoso, ad latera perparum incrassato ; elytris subsulcatis, sulcis obsolete punctatis.

Long. cum rostro 19 millim.

Hab. North America, Winslow, Arizona (*Wickham*).

I name this species in honour of Mr. H. F. Wickham, to whom I am indebted for a considerable part of the specimens that have enabled me to form some idea of the N.-American *Ophryastini.* The feet of *O. wickhami* are rather broad, but have no horny projections beneath, these being replaced by membranous processes (formed apparently by agglutinated ciliæ) coming from the side-margins of the joints; the tips of the hind tibiæ are distinctly truncate, and the truncature is entirely filled by long ciliæ or scales, part of them directed inwards, part outwards, but there are no marginal ciliæ. Mr. Wickham thought the species might be referable to *O. desertus,* Lec., but this is clearly not the case.

1. **Ophryastes latipennis,** sp. n. (Tab. IV. fig. 2.)

Latior, griseo-obscurus; prothorace ad latera angulariter dilatato, grosse rugoso-sculpturato; elytris parum profunde striatis, interstitiis nullo modo convexis, striis fortiter punctatis.
Long. 16 millim.

Hab. MEXICO, Chihuahua city, Villa Lerdo in Durango (*Höge*).

Rostrum transversely impressed at the base; median groove very broad; lateral grooves short, abruptly terminated above by the transverse impression. Thorax very short and broad, with very coarse irregular sculpture; the lateral dilatation becoming gradually broader till near the base, where it ceases very abruptly, leaving an angular projection; basal marginal band of tomentum very broad. The exposed apex of the scutellum broad and short. Elytra very broad at the shoulders, of a uniform dark grey colour, the sculpture consisting of series of rather large punctures, the interstices broad. Tarsi stout, scaly beneath, the angles of joints 1–3 forming short horny projections. Two specimens.

This species may be readily distinguished by the very broad elytra, the angular form of the lateral projection on the thorax, and the very coarse sculpture of the latter part.

2. **Ophryastes strumosus.**

Dystirus strumosus, Pasc. Journ. Linn. Soc., Zool. xi. p. 447, t. 13. fig. 10[1].

Hab. MEXICO[1], Arroyo Zarco (*Sallé*).

We have received only one example that I can refer to this species. It has a depression, though only a slight one, at the base of the rostrum; the thorax coarsely and irregularly sculptured, the lateral expansion feebly bilobed, not angular behind; the elytra not striate, but with rows of deep, remarkably definite, broadly separated punctures.

3. **Ophryastes basalis,** sp. n.

Angustus, fusco-griseus, submaculatus; prothorace ad latera bilobo-dilatato, parcius sculpturato; elytris profunde sat fortiter remote punctatis, interstitiis subconvexis.
Long. $10\frac{1}{2}$ millim.

Hab. MEXICO, Arroyo Zarco (*Sallé*).

This species bears a general resemblance to *O. strumosus*, but differs by some very important characters: there is no constriction or depression at the base of the rostrum and the shoulders of the elytra do not stand out at all laterally. The base of the thorax has the marginal part less definite than usual, and considerably extended in the longitudinal direction. The median groove on the rostrum is moderately deep, and terminates abruptly without extending on to the head; the lateral grooves are quite short. The fimbriæ of the ocular lobes are scanty. One example.

4. **Ophryastes bituberosus,** sp. n. (Tab. IV. fig. 1.)

Pallide griseus, fusco-submaculatus ; prothorace rugoso-sculpturato, ad latera bilobo-dilatato ; elytris confertim fortiter seriatim punctatis, interstitiis subconvexis.

Long. 10–14 millim.

Hab. Mexico, Paso del Norte (*Höge*).

Rostrum without any basal depression ; median groove very obsolete, not extending on to the head ; lateral groove seen from the side quite short, and with its inner margin somewhat raised, seen from the front appearing elongate owing to the fusion with it of a slight depression near the inner margin of the eye. Thorax very broad and short, very coarsely rugose, the lateral expansion deeply emarginate in the middle. Scutellum almost entirely concealed. Elytra with deep rows of large, rather closely-placed punctures, the interstices being evidently convex; they are vaguely maculate, the suture remaining pallid. Eight specimens.

This insect was pointed out to me by Dr. Horn as being possibly *O. tuberosus*, Lec., and judging from the description it must be extremely similar to the North-American species ; but as *O. bituberosus* has no basal depression on the rostrum—a character of great importance in *Ophryastes*—I think the two likely to be distinct.

I treat as a variety two specimens from the same locality, of broader form, and not maculate, and with finer punctures on the elytra.

5. **Ophryastes ovipennis,** sp. n. (Tab. IV. fig. 3.)

Griseus ; prothorace brevissimo, ad latera posterius subhamato, obsolete sculpturato ; elytris convexis, humeris omnino rotundatis, apice subacuminato, sulcatis, sulcis fortiter punctatis.

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

Hab. Mexico, Paso del Norte (*Höge*).

Rostrum without any trace of basal impression, with a fine deep median channel extending from the tip to the upper part of the vertex, and on each side with a short deep lateral channel. Thorax very short, the sculpture very coarse, but obsolete on the disc, where also there is a vague broad channel ; basal band of tomentum rather small. Scutellum almost entirely concealed. Elytra subinflated, convex even at the base, with shallow broad grooves in which are placed coarse punctures. Tarsi without horny projections, but with semimembranous, projecting angles.

Two examples were found of this very distinct species ; the male has the elytra considerably less ample than the female, and the punctures are consequently more closely placed.

6. **Ophryastes validus.**

Ophryastes validus, Lec. Proc. Ac. Phil. vii. p. 225 [1].

Hab. Mexico, near Chihuahua [1].

7. **Ophryastes porosus.**

Ophryastes porosus, Lec. Proc. Ac. Phil. vii. p. 225 [1].

Hab. Mexico, near Chihuahua [1].

TOSASTES, gen. nov.

Tarsi articulo tertio vix lobato, subtus absque pubescentia. Tibiæ posteriores ad apicem simpliciter laminatæ, nullo modo truncatæ.

This genus has an appearance very different to *Ophryastes*, though it appears to be closely allied thereto; as, however, the apices of the hind tibiæ are without any trace of truncature, or of a second row of spinules, it is perhaps advisable to treat the two forms as distinct genera. I cannot detect any other difference of true generic importance, though there are several minor peculiarities. The second ventral segment is quite short, the first suture straight, the third and fourth segments very short. The body is covered with overlapping scales as in *Ophryastes*. The ocular lobes are well developed.

As remarked above, the facies is very different from *Ophryastes*; had it not been for this I should not have separated the two, as the corbels of the hind tibiæ are in this group in a transitionary condition, and differ from species to species.

1. **Tosastes humeralis,** sp. n. (Tab. IV. fig. 4.)

Inæqualis, rugosus, pallide griseus; prothorace brevi, ante basin brevissime constricto, angulis posterioribus minute prominulis; elytris basi truncato, angulis anterioribus acutis.
Long. cumque rostro 7–8 millim.

Hab. Mexico, Chihuahua city (*Höge*).

Covered with thin scales, which on the anterior parts are almost entirely fused into a continuous indument, bearing also some scanty, very short setæ. Rostrum short, with a broad median groove and a large lateral impression on each side. Thorax strongly transverse, very deeply rugose. Elytra quite truncate at the base, and with the angles minutely prominent; very closely applied to the base of the thorax, and of exactly the same width, so that the two are almost continuous in outline; the sculpture consists of vague, large depressions, placed in series, and connected by obscure striæ. Spinules at the apex of the hind tibiæ excessively short and broad, and very few in number. Two specimens.

2. **Tosastes globipennis,** sp. n. (Tab. IV. fig. 5.)

Pallide griseus, obsolete sculpturatus; coleopteris convexis, humeris rotundatis.
Long. cumque rostro $7\frac{1}{2}$ millim.

Hab. Mexico, Guajuco in Nuevo Leon (*Dr. Palmer*).

This insect differs at first sight from *T. humeralis* by the elytra being quite destitute

of the acute humeral angle seen in that species. The rostrum has only very obsolete impressions at the sides. The scape of the antennæ is dark, the first six joints of the funiculus are pale, the seventh being black like the club, and so closely applied thereto as to appear a part of it. Thorax uneven, indistinctly sculptured, very strongly transverse, closely applied to the base of the elytra at the angles, less so in the middle, so that the scutellum is not quite concealed. Elytra with very obsolete sculpture consisting of vague large pits, arranged serially. One specimen.

CACCOPHRYASTES, gen. nov.

Palpi maxillares exserti.

This genus is proposed for a species, of which we have received only a single example, having the peculiarity of structure mentioned above, but in other respects very closely allied to *Ophryastes* and *Eupagoderes*, and in fact much resembling *O. vittatus*, Say. I have hesitated as to whether the exposure of the maxillary palpi might not be the result of some abnormality of structure, but I can find no reason for believing this to be the case; and the mentum, moreover, is peculiarly formed, its front margin being directed only slightly obliquely upwards, instead of abruptly as in all the other forms of Ophryastini I have examined. There is a slight thickening of the sides of the prothorax, but no distinct projection; the third tarsal joint is bilobed, and each lobe possesses a patch of adhesive pubescence beneath; the apex of the hind tibia is feebly cavernous. The scutellum is rather largely exposed. The other characters are those of *Ophryastes* and *Eupagoderes*.

There are other genera of Otiorhynchidæ with the mentum in front not covering the palpi, but none of them are allied to *Caccophryastes*. It is very possible that when other examples of the species for which I have established the genus are found, it may be discovered that the palpi are normally concealed by the mandibles when the mouth is closed; but in that case the insertion of the palpi in such a way as to project towards the front of the mouth, instead of upwards towards its interior, will probably be found to differentiate the genus satisfactorily.

1. **Caccophryastes lineatus,** sp. n. (Tab. IV. fig. 6.)

Pallide griseus, elytrorum striis fusco-lineatis; prothorace inæqualiter sculpturato, medio obsolete canaliculato, lateribus rotundatis, subtumidulis.

Long. 10 millim.

Hab. Mexico, Durango city (*Höge*).

Rostrum without basal constriction, with a deep elongate median channel extending on to the forehead, and with a short, rather deep lateral impression. Thorax short, with coarse unevenly distributed sculpture; ocular lobes feeble; the sides greatly rounded and a little tumid, especially behind. Scutellum largely exposed behind the

margin of the thorax. Elytra slender, the humeri not at all prominent, the striæ rather fine and bearing somewhat distant, indistinct punctures; they are marked with dark lines, and the alternate interstices are slightly paler. One specimen.

EUPAGODERES.

Eupagoderes, Horn, Rhynchophora of N. America, p. 32 (1876).
Ophryastes (part.), Schönherr, Gen. Curc. i. p. 508 (1833).

I take the existence of a definite patch of adhesive pubescence on each of the lobes of the third tarsal joint to be a satisfactory means of distinguishing the species of *Eupagoderes* from *Ophryastes*. The truncature of the hind tibia is usually more perfectly cavernous than it is in *Ophryastes*. The genus as thus defined is susceptible of further division, but this is quite unnecessary at present; the species being comparatively few, though doubtless many more remain to be discovered.

Eupagoderes is peculiar to the United States and Mexico, and has until now consisted of about twelve species, to which I add seven others. The genus seems to be in Mexico less exclusively confined to the north than *Ophryastes* is.

1. **Eupagoderes constrictus**, sp. n. (Tab. IV. fig. 7, ♂.)

Pallide griseus, prothorace utrinque vage vittato; elytris ad basin depressis, quasi constrictis, subtiliter striatis.

Long. $7\frac{1}{2}$–$9\frac{1}{2}$ millim.

Hab. Mexico, San Isidro (*Höge*).

This insect cannot be confounded with any other member of the genus, on account of the peculiar neck-like prolongation at the front of the convex elytra, and of the more than usually exposed scutellum. There is a feeble depression at the base of the rostrum, and on its middle in front are two longitudinal elevations with a short broad groove between them. Club of antennæ small and stout. Thorax short, greatly rounded at the sides, with rather deep punctures irregularly distributed. The striæ on the elytra are quite fine, and only very obscurely punctate.

Four specimens were found. The female has the elytra very much more ample than the male, and the basal constriction considerably shorter.

2. **Eupagoderes speciosus.** (Tab. IV. fig. 8.)

Ophryastes speciosus, Lec. Proc. Ac. Phil. vi. p. 444[1].
Eupagoderes speciosus, Horn, Rhynch. N. Amer. p. 33[2].

Hab. North America, Texas [1 2].—Mexico, Santa Clara in Chihuahua (*Höge*).

We have received only two examples of this remarkable insect. It and the following species will, no doubt, be ultimately separated under a distinct genus. In *E. speciosus* the mentum has a very large rugose anterior portion; and the polished plane at its base for it to slide over is very large and conspicuous.

3. **Eupagoderes prolatus,** sp. n. (Tab. IV. fig. 9.)

Elongatus, albidus; prothorace nigricante vage albido-variegato, rugoso, medio canaliculato; elytris seriatim fortiter punctatis, interstitiis convexis.

Long. 22 millim.

Hab. Mexico, Villa Lerdo in Durango (*Höge*).

Rostrum with three deep elongate grooves. Thorax much rounded at the sides, rugose, with a deep channel all along the middle. Scutellum rather large. Elytra very narrow and elongate, covered densely with fine scales, with series of large punctures, and with the alternate interstices more elevated. Legs very long, white. Mentum deeply depressed in the middle, the anterior part rugose and hispid with erect setæ.

A single example only of this conspicuous insect has been received. It is probably a male, and the female may prove to be a much broader, heavier-looking insect.

4. **Eupagoderes mexicanus,** sp. n. (Tab. IV. fig. 10.)

Elongatus, niger, parce squamosus, submaculatus; prothorace lateribus rotundatis, rugoso, medio canaliculato; elytris seriatim profunde foveolatis.

Long. cumque rostro 13–15 millim.

Hab. Mexico, Matamoros Izucar in Puebla (*Höge*, *Sallé*), Atlixco (*Höge*), Venta de Zopilote in Guerrero 2800 feet (*H. H. Smith*).

Rostrum with three parallel grooves terminating abruptly above on one line. Antennæ black, with small club, which is scarcely broader than the eighth joint. Thorax transverse, very strongly rounded at the sides, with coarse distant punctuation, and a broad channel on the middle. Elytra with series of very distinct large punctures, which are not connected by striation. Mentum with the margins not, or only obscurely, raised. Eighteen specimens.

5. **Eupagoderes durangoensis,** sp. n.

Elongatus, angustus, niger, tenuiter squamosus; prothorace punctato, medio obsolete canaliculato; elytris striatis, striis minus argute punctatis.

Long. cumque rostro 13 millim.

Hab. Mexico, Villa Lerdo in Durango (*Höge*).

Similar to *E. mexicanus*, but rather smaller, with the elytra striate. The middle channel of the rostrum obsolete, the lateral channel small, not extending up to the eye. Thorax a good deal narrowed behind, coarsely irregularly punctate, with only a very indistinct channel on the middle. Mentum with the lateral and hind margins strongly and acutely raised. Four specimens, all in a bad state of preservation.

6. **Eupagoderes cinereus.**

Ophryastes cinereus, Fåhr. in Schönh. Gen. Curc. v. p. 819[1].

Hab. Mexico [1], Alvarez Mountains (*Dr. Palmer*), Puebla, Guanajuato (*Sallé*), Oaxaca, Matamoros Izucar (*Höge*).

Closely allied to *E. sallæi*, but with the scales of the surface less densely packed, the colour more obscure, the patches of adhesive pubescence on the tarsal lobes smaller, and the mentum rather different in form, it being less transverse, and not so angular at the sides; the latter is but feebly impressed, little sculptured, and very shining.

The typical example sent me from Schönherr's collection by Dr. Aurivillius is considerably smaller than any specimen of the series we have received, and differs slightly in several other respects from our examples, but I do not see any way of distinguishing it specifically. This individual came from Sturm's collection, and two other examples in our possession from the same collection appear to connect it satisfactorily with the rest of our series.

7. **Eupagoderes sallæi.** (Tab. IV. fig. 11.)

Ophryastes sallei, Gyll. in Schönh. Gen. Curc. v. p. 820 [1].

Hab. Mexico (*Sallé*), Vera Cruz [1].

I have seen only two examples of this species: one was obtained from Sallé's collection, and therein was labelled "*O. sallei*, type"; the other is also a "type" from Schönherr's collection communicated by Dr. Aurivillius. *O. sallæi* is one of the most densely squamose species of the genus, and I think the maculation of the surface in these individuals is in part, if not entirely, due to their being stained irregularly with a very tenacious, muddy fluid. The legs are remarkably short. The rostrum is short, without median groove, but with a vague basal, transverse impression. The mentum is short and broad, greatly narrowed towards the base, depressed and shining in the middle.

8. **Eupagoderes squalidus,** sp. n.

Fusco-griseus; prothorace nitido, subtransverso, parce obsoleteque punctato, medio tenuiter canaliculato; elytris subtiliter striatis, striis remote minus fortiter punctatis.

Long. 10 millim.

Hab. Mexico (*Sallé*), Esperanza (*Höge*).

Rostrum with a deep median channel, extending quite to its base, and with broad, well-marked, lateral grooves. Thorax with only a few obscure and distant punctures, and with an obsolete median channel. Elytra with fine striæ separated by broad flat intervals, and bearing remote, moderately large, not deep punctures.

In this species the scales are very closely fastened to the surface, and, though dense, the outline of each is quite distinct; on the disc of the thorax they have a peculiar shining appearance, and are but little variegate, but on the rostrum and the sides of the thorax are much paler than elsewhere, nearly white in fact. *E. squalidus* is at first

sight very similar to *E. cinereus*, but it has a rather larger thorax, which is obsoletely punctured, a longer and deeper median channel on the rostrum, and the lateral channels are parallel with this, not convergent above. Two specimens.

9. **Eupagoderes cretaceus,** sp. n.

Niger, albido-squamosus; prothorace subtransverso, parce obsoleteque punctato, tantum anterius obsolete canaliculato; elytris subtiliter striatis, striis subtiliter punctatis.
Long. 10 millim.

Hab. MEXICO, Villa Lerdo in Durango (*Höge*).

This insect is very closely allied to *E. squalidus*, and has a similar rostrum; but the scales of the upper surface are white, and have not the peculiar nitid appearance that they have in *E. squalidus*. It also resembles *E. dunnianus*, Casey, but the latter species has a differently channelled rostrum.

Two examples, both in bad preservation.

10. **Eupagoderes decipiens.**

Ophryastes decipiens, Lec. Proc. Ac. Phil. vi. p. 445 [1].
Eupagoderes decipiens, Horn, Rhynch. N. Amer. p. 33 [2].

Hab. NORTH AMERICA, Eagle Pass [1], Texas [2], New Mexico [2], Arizona [2].—MEXICO, Monclova in Coahuila (*Dr. Palmer*).

One specimen only exists in our Mexican collections, but it agrees with a pair from Arizona, sent to me by Captain Casey. The species may be known by its convex forehead, by the median groove of the rostrum being absent, though represented by a small fovea, by the deeply punctate thorax, by the fine striæ on the elytra, and by the squalid clothing thereon being variegated by darker patches. The insect bears a considerable general resemblance to *E. cinereus*.

11. **Eupagoderes gracilis,** sp. n. (Tab. IV. fig. 12.)

Angustus, convexus, pallide griseus, elytris nigro-variegatis, prothorace nigro-bivittato, parce fortiter punctato.
Long. 6–8 millim.

Hab. MEXICO, Matamoros Izucar in Puebla (*Höge*), Cholula in Puebla (*Ferrari-Perez*).

This is distinguished from all our other species by the apparent absence of fimbriæ on the ocular lobes. The rostrum has no transverse impression at the base, but the front of the head has a separate convexity from the rostrum; there is a very vague broad impression along the middle of the latter, terminating above in a sort of fovea; this impression is due chiefly to a slight elevation of the inner margin of the lateral grooves, these latter being elongate and definite. Thorax elongate, rounded at the sides, and convex longitudinally as well as transversely, destitute of basal margin. Elytra small

and slender, with series of rather large deep punctures. Posterior tibiæ thick at the extremity and with unusually large apical truncature. The whole insect is covered with somewhat shining scales, and the maculation is due to some of these being dark in colour. Three examples.

The apparent absence of fimbriæ from the ocular lobes suggests that this species may belong to the genus *Sapotes*, Casey, but I do not think it necessary that it should be separated from *Eupagoderes* at present.

AMPHIDEES.

Amphidees, Schönherr, Gen. Curc. vi. 2, p. 252 (1842) ; Lacordaire, Gen. Col. vi. p. 242.

This genus was established by Schönherr for a single Mexican species, and I now add several others. These differ among themselves by small structural distinctions in the ventral segments and apices of the hind tibiæ, as well as in the thickness of the rostrum ; but I am quite unable to look on these minute structural characters as of more than specific importance. *A. pilosus* differs rather more strongly, but I do not think it necessary to separate even it at present.

Viewed in this way, I define *Amphidees* as embracing such "Otiorhynchinæ apteræ" as have ocular lobes, and in which the rostral scrobes are broad and indefinite behind ; this latter character being the essential point of distinction from *Eupagoderes*. In our region, therefore, the genus is the equivalent of Horn's group Strangaliodes. The posterior corbels are more or less imperfectly cavernous, except in *A. pilosus*, where I think they may be described as open.

1. **Amphidees major,** sp. n. (Tab. IV. fig. 13.)

Sat elongatus, æqualiter squamosus ; elytris versus apicem breviter setosis, seriatim sat remote punctatis, interstitiis 3° et 5° parum elevatis, ceteris planis.

Long. cumque rostro 10 millim.

Hab. Mexico, Tepansacualco (*Sallé*).

This greatly resembles an elongate *Eupagoderes* of the *E. cinereus* group of species, and is covered with scales in a similar manner ; the rostrum, too, is only a little more slender, but its scrobes are excessively broad and vague posteriorly, so that a glance is sufficient to enable one to appreciate the distinction between the two genera. The forehead has a convexity slightly separate from the plane of the rostrum ; the latter has a vague elevation of its middle near the base, and in a line with this there is a small longitudinal fovea on the forehead ; the antennæ are elongate and slender, the first and second joints of the funiculus equal in length, the club elongate, slender, and acuminate, the sutures distinct, the eighth joint very abruptly separated from the club. Thorax strongly transverse, evenly rounded at the sides. Elytra considerably broader than the thorax, with a raised margin behind the scutellum, which is unusually distinct ;

with regular series of evident, though lightly impressed and somewhat remote, punctures, and on the declivous part with erect setæ. Hind tibiæ with a definite space at the apical truncature, formed by the divergent spinules. First ventral suture feebly arcuate in the middle, about equal in length to the second and third together ; sutures extremely deep ; apical segment with an indefinite raised glabrous space along the middle near the apex. One specimen.

2. **Amphidees nubilosus.** (*A. curtus*, Tab. IV. fig. 14.)

Amphidees nubilosus, Boh. in Schönh. Gen. Curc. vi. 2, p. 253 [1].

Brevis, convexus, squamosus ; elytris quam prothorax multo latioribus, seriatim punctatis, interstitiis latis, subconvexis, posterius hispidis.

Long. cumque rostro 7 millim.

Hab. Mexico [1], Parada, Capulalpam (*Sallé*).

Rostrum rather slender in the middle, separated from the head only by a feeble convexity of the latter, and without elevations or grooves. Thorax much narrowed in front and strongly rounded at the sides. Scutellum quite minute. Elytra with broad base, and without trace of any margin even near the scutellum ; shoulders greatly rounded. Male with an impression on the middle of the basal ventral segment. Three specimens.

Though so different in form from *A. major*, I cannot detect any distinctions of a generic character, except minute modifications of structure.

A. nubilosus is figured on our Plate under the name of *A. curtus* ; but having now received a type of *A. nubilosus* from Schönherr's collection, I find our insect to belong to that species.

3. **Amphidees —— ?**

Hab. Mexico, San Antonio de Arriba (*Sallé*).

I refer to this genus a pinned example of a very small species, resembling *A. nubilosus*, but having the elytra finely striate and the interstices quite flat.

4. **Amphidees macer,** sp. n. (Tab. IV. fig. 15.)

Angustus, elongatus, tenuiter squamosus, parce pilosus ; prothorace elongato ; elytris striatis, striis parum argute punctatis, interstitiis latis, levissime convexis.

Long. cumque rostro 10 millim.

Hab. Mexico, San Antonio de Arriba (*Sallé*), Toluca (*Höge*).

Covered with scales, some of which are jewel-like, more especially on the head, rostrum, and thorax ; also with scanty, fine, long setæ. Rostrum with a convexity distinct from that of the head. Thorax elongate, with some very distant, rather fine punctures scattered between the scales. Elytra slender and elongate, with moderately

large punctures placed in feeble grooves, the interstices broad, slightly convex, all similar. Male with a depression on the apical ventral segment. Three specimens.

In this species the ocular lobes are but little prominent. An example of this insect was labelled in Sallé's collection "*Scotæborus* (*Peritaxia*, Horn) sp."; but the first generic name is quite erroneous.

5. **Amphidees nasutus,** sp. n.

Gracilis, niger, fusco-squamosus, in elytris hispidus; rostro elongato, apice latiore.
Long. 8–8½ millim.

Hab. Mexico, Omilteme in Guerrero 8000 feet (*H. H. Smith*).

Antennæ reddish, with the club nearly black; first and second joints of funiculus elongate, the latter a little the longer. Rostrum elongate, longer than the thorax, much dilated at the tip, with the pterygia and a part of the scrobes visible from above, with two very indistinct longitudinal impressions on the basal part, indistinctly carinate on each side in front; eyes touching the thoracic margin. Thorax transverse, much rounded at the sides, the surface finely granulate, each granule bearing a scale. Scutellum distinct, glabrous, not quite horizontal, being slightly elevated at the tip. Elytra with series of coarse punctures concealed by the squamosity with which they are clothed, and with numerous erect, fine, but rigid, setæ. Legs slender, the posterior tibiæ much broader at the tip; the apical cilia are directed towards the tarsus, but there is no trace of any incrassation or truncature external to the cilia. Two specimens.

This species is well distinguished from its congeners by the longer rostrum.

6. **Amphidees alternans,** sp. n.

Elongatus, squamosus, submaculatus, elytris parce hispidulis; prothorace in medio tenuiter canaliculato; elytris seriatim punctatis, interstitiis latis, alternis magis elevatis.
Long. cumque rostro 9–10 millim.

Hab. Mexico, Jacale (*Sallé*).

This is a more elongate and narrow insect than *A. major*, and in respect of the clothing of the surface is intermediate between it and *A. longulus*, the squamosity being distinct, and yet evidently covering a finely rugose surface. Forehead with a fovea in front; rostrum very indistinctly longitudinally impressed at the base. Thorax narrowed in front, and much rounded at the sides, the surface rugose, but the rugosities concealed by the scales, except at a patch on each side at the base; finely channelled along the middle. Scutellum small but distinct, the suture very slightly raised just behind it. Elytra elongate, covered with scales which form an indefinite maculation, bearing series of moderately large punctures, and with the alternate interstices distinctly raised. Three specimens in bad preservation.

7. **Amphidees longulus,** sp. n. (Tab. IV. fig. 17.)

Angustulus, sat elongatus, sordide squamosus, hispidus; prothorace dense rugoso, medio tenuiter canaliculato; elytris seriatim fortiter punctatis, interstitiis minus latis.
Long. cumque rostro 6–7 millim.

Hab. Mexico, San Antonio de Arriba (*Sallé*), Tehuacan (*Höge*).

This species is covered with a squalid squamosity, which is apparently caducous, and the surface is frequently discoloured with dirt; it is hispid with fine hairs which are not at all dense, and are either black or grey in colour. The rostrum is rather short, with no impressions; on the front of the forehead there is a minute fovea. Thorax greatly rounded at the sides, equally narrowed in front and behind, with the surface rugose, the interstices squamose; there is a channel along the middle. Scutellum very minute. Elytra oblong, with regular series of moderately large punctures, separated by rather small intervals. The male has a large oblong impression extending from the hind margin of the metasternum to near the hind margin of the second ventral segment.

Höge found a good series of this species, but nearly all the specimens are very dirty, and apparently the dirt and squamosity become agglutinated by some exudation.

The second ventral segment is rather shorter in this species than in the allies. Dr. Horn pointed it out in our collection as similar to *Peritaxia rugicollis*; I should not, however, from his generic table, refer it to *Peritaxia* at all, the first ventral suture being nearly straight, and the second segment scarcely so long as the following two together, which would bring it into the first group of genera distinguished by the table on p. 38 in the "Rhynchophora of N. America."

Nocheles vestitus, Casey, is an allied but distinct species.

8. **Amphidees pilosus,** sp. n. (Tab. IV. fig. 16.)

Niger, opacus, pilosus, rostro prothoraceque rugosis, subsquamosis; elytris profunde striatis, striis sat fortiter punctatis.
Long. cumque rostro 7 millim.

Hab. Mexico, Paso del Norte (*Höge*).

Rostrum short, stout, and curved, separated from the head by a deep transverse curved groove. Antennæ rather short, the club acuminate, black, the preceding joint broad. Thorax much rounded at the sides, densely rugose. Scutellum very minute. Elytra suboval, with definite broad striæ, in which are punctures placed very near to one another. First ventral segment strongly arcuate, in the middle slightly longer than the two following together. One specimen.

This is distinguished from all our other species by the pilosity of the surface, and by the deep groove separating the rostrum from the head. The laminæ of the apex of the hind tibia are scarcely perceptibly flexed inwards, so that the corbels are open. There is a feeble squamosity of the surface, the scales apparently being delicate and

caducous. In many respects the insect agrees with Horn's genus *Peritaxia*, containing two North-American species, one of which (*P. hispida*) is said to be destitute of ocular lobes. In *A. pilosus* the ocular lobes are very feeble, though undoubtedly extant; but I cannot think it likely to be allied to *P. hispida*, as Horn makes no allusion to the remarkable transverse constriction at the base of the rostrum.

Group **EPICÆRINA.**

This group includes all the apterous Otiorhynchinæ of our region that have no ocular lobes to the thorax, and in which the scrobes—whether definite or indefinite—are entirely lateral, with their lower border arcuate to a greater or less extent, and the claws are free. These characters are strictly diagnostic, and in addition it may be added that the scape of the antenna is always moderate in thickness, never incrassate, never extremely slender. The corbels of the hind tibiæ vary much, but it may be considered as a character of the group that they are cavernous or subcavernous, the tip of the tibia never being extremely slender, as is the normal condition in the Sciaphilina.

Horn's "Tribe Brachyderini" is no doubt nearly equivalent with this group. He, however, remarks very truly (Rhynchophora of N. America, p. 16) that "the tribe is widely different from that defined by Lacordaire under the same name;" this being the case—both definition and composition of the group differing entirely from Lacordaire's "Brachydérides" or "Brachydérides vrais"—it seems preferable to adopt a fresh name for the group, as I have done here.

The greater part of our Epicærina are hitherto undescribed. In arranging them into genera I have endeavoured to adopt a middle course, striving at the same time to propose as few genera as possible, and to avoid placing in one genus insects strikingly different as regards the points that have been treated as of generic importance by Lacordaire and by Horn.

I find myself obliged to adopt fourteen genera: the following table, though not expressing the affinities of the genera, may help future students to determine their insects of this group:—

Front femora unarmed.

- Scrobes very indefinite and broad behind . . . . . *Deamphus.*
- Scrobes deep behind, with upper and lower borders subparallel.
  - Second joint of funiculus elongate, longer than the first joint . . *Pantomorus.*
  - Second joint of funiculus not elongate, rarely a little longer, sometimes shorter, than the first joint.
    - Scape elongate, passing beyond the back of the eye . . . . *Cacochromus.*
    - Scape not elongate.

Lobes of third tarsal joint very short; head very convex . *Pseudelissa.*
Lobes of tarsi normal.
Rostrum very short and broad, not longer than wide.
Pterygia of apex of rostrum visible from the front . . . . . *Bradyrhynchus.*
Pterygia of rostrum entirely concealed . . . . *Sciorhinus.*
Rostrum normal.
Scrobes slender; corbels of posterior tibiæ markedly cavernous . . . . . *Epicærus.*
Scrobes broader; corbels usually feebly cavernous. *Epagrius.*
Front femora dentate or tuberculate.
Scutellum with a transverse process at the apex . . . . . *Cleistolophus.*
Scutellum acuminate at the apex.
Scape of antennæ elongate; scrobes quite indefinite . . . . . *Epitosus.*
Scape short or moderate; scrobes slender, deep.
Thorax elongate.
Head a little constricted behind the eyes . . . . . *Eumestorus.*
Head not constricted behind the eyes . . . . . *Mestorus.*
Thorax more or less globose.
Eyes convex and close to the thorax; head not broader behind them . . . . . *Maseorhynchus.*
Eyes placed some distance in front of the thorax; head broader behind them . . . . . *Bufomicrus.*

DEAMPHUS, gen. nov.

Rostrum breve, scrobibus latissimis, posterius evanescentibus, ad latera sitis, descendentibus.

I propose this genus for some insects differing greatly from *Epicærus* in the form of the scrobes, which are extremely broad and vague behind. The rostrum is very short, not longer than the head. The scape of the antennæ is rather long and passes the eye; this latter is round and placed far in front of the thorax. The thorax is broad and strongly transverse; it entirely covers the very large scutellum, which does not penetrate between the elytra. These latter are short, with rounded, not prominent shoulders. The middle coxæ are only slightly separated, the epipleura is rounded at the shoulder, and the mesothoracic epimeron is quite minute. The metasternum is very short. The corbels of the posterior tibiæ are feebly cavernous.

These insects do not much resemble *Epicærus* in appearance, and in this respect come nearer to *Amphidees*; there is, however, no trace of any ocular lobes on the thorax, so that the genus must be separated from the forms I have included in *Amphidees.* The Colombian genus *Amphideritus* resembles *Deamphus* in the form of the scrobes, and also in its general appearance; but it has the elytra broader than the thorax, and the scutellum visible at the base of the suture, so that it probably belongs in the "Otiorhynchinæ alatæ." In each of these two genera the front coxæ are minutely

separated, but in *Amphideritus* there is a post-coxal process that is not found in *Deamphus*.

1. **Deamphus brevipennis,** sp. n. (Tab. V. fig. 1.)

Niger, tenuiter setosus, antennis piceis; prothorace valde transverso, lateribus rugosis, disco punctato, nitido; elytris seriatim fortiter, minus argute punctatis.
Long. $6\frac{3}{4}$ millim.

Hab. GUATEMALA, Quezaltenango 7800 feet (*Champion*).

Rostrum short, coarsely and closely punctate, shining, rather deeply impressed along the middle, with a fovea between the eyes; the latter a little convex. Thorax broad, close to the front abruptly narrowed, and also much narrowed near the base, the basal margin distinct; rugose-punctate, except on the disc, where the punctuation is more scanty. Elytra short, with series of coarse, but not deep punctures. Legs elongate. One specimen.

This species is not much like any other known from our region. It somewhat resembles *Peritaxia rugicollis*, Horn, though that is a much more elongate insect.

2. **Deamphus deceptor,** sp. n.

Nigro-piceus, nitidus, parce setosus, in elytris submaculatus; prothorace fortiter rugoso; elytris profunde grosseque seriatim punctatis.
Long. 7–8 millim.

Hab. GUATEMALA, Quiche Mountains 7000 to 9000 feet, San Gerónimo 3000 feet (*Champion*).

Closely allied to *D. brevipennis*, but with a much coarser sculpture on the thorax; the surface bears a scanty depressed setosity of a pinkish-grey colour, and on the elytra these scale-like setæ are more abundant in some places, so as to form a vague pattern. In the male the thorax is rather more dilated at the sides than it is in the female. Six specimens.

3. **Deamphus latifrons,** sp. n. (Tab. V. fig. 2.)

Gracilis, elongatus, piceus, squamosus parciusque setosus; elytris punctato-striatis.
Long. 11–12 millim.

Hab. MEXICO, Hacienda de San Miguelito (*Dr. Palmer*), Refugio in Durango (*Höge*).

Evenly covered with round, closely-adherent scales of a greyish or ashy colour, these scales nowhere overlapping one another; the surface also bears fine, rather long, scanty hairs. Rostrum very short and broad, separated from the head by a broad obscure depression, in which there is placed an indistinct fovea; eyes very widely separated, round, rather convex; antennæ dark red, setose. Thorax strongly transverse, rounded at the sides, rather narrower at the base than in front, quite even, and without basal

margin; rather deeply punctate, but the sculpture obscured by the clothing. Elytra slender, oval, rounded at the shoulders, marked with fine, shallow striæ, which are indistinctly punctured; the setæ are pallid in colour, and much longer than those on the head and thorax. Legs reddish. Corbels of hind tibiæ almost simply laminate externally. Four specimens.

This species bears a considerable resemblance to *Amphidees macer*; but that insect has well-marked ocular lobes, whereas in *D. latifrons* these are quite absent. The corbels of the hind tibiæ would, no doubt, have been called open by Lacordaire.

4. **Deamphus puncticollis,** sp. n.

Gracilis, piceus, squamosus et setosus, squamulis submetallico-micantibus; rostro fere subcylindrico; elytris subtiliter punctato-striatis.

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

Hab. Mexico, Huitzilac in Morelos (*Höge*).

Rostrum subcylindrical, very coarsely punctate, with a few opalescent scales between the punctures, scarcely transversely depressed between the eyes; antennæ dusky red. Thorax transverse, much rounded at the sides, narrowed and a little constricted in front, strongly setose, rather coarsely punctate, with opalescent scales between the punctures. Elytra slender, the shoulders not at all prominent; with series of rather coarse punctures, squamose, and with numerous fine elongate setæ. One specimen.

Besides being much smaller than *D. latifrons*, this species has a more slender, cylindrical rostrum.

EPICÆRUS.

Epicærus, Schönherr, Gen. Curc. ii. p. 323 (1834); Lacordaire, Gen. Col. vi. p. 132; Horn, Rhynch. N. Amer. p. 20.

This extensive genus is almost peculiar to our region, as in addition to those here enumerated, two species of it from the United States of North America are all that are known. It is, however, extremely close to the Palæarctic genus *Barynotus*—so much so indeed, that I do not myself see any satisfactory way of distinguishing the two.

The genus is a peculiarly difficult one to deal with, the sexes of some species differing greatly in size and form. But these sexual distinctions seem to be by no means constant, while in allied species they are yet of a slightly different nature; thus it is extremely difficult to decide, from the inspection of a few specimens, where the specific limits should be drawn.

I divide the genus, in the hope of facilitating the determination of the species, into three groups, one of which is natural and easily recognized; on the other hand, the distinction between the second and third groups is a very vague and variable one.

GROUP 1.—Thorax broad, narrowed and contracted behind, its dorsal surface very coarsely sculptured, usually with a broad irregular groove along the middle. Sculpture of the elytra very coarse. Rostrum broad at the tip. Species 1–11.

GROUP 2.—Thorax subconical or subcylindric in form, with only a vague channel on the middle. Rostrum usually a little more slender towards the tip and the pterygia but little visible. Species 12–38.

GROUP 3.—Thorax without the peculiar form and sculpture of Group 1. The rostrum usually a little broader towards the tip, with the pterygia exposed. Species 39–52.

Group 1.—*Thorax broad, constricted behind, very coarsely sculptured, with a broad groove along the middle.* (Diorynotus, *Jekel, in litt.*) (Species 1–11.)

1. **Epicærus vilis,** sp. n. (Tab. IV. fig. 18, ♀.)

Minus elongatus, niger, obsolete squamosus, inæqualis, grosse sed vage et parum profunde sculpturatus; elytris interstitiis 3°, 5°, 7° latis, posterius obsoletescentibus; rostro medio sulcato.
Long. 11–13 millim.

Hab. MEXICO, Salazar, Morelia in Michoacan, Esperanza, Mexico city (*Höge*), Toluca, Parada (*Sallé*).

One of the smallest and most squalid species of this group, the sculpture being very coarse, vague, and indefinite, while the surface appears almost destitute of squamosity; on examining under a strong lens the surface looks as if the scales were present, but partially dissolved away, as though by the action of some corrosive agent. The thorax is not elongate; the median groove on it is indefinite, and in the female is usually quite interrupted in the middle. The surface between the ribs of the elytra is irregularly impressed, the sculpture consisting of two series of large punctures that are more or less confluent, and usually more definite in the male than in the female.

We have received about twenty examples that I assign to this species; they exhibit considerable variation in size, shape, and sculpture.

2. **Epicærus cognatus,** sp. n.

Niger, obsolete sqamosus, grosse sculpturatus; rostro medio canaliculato, utrinque canalicula breviore minus arguta munito; elytris interstitiis 3°, 5°, 7° sat alte elevatis.
Long. 11–15 millim.

Hab. MEXICO, Esperanza, Mexico city (*Höge*).

This insect may be distinguished from *E. vilis* by the presence, on each side of the rostrum near the front, of an additional, though vague, groove; the sculpture is better defined, the alternate interstices of the elytra form more definite costæ, and the general form is on the average more elongate. The channel on the middle of the thorax is

deep, and the costæ on the wing-cases are distinctly elevated even on the part where they all join.

The males differ from the females by their more slender form.

3. **Epicærus calvus,** sp, n. (Tab. IV. fig. 19, ♀.)

Minus elongatus, niger, fere nudus, profunde sculpturatus; elytris interstitiis 3°, 5°, 7° argute elevatis, intervallis profunde sculpturatis; rostro medio sulcato.
Long. 17 millim.

Hab. Mexico, Orizaba (*Sallé*).

This appears to be more completely free from squamosity than any of the other species of the genus, and is of a jet-black colour. The rostrum is broad and short, with a fine, very definite channel on the middle. The rugose sculpture on the thorax is remarkably deep, and there is a median, deep, rugose groove, a little interrupted in the middle. The elevated costæ of the elytra are very definite, and the two series of large punctures in the groove between each pair of costæ are distinct; indeed the longitudinal interval separating them is more definite than usual. One pair.

4. **Epicærus sulcirostris,** sp. n.

Brevis, niger, subsquamosus; elytris interstitiis 3°, 5°, 7° sat elevatis, intervallis grosse punctatis; rostro medio late sulcato.
Long. 13 millim.

Hab. Mexico, Esperanza (*Höge*).

This is one of the species with black, apparently denuded surface, but which is nevertheless nearly covered with scales closely adpressed to the surface, and not at all overlapping; although greatly resembling *E. vilis*, it may be recognized by the deep, remarkably broad, depression that extends from between the eyes to the apex of the rostrum. The thorax is short and broad, with an obsolete sulcus along the middle and vague rugosities on the lateral portions. The costæ of the elytra are well-marked, but not strongly elevated, and are nearly as definite behind as they are in front; the broad grooves between them are almost entirely occupied by two series of large vague punctures or pits.

Two specimens only have been received. They appear to represent the sexes, though there is but little difference between them; if of one sex, both are, no doubt, females.

5. **Epicærus niger,** sp. n.

Elongatus, niger, obsolete squamosus; rostro medio canaliculato; elytris interstitiis 3°, 5°, 7° argutis, sat latis, parum alte elevatis, punctis inter costas confertis.
Long. 13 millim.

Hab. Mexico, Orizaba (*Sallé*).

This is another of the species which to the unaided eye appears black, and destitute

of squamosity, but that is really clothed with inconspicuous scales. It is of comparatively narrow and elongate form, and is also distinguished by the regular costæ, which, however, are not strongly elevated, and by the numerous and closely placed large punctures on the spaces or intervals between them. The thorax has the groove along the middle entire, rather narrow, the lateral sculpture scanty, and not forming a continuous depressed space.

Two specimens from Sallé's collection are labelled "*Epicærus niger*, Chevr.;" a mutilated example in my own possession is labelled "*E. alternans*, Jekel."

6. **Epicærus centralis,** sp. n.

Elongatus, niger, tenuiter squamosus; elytris interstitiis 3°, 5°, 7° parum elevatis; prothorace haud discrete sulcato; rostro medio canaliculato.

Long. 12–14 millim.

Hab. Mexico, Guanajuato (*Sallé*).

I distinguish from *E. vilis* four individuals of more elongate form, with a greater amount of pallid squamosity on the surface, and with the raised costæ of the elytra less definite. They are separable from *E. cognatus* by these characters, and by the rostrum having on the middle only a single groove. The thorax bears numerous coarse rugosities, but exhibits no definite sulcus along the middle, though the rugosities there are more continuous and confluent than elsewhere. The sculpture between the slightly elevated costæ of the wing-cases is coarse and deep, though indefinite.

Three males and one female. The female example is much larger and broader than the males.

7. **Epicærus æqualis,** sp. n. (Tab. IV. fig. 20.)

Elongatus, niger, obsolete squamosus; prothorace ubique rugoso, medio sulcato; elytris profunde regulariter, fortiter seriatim punctatis, interstitiis alternis vix magis elevatis; rostro trisulcato.

Long. 17 millim.

Hab. Mexico, Orizaba (*Sallé*).

Although we have received only one example, a male, of this species, it appears to be readily distinguished from all others of the genus by the sculpture of the elytra consisting of very large, regularly-placed punctures, while the alternate interstices are only very obscurely elevated. The rugose punctures of the thorax are evenly distributed, so that there is no trace of lateral impressions, although the median groove is quite distinct. The three grooves on the rostrum are very distinct.

8. **Epicærus uniformis,** sp. n.

Niger, dense, pallide griseo-squamosus; elytris interstitiis 3°, 5°, 7° sat elevatis, 7° nudo; prothorace rugoso, vix in medio sulcato; rostro medio canaliculato.

Long. 13 millim.

Hab. Mexico, Puebla (*Sallé*).

This is more uniformly covered with pallid scales than the other species of the genus; the scales are very minute and cover the internal two costæ, but the outer of the three raised costæ is nearly bare and dark in colour. The rostrum is rather short. The surface of the thorax is uneven, and has a feeble rugose depression along the middle, but this is not limited by any definite smooth space. The first and second of the three costæ on the elytra are not much elevated, and the sculpture in the grooves between them is very shallow. The female is much broader than the male. Three specimens.

E. coxalis, which in some respects is like this species, has a tubercle on the middle coxa, and the squamosity of the surface brownish in colour, not nearly white as in *E. uniformis*.

9. **Epicærus coxalis,** sp. n. (Tab. IV. fig. 21.)

Niger, pallide brunneo-squamosus; rostro parce squamoso, medio minus profunde sulcato; elytris dense squamosis, interstitiis alternis elevatis haud altis; coxis intermediis tuberculo minuto munitis.

Long. 14–17 millim.

Hab. Mexico, Amula 6000 feet, Omilteme 8000 feet, Chilpancingo 4600 feet, Xucumanatlan 7000 feet, all in Guerrero (*H. H. Smith*).

The small tubercle on the middle coxa is diagnostic of this species, as I have not been able to find it in any other. No other species before me of this group has the elytra so densely and uniformly clothed with scales. The rostrum is shining, black, covered with delicate and small, pallid, rather widely separated scales, with a rather feeble channel along the middle that scarcely reaches a fovea placed on the middle of the vertex; the eye is surrounded by a black orbit, and outside this there is a deep impression extending all round the front part of the eye, and just before this, on each side of the front of the rostrum, there is a short curvate depression. The thorax is very irregularly sculptured; there is a broad longitudinal depression along the middle, and outside this a still broader depression; the depressions are more or less rugose, and are densely covered with scales, which are of a larger size than those placed on the elevated parts. The elytra are elongate, the suture only slightly raised, the third, fifth, and seventh interstices more distinctly raised, the sculpture on the depressed spaces between them being very indistinct; the costæ are covered with scales, and those on the outer costa are usually smaller and more delicate than elsewhere; mixed with the scales there are excessively short setæ. The legs bear a squamosity similar to that of the rostrum.

Eighteen examples; the males are very much more slender in form than the females, and have a long acute mucro at the end of the posterior tibia in front; they also have the apical portion of the elytra different in shape from the female.

10. **Epicærus costicollis,** sp. n.

Sat elongatus, niger, dense brunneo-squamosus, subvariegatus; prothorace ubique rugoso, medio late sulcato; elytris interstitiis 3°, 5°, 7° elevatis, angustis.
Long. 14 millim.

Hab. Mexico, Yolotepec (*Sallé*).

Rostrum not so densely clothed with scales as the thorax and elytra, the scales metallic. Thorax very rugose, with a longitudinal depression along the middle, which is limited on each side by an elevation, the latter narrow, so as to appear like an irregular costa. The costæ on the elytra are rather narrow, sharply raised, and continue so to their point of common union before the extremity; the grooves between them are broad, and have only a few very indefinite and very large vague depressions to represent the punctures. One pair.

This species is most like *E. coxalis*, but is of rather shorter form, has no tubercle on the middle coxæ, and the scales have a distinctly metallic appearance. I have no doubt the specimens are of one species, though the male has the groove on the rostrum very obsolete, while it is quite distinct in the female.

11. **Epicærus costatus,** sp. n. (Tab. IV. fig. 22, ♂.)

Elongatus, elytris interstitiis 3°, 5°, 7° elevatis, integris, plumbeo-nitentibus, intervallis dense squamosis; rostro medio canaliculato.
Long. 18–19 millim.

Hab. Mexico, Puebla (*Sallé*), Amecameca (*Höge*).

E. costatus is the most elegant species of this group, and it can be very easily identified by the great development of the alternate elytral interstices, and the diminution of the sculpture between them—it thus results that the second, fourth, and sixth interstices cannot be recognized at all. The rostrum is rather longer than usual, considerably widened in front, and very distinctly but not broadly sulcate along the middle. The thorax has a shallow longitudinal median sulcus, which is slightly interrupted about the middle; outside this is an irregular, comparatively smooth space; the lateral part of the surface is very coarsely though not deeply rugose. The costæ on the wing-cases are remarkably definite, and contrast strongly with the spaces between them, which are densely covered with very minute, pallid (in the typical form white) scales. The legs are only feebly squamose. The swelling or incrassation of the front tibia at the tip of its posterior face is more developed in this than in any other species of the genus. The female is much broader than the male.

The three specimens from Sallé's collection I treat as the typical form of the species; they have the scales in the grooves of the elytra almost white, while in the two examples from Amecameca they are pale brown.

Group 2.—*Rostrum usually not broader—even a little narrower—towards the tip; thorax subconical or subcylindric in form.* (Species 12–38.)

This group contains a number of discrepant forms, which cannot be tabularly separated in a practically useful way, the slight structural distinctions varying from species to species in a very perplexing manner.

12. Epicærus mexicanus.

Epicærus mexicanus, Boh. in Schönh. Gen. Curc. ii. p. 324 [1]; vi. 2, p. 271 [2].
Epicærus æruginosus, Boh. op. cit. vi. 2, p. 276 [3].
Epicærus cyphus, Boh. t. c. p. 272 [4].
Epicærus transversepunctatus, Boh. t. c. p. 271 [5].

Hab. Mexico [1 2 3 4 5], Tierra Colorada and Omilteme, both in Guerrero (*H. H. Smith*), Chilpancingo (*Höge*), Orizaba (*Godman*, *Sallé*), Vera Cruz, Toxpam, Guanajuato (*Sallé*), Oaxaca, Misantla, Jalapa (*Höge*).

This is a very variable insect and presents considerable sexual differences, which also appear to be inconstant. The size and colour, the punctuation of the elytra, the shape of the thorax, and the impression of the rostrum all exhibit much discrepancy in the large series before me, and yet after repeated attempts I fail to discover any constant characters as marks of specific distinction. I have examined the œdeagus in four of the varieties, and though I find it presents slight differences in each of them I do not think these are beyond the range of variation possible in this organ. I must, however, state that I am by no means sure that there may not prove to be several closely allied but variable species. I had decided from Boheman's descriptions that his *E. mexicanus*, *E. æruginosus*, *E. cyphus*, and *E. transversepunctatus* all referred to one variable species, and the types since sent me from Schönherr's collection by Dr. Aurivillius quite confirm this view.

13. Epicærus fallax.

Epicærus fallax, Boh. in Schönh. Gen. Curc. vi. 2, p. 274 [1].

Hab. Mexico [1] (*Sallé; coll. Sharp*).

This insect is extremely similar to some of the varieties of *E. mexicanus*; but the female can be distinguished by a glance at the peculiar form of the apical portion of the wing-cases, the sutural part projecting backwards just before the declivity in an abrupt manner instead of being broadly rounded. The male is much more likely to be passed over as being *E. mexicanus*, but this sex of *E. fallax* may be satisfactorily determined by the following slight peculiarities: the thorax is not rounded at the sides and constricted behind, but straight, and from the middle to the front gently narrowed; its surface is more even than that of *E. mexicanus*, the only inequality that

can be detected being a slight channel along the middle of the basal half; the outline of the front margin of the thorax at the sides is more sinuate, or, in other words, rudimentary ocular lobes are undoubtedly present. *E. fallax* is apparently a rare insect, as the collections received by our editors contain only a pair of the species, and there are two pairs of old specimens in my own collection; these were all named *E. fallax*—those in my own collection on the authority of Jekel—and they agree with the type of the species sent me by Dr. Aurivillius.

14. **Epicærus nebulosus.**

? *Epicærus nebulosus*, Boh. in Schönh. Gen. Curc. ii. p. 326 [1]; vi. 2, p. 277 [2].

Hab. Mexico [1 2], Cordova, Toxpam, Vera Cruz (*Sallé*), Oaxaca (*Höge*).

This is another variable species, certain specimens of which resemble extremely some of the varieties of *E. mexicanus*. *E. nebulosus* may, however, always be distinguished from the commoner species by the following characters: the rostrum is shorter; the eyes are more convex; the head behind the eyes is subconstricted and the outline of the front of the thorax at the sides is very sinuate, so that a distinct, if rudimentary, ocular lobe is present. The rostrum in *E. nebulosus* is in each sex deeply impressed, and the sides of the depression are more abruptly raised, and converge less at the forehead. *E. nebulosus* is apparently not a common insect, and nearly all of the fourteen specimens we have received of it are old examples from Sallé's collection. The marks on the wing-cases—on which Boheman chiefly relied when discriminating *E. nebulosus*—are distinct in some examples only, being in others entirely absent. The size of the individual is on the average very much less than it is in *E. mexicanus*, but the largest examples considerably exceed the smaller specimens of the commoner species in stature.

The example sent me as *E. nebulosus* from Schönherr's collection is a small male of *E. mexicanus*, but I anticipate that other specimens in the Schönherrian collection may prove to be the insect I now call *E. nebulosus*; if this, however, should not be the case the species will require a new name.

15. **Epicærus cultripennis.** (Tab. V. figg. 3, 3 *a*, ♂; 4, 4 *a*, ♀.)

Epicærus cultripennis, Boh. in Schönh. Gen. Curc. vi. 2, p. 273 [1].
Epicærus depilis, Boh. t. c. p. 279 [2].

Hab. Mexico [1 2], Jalapa, Misantla (*Höge*), Toxpam (*Sallé*), Orizaba (*Godman, H. H. Smith*).

E. cultripennis was described [1] by Boheman from specimens (or a specimen) sent to him by Chevrolat, and I think his description on the whole applies better to the species we figure than to any other; and a small series of examples in my own collection were so named by the late M. Jekel. The examples of *E. cultripennis* in

Sallé's collection were, however, labelled *E. depilis*, Schönh., which I consider to be the male sex, in a worn condition, of *E. cultripennis*. An example of *E. cultripennis* sent from Chevrolat's collection by Dr. Aurivillius is a female of this species.

E. cultripennis has the thorax obscurely punctate, and, in addition, more or less coarsely and abundantly transversely rugose-sulcate. The insect is unusually elongate in proportion to its width, and the thorax is remarkably long; viewed in profile, the angle at the junction of the dorsal and apical parts of the wing-cases is much less broadly rounded than usual, the apical part being perpendicular; the sexual disparity is very marked, the female being usually quite twice the size of the male, the outline of the body in the latter sex being so slender and parallel as to remind one of the genus *Lixus*.

We figure the species in profile so as to allow an idea to be formed of the sexual distinctions in the shape. Such distinctions exist in many other species of the genus, though usually to a less extent than in *E. cultripennis*; indeed they vary not only from species to species, but also in the same species to a certain extent; the variation apparently being due to the fact that some males partake to a greater or less extent of the peculiar sexual outlines of the female.

Boheman's description of *E. depilis* no doubt refers to worn examples of the male of *E. cultripennis*, and a specimen sent from Schönherr's collection—not, however, the type—as *E. depilis* is certainly *E. cultripennis*, ♂.

16. **Epicærus inflatus,** sp. n. (Tab. V. fig. 5.)

Anguste ovalis, convexus, niger, nitidus, fortius punctatus, fere esquamosus.
Long. $10\frac{1}{2}$ millim.

Hab. Mexico, Yolotepec (*Sallé*).

Rostrum rather short and broad, moderately deeply impressed on the middle, without fovea on the forehead. Thorax narrowed in front, not elongate, not constricted behind, with coarse rugulose sculpture and a very feeble depression along the middle, the fine basal margin unusually distinct and definite. Elytra not elongate, convex, rounded at the sides, with the surface uneven and with series of rather large punctures; there is a slight squamosity on the depressed spots. Two specimens.

The bare surface is not, I believe, due to abrasion, the two specimens being in very good preservation. They represent, I think, the sexes, the female having the elytra rather more convex.

17. **Epicærus fronteræ,** sp. n. (Tab. V. fig. 6.)

Pyriformis, convexus, niger, fusco-setosus; prothorace fortiter punctato, transversim subcylindrico; elytris regulariter seriatim punctatis.
Long. 13 millim.

Hab. Mexico, Frontera in Tabasco (*Höge*, *H. H. Smith*).

A very distinct species, the clothing being rather setiform than squamiform, and the outline peculiar, recalling that of a large *Apion*. The rostrum is short and broad, deeply and broadly impressed in front, with a fovea on the forehead. The thorax is but little narrowed in front, and bears numerous large punctures. The elytra are only about as broad at the base as the thorax, but become much broader to behind the middle, and are also very convex and rounded behind; the punctures of the series are unusually definite and distinct though rather small. Two specimens of uncertain sex. The setose squamosity is no doubt very readily abraded and it then leaves the surface quite bare.

18. **Epicærus reversus,** sp. n.

Elongatus, ovalis, niger, griseo-squamosus, ad latera et subtus albidus; rostro profunde angulariter impresso; prothorace parce profunde punctato; elytris seriatim foveolatis.

Long. $9\frac{1}{2}$–12 millim.

Hab. MEXICO, San Andres Tuxtla (*Sallé*), Teapa in Tabasco (*H. H. Smith*).

Rostrum rather short, with a deep angular depression anteriorly, the sides of which converge to meet just in front of a well-marked fovea between the eyes; the lateral impressions are elongate and extend as far as the insertion of the antennæ, being thus in front very near to the median depression, and giving the latter somewhat the appearance of being limited by a carina on each side anteriorly. The thorax is moderately long, subcylindrical, though a little narrowed in front, with only a few punctures. Elytra with series of rather large punctures which are moderately approximate. Six specimens.

This insect was named *E. convexus*, Schönh., in Sallé's collection, but the next species agrees better with Boheman's description. *E. reversus* is closely allied to *E. convexus*, however, and differs by the peculiar depression on the rostrum, and also by having the thorax less rugose and the punctures on the elytra larger. *E. fronteræ*, which has a similar depression on the rostrum, is very different in shape.

19. **Epicærus convexus.**

Epicærus convexus, Boh. in Schönh. Gen. Curc. vi. 2, p. 281 [1].

Hab. MEXICO [1], Juquila, Panistlahuaca, Etla (*Sallé*), Jalapa, Oaxaca (*Höge*).

The specimens I assign to this species are in all twelve in number, there being only two or three from each locality; they vary a great deal, so as to leave some doubt as to their all belonging to one species. Two or three agree satisfactorily with Boheman's description, having only a slight depression on the rostrum, but in others the depression is larger. The pallid colour of the sides also varies, and in some specimens is not conspicuous, while in others it is nearly pure white, and in one or two is white,

delicately tinted with green. Such examples were labelled *Epicærus marginalis*, Chevr., in Sallé's collection.

A typical example of *E. convexus*, communicated from Schönherr's collection by Dr. Aurivillius, is rather larger and more elongate than any of our series, and has the rostrum still less distinctly impressed; but I consider it to be only an extreme form of the same species as our series.

20. **Epicærus sturmi,** sp. n.

Minus elongatus, ovalis, convexus, niger, griseo-squamosus, lateribus corporeque inferius albidis; rostro profunde impresso; prothorace conico, subæquali; elytris seriatim remote punctatis.

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

Hab. Mexico (*Sallé*).

This species is allied to *E. convexus* and *E. reversus*, but is considerably shorter in form; the rostrum is short, broadly and deeply impressed in front, with a minute fovea between the eyes. The thorax is gradually narrowed from the base to the front, with a coarse but indistinct punctuation, and a feeble longitudinal depression, not extending to the base, on the middle. The elytra have regular series of remote punctures, distinct at the base but extremely minute behind; the squamosity is rather irregularly distributed, so as to give a slight appearance of two rather darker fasciæ across the middle.

Of *E. sturmi* we have obtained only two old examples, without special locality, from Sallé's collection; one of them was formerly in Sturm's collection and is labelled "*Barynotus obliquefasciatus*, mihi," in that naturalist's writing. It is not very likely to be mistaken for any other of our species except *E. reversus*, which is of much more elongate form. *E. fronteræ* has also a deep impression on the front of the rostrum, but it is a larger and broader insect, with less conical, more coarsely sculptured thorax. The two specimens of *E. sturmi* are no doubt of the female sex.

21. **Epicærus championi,** sp. n. (Tab. V. fig. 7.)

Angustulus, griseo-squamosus; prothorace inæquali, fortiter subobsolete punctato; elytris transversim subundulatim impressis.

Long. 9 millim.

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

Rostrum rather short, punctate and squamose, impressed along the middle and foveolate at the summit of the impression; lateral impressions broad and placed much on the front aspect. Thorax subconical, but with a slight constriction at the sides behind; the surface with coarse, very vague, rather regularly distributed impressions. Elytra slightly constricted at the base, with series of impressions that are connected transversely so as to form undulatory grooves. The suture of the elytra is in the female a little more prominent at the commencement of the apical declivity.

There is no difficulty in distinguishing this insect, the vague depressions seen in other species in connection with the punctuation being in *E. championi* unusually developed. A small series was procured.

22. **Epicærus tenuis,** sp. n.

Gracilis, niger, griseo-squamosus ; rostro anterius in medio leviter impresso ; prothorace subcylindrico, inæquali ; elytris seriatim remote sat fortiter punctatis.

Long. 8–9 millim.

Hab. Mexico, Xautipa and Chilpancingo in Guerrero (*H. H. Smith*).

Rostrum in the male with a distinct short longitudinal depression on the middle, in the female almost flat ; a distinct fovea between the eyes. Thorax very little broader behind, the surface covered with vague impressions, and with an obscure depression along the middle. Elytra with regular series of punctures, which towards the suture in front are larger and foveiform. Eight specimens.

This is one of the most slender insects of the genus, and the sexual distinctions are comparatively slight, the female being, however, rather broader and more convex. The next two species approach *E. tenuis* very closely, but the thorax in them is less rugose.

23. **Epicærus pedestris,** sp. n.

Angustulus, niger, griseo-squamosus, fere concolor ; prothorace impressionibus paucis subinæquali ; elytris seriatim remote subtiliter foveolatis.

Long. 8–9 millim.

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

Rostrum similar in the two sexes, nearly flat and unimpressed, with a small punctiform fovea between the eyes. Thorax conico-cylindrical, not much narrowed in front, the surface shining black (but covered with minute scales) and rendered slightly uneven by a few vague impressions ; in the male with a slight transverse constriction immediately before the base. Elytra with regular series of moderately large rather distant punctures, the surface slightly depressed round each puncture ; in the male there is a distinct constriction just behind the base.

Three examples were found at Cerro Zunil, one at San Gerónimo ; the specimen from the latter locality differs considerably in outline and a little in colour, and may perhaps prove to belong to a distinct species.

24. **Epicærus capetillensis,** sp. n.

Angustulus, niger, fusco-griseo-squamosus, fere concolor ; prothorace fere æquali ; elytris seriatim remote subtiliter punctatis.

Long. 8–10 millim.

Hab. Guatemala, Capetillo (*Champion*), Chinautla 4100 feet (*Salvin*), Escuintla (*Conradt*).

This insect is very closely allied to *E. pedestris*, but is distinguished by the fact that the vague impressions on the thorax are nearly absent, the serial punctures on the elytra are not so large, and that there is less difference between the sexes; the male differing from the female chiefly in being smaller and more slender, with the prothorax a little more conical. In both sexes the rostrum is flat and nearly unimpressed, and there is a small though very distinct fovea between the eyes. About twenty examples.

25. **Epicærus squalidus,** sp. n.

Angustulus, dense fusco-squamosus; prothorace subcylindrico æquali; elytris regulariter seriatim profunde punctatis.

Long. 8 millim.

Hab. MEXICO, Oaxaca (*Höge*).

This is a narrow *Epicærus* very densely covered with squalid squamosity in a uniform manner, except that there is an obscure transverse darker fascia across the middle. Rostrum densely squamose, feebly impressed on the front, with a fovea between the eyes. Thorax conico-cylindrical, not at all constricted near the base; the surface not uneven, but with a few distant punctures concealed by the squamosity. Elytra with remarkably definite deep foveiform punctures placed in very regular series. Three specimens.

This species is perhaps best placed near *E. pedestris*, compared with which it is found to be more continuous in outline, and more uniformly covered with darker squamosity; the eyes are smaller, the thorax less impressed, and the legs smaller.

26. **Epicærus bicolor,** sp. n.

Niger, capite prothoraceque parcius subtiliter squamosis, hoc impressionibus paucis subinæquali; elytris fusco-squamosis, lateribus corporeque subtus fere albidis.

Long. 8–11 millim.

Hab. MEXICO, Tapachula in Chiapas (*Höge*); GUATEMALA, San Isidro, Las Mercedes, Volcan de Atitlan (*Champion*).

Rostrum flat, not at all impressed along the middle, with a minute punctiform fovea between the eyes. Thorax rather short, with only a very few impressions on it. Elytra with the upper surface covered with dark fuscous scales, the sides nearly white; the impressed remote punctures of the series are fine. Many specimens.

When quite fresh, the rostrum and thorax of this species are covered with a delicate squamosity which is apparently very easily abraded; in such specimens the squamosity of the elytra almost entirely conceals the sculpture. There is not much difference between the sexes, except that the female is larger and more convex than the male.

27. **Epicærus griseus.**

Epicærus griseus, Boh. in Schönh. Gen. Curc. vi. 2, p. 282 [1].

Hab. Mexico [1], Playa Vicente, Orizaba, Cordova (*Sallé*), Jalapa (*Höge*).

We have received seven examples of this species; it is distinguished from *E. sphæroides* chiefly by the broad depression on the front of the rostrum, and also is rather larger in size.

I am by no means sure as to the distinctions between Boheman's *E. griseus* and *E. sphæroides*; the small series of the two we have received are variable in respect of the characters mentioned by the Swedish writer. I have therefore arbitrarily divided our examples, as above stated, until a larger number of specimens shall have been obtained, so as to allow the sexes to be distinguished, and thus facilitate the solution of the question as to whether *E. griseus* and *E. sphæroides* may not be the sexes of one variable species. An example of *E. griseus* communicated by Dr. Aurivillius from Schönherr's collection agrees with our examples.

28. **Epicærus sphæroides.**

Epicærus sphæroides, Boh. in Schönh. Gen. Curc. vi. 2, p. 283 [1].

Hab. Mexico [1], Oaxaca (*Höge*), Cordova, Orizaba, Playa Vicente (*Sallé*).

I refer to this species a dozen examples which agree moderately well with Boheman's description, and with three specimens in my own collection determined by the late M. Jekel as being *E. sphæroides*. We have also received some half dozen specimens that are very variable as regards the characters supposed to be distinctive of *E. sphæroides* and *E. griseus*. The example of *E. sphæroides* communicated by Dr. Aurivillius from Schönherr's collection I cannot distinguish from *E. griseus*; but it is probable that other examples in his collection may prove to have the rostrum unimpressed, as stated in the description.

29. **Epicærus oscillator,** sp. n. (Tab. V. fig. 8.)

Convexus, niger, griseo-squamosus; prothorace conico-cylindrico, obsolete inæquali, haud punctato; elytris minus fortiter seriatim punctatis.

Long. $7\frac{1}{2}$–10 millim.

Hab. Mexico, Capulalpam (*Sallé*).

Rostrum short and broad, in front indistinctly and broadly impressed; scrobes short, rather broader and more indefinite behind than is normal in *Epicærus*. Thorax narrowed in front, not constricted behind, the surface very slightly uneven but without channel or punctures. Elytra rather short, much elevated, with somewhat indistinct series of punctures.

This insect resembles the shorter and more strongly-scaled varieties of *E. mexicanus*, *E. nebulosus*, and *E. squamosus*. It has the scrobes shorter and rather broader and

more indefinite behind, so that it may be doubted whether it should remain in *Epicærus*; but as *E. squamosus* to some extent connects it with *E. mexicanus*, the typical species of the genus, I think it would be wrong to separate it at present. The truncation of the tip of the hind tibia is almost completely absent in *E. oscillator*, but this is also the case with some other species of *Epicærus*.

We have received only three examples of this species. It apparently varies in a similar manner to *E. mexicanus*, the sculpture and squamosity being a little dissimilar in each of the examples. The male is much smaller than the female, but exhibits scarcely any difference in the shape of the elytra.

30. **Epicærus minor,** sp. n. (Tab. V. fig. 9.)

Brevis, convexus, niger, squamosus, hispidus, subvariegatus; antennis rufis; rostro brevi, fere æquali, fronte fovea elongata munita.

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

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

Rostrum very short, not broader in front, covered with scales, the nasal plate very prominent, polished, the forehead with a deep elongate fovea; the eyes large, not prominent. Thorax short, much rounded at the sides, deeply and coarsely punctate, covered with griseous scales, the basal margin distinct. Elytra densely squamose, the squamosity griseous, whitish, and fuscous, but not forming a definite pattern; with regular series of fine punctures, the interstices very broad but scarcely perceptibly convex. One specimen.

I can detect no good character for distinguishing this insect from *Epicærus*, though the apex of the hind tibia is so simple that Lacordaire would no doubt have considered the corbels to be open. There is, however, much variety in *Epicærus* as to this character, and even in *E. minor* there is visible a slight incrassation of the apical face of the outer lamina, so that I consider the corbels to be cavernous in a rudimentary degree. The insect bears a good deal of resemblance to *Epagrius pumilus* and *E. lævinasus*, but they have broader scrobes.

31. **Epicærus monclovæ,** sp. n. (Tab. V. fig. 10.)

Brevis, convexus, dense griseo-squamosus, minute setosus; elytris seriatim fortiter profunde punctatis.

Long. 7 millim.

Hab. MEXICO, Monclova in Coahuila (*Dr. Palmer*).

Antennæ rather stout, the second and third joints equal in length; club rather long, dark in colour. Rostrum short and broad, densely squamose, and bearing white setæ, feebly impressed along the middle; eyes moderately convex, the fovea between them obsolete. Thorax convex, transverse, narrowed in front and a little rounded at the sides, densely squamose, without depressions or channel. Elytra convex, truncate at

the base, densely squamose, and furnished with very regular series of deep, moderately large punctures. Under surface squamose. One specimen.

There is no other species of the genus at all like this one ; indeed, in appearance it more resembles *Tosastes globipennis* and *T. humeralis*.

32. **Epicærus durangoensis,** sp. n. (Tab. V. fig. 11.)

Angustus, ubique griseo-squamosus, in elytris subvariegatus, setulisque brevibus vestitus; elytris seriebus punctorum haud remotorum, interstitiis subconvexis.

Long. 7 millim.

Hab. Mexico, Durango city (*Höge*).

Antennæ with moderately long slender club, which is black in colour. Rostrum oblong, densely squamose, very feebly canaliculate along the middle, with a deep, moderately long frontal channel. Thorax 2 millim. long, slightly transverse, densely covered with grey and brown squamosity, which conceals the rugose surface; there is a shallow and obsolete channel along the middle. Elytra covered with grey and pale brown squamosity, the squamosity much mottled, but not forming any definite pattern; with quite regular series of rather fine deep punctures, and with a recumbent setosity on the interstices. Legs densely covered with squamosity.

33. **Epicærus planirostris,** sp. n. (Tab. V. fig. 12.)

Sordide squamosus; rostro brevi, densissime punctato, fere æquali, fronte anguste canaliculata; prothorace fortiter transverso, subæquali, medio vix obsolete canaliculato vel punctato; elytris seriebus punctorum sat remotorum.

Long. 8 millim.

Hab. Mexico, Guanajuato (*Sallé*), Lagos in Aguas Calientes (*Höge*).

Rostrum short and broad, densely punctate, squamose; eyes moderately convex; forehead with a very definite fine channel, nearly as long as the length of the eye. Thorax very strongly transverse, a little narrowed from the middle to the front, without rugosities or punctuation, and with only an obsolete interrupted median channel; the surface is squamose, and there is a fine basal margin. Elytra densely squamose, the squamosity scarcely variegate, covering regular series of rather fine punctures. Four specimens.

This species is twice as large as *Bradyrhynchus tolucæ*, and has the rostrum flat on the anterior aspect; it should be readily identified by the fine but comparatively elongate and definite channel on the forehead.

34. **Epicærus aurifer.**

Epicærus aurifer, Boh. in Schönh. Gen. Curc. vi. 2, p. 278[1].

Epicærus ravidus, Boh. t. c. p. 277[2].

Hab. Mexico[1 2], Omilteme, Puente de Ixtla (*H. H. Smith*), Orizaba, Etla, Puebla

(*Sallé*), Cuernavaca (*Sallé*, *H. H. Smith*, *Höge*), Matamoros Izucar (*Sallé*, *Höge*), Esperanza (*Höge*).

I cannot distinguish *E. ravidus* from *E. aurifer*, which I look upon as a variable species like several others of the genus. The type of *E. aurifer* sent by Dr. Aurivillius from Schönherr's collection is an example of the most coarsely sculptured form of the species as known to me. I have not seen any typical example of *E. ravidus*, which was described from Germar's collection, but I have very little doubt it will prove to be the more thickly scaled and finely punctured form of this species.

35. **Epicærus amulæ,** sp. n.

Convexus, niger, subnitidus, subnudus ; prothorace in medio longitudinaliter bi-impresso ; elytris punctis grossis impressis, interstitiis alternis vix magis elevatis, ad latera prope humeros minus parce squamosis.
Long. 10 millim.

Hab. Mexico, Amula in Guerrero 6000 feet (*H. H. Smith*), Cuernavaca (*Höge*), Mexico city (*Schumann*).

Rostrum somewhat closely punctate, broadly but not deeply impressed on the middle, with an obsolete channel (rather more distinct in the female than in the male) in the depression ; lateral impression moderately large ; the fovea on the forehead distinct. Thorax elongate, subconical, finely punctate, very sparingly squamose, with a vague depression on the middle interrupted just on the disc. Elytra with series of very large punctures, the alternate interstices but little raised, the one proceeding from the shoulder is, however, quite distinct, and outside it, near the shoulder, there is an accumulation of pallid scales. The squamosity is less scanty on the apical parts of the elytra ; and the under surface is almost covered with scales. Two specimens.

This species is similar to some of the varieties of *E. aurifer* ; but it has a much longer thorax, and larger punctures on the elytra.

36. **Epicærus lateralis,** sp. n. (Tab. V. fig. 13.)

Angustus, convexus, niger, subnudus ; elytro singulo vitto laterali pallide flavo-squamoso.
Long. 11 millim.

Hab. Mexico, Amula in Guerrero 6000 feet (*H. H. Smith*).

Head and rostrum shining black, rather sparingly punctate ; the front of the latter somewhat depressed along the middle ; the depression in the male broad, shallow, and scarcely canaliculate, in the female more elongate, narrow, and vague, but very distinctly canaliculate ; lateral impression short, placed near the eye ; a fovea on the forehead. Thorax conico-cylindrical, nearly bare on the upper aspect, squamose on the flanks ; sparingly and finely punctate, very feebly longitudinally depressed along the centre, the depression interrupted in front of the middle and not reaching the base. Elytra narrow and subcompressed, with a series composed of paired, nearly confluent, coarse

punctures or foveæ near the suture, the interstice between the two punctures forming each pair very little elevated; outside them a more elevated interstice, and then outside this the space occupied by the next pair of series covered with a pallid sulphurous-yellow squamosity; the lower part of the sides feebly squamose.

This species will, I think, be readily recognized by the yellow lateral stripe. There is apparently but little difference between the sexes, except as regards the depression on the rostrum.

37. **Epicærus decoratus,** sp. n.

Angustus, valde convexus, niger, nitidus, subnudus; elytro singulo posterius ad latus vitta obliqua albida.
Long. 9 millim.

Hab. Mexico (*Sallé, ex coll. Sturm*).

Rostrum nearly flat in front, rather short; lateral impressions small; frontal fovea obsolete. Thorax conico-cylindrical, shining black, finely punctate, almost destitute of scales, vaguely impressed along the middle, the impression not extending to the base or apex. Elytra with series of moderately large, rather widely separated punctures; the third interstice not visibly elevated, the fifth distinctly so; the surface black and somewhat shining, only very slightly squamose or setose, but with a more or less distinct interrupted vitta of white squamosity extending from near the middle of the side obliquely backwards and inwards to near the suture.

This insect is allied to *E. lateralis*; but, in addition to the different stripe on the elytra, the rostrum is nearly unimpressed along the middle, and the foveæ or punctures on the elytra are much smaller. The species is described from two specimens from Sturm's collection labelled "*Hypsonotus decoratus*, Sturm;" one of the two is more slender and elongate than the other, so that they are probably of different sex.

38. **Epicærus oculatus,** sp. n. (Tab. V. fig. 14, ♂.)

Griseo-squamosus; rostro brevi, ad apicem profunde curvatim depresso; prothorace medio vage sulcato; elytris seriatim multipunctatis.
Long. 12 millim.

Hab. Mexico, Oaxaca (*Sallé*).

Rostrum short and broad; the clypeal depression with elevated margins and surrounded behind by a well-marked curvate depression; the sides of the front of the rostrum a little elevated and prolonged; the middle of the front of the rostrum broadly deplanate and slightly depressed; the lateral depressions vague; the frontal fovea small; the eyes moderately convex, nearly circular; the surface punctate, but little squamose. Thorax a little narrowed in front, finely punctate, the dorsal surface feebly squamose, the flanks more densely so, on the middle a very vague longitudinal depression. Elytra with series of rather small punctures, the interstices similar (there being no trace of any greater

elevation of the alternate intervals), just perceptibly convex, the sculpture greatly concealed by a sordid squamosity.

This species is distinguished from the other *Epicœri* by the somewhat aberrant structure of the front of the rostrum. Only two specimens have been received; they are no doubt the sexes, as they exhibit a great disparity in the breadth of the body.

Group 3.—*Thorax without the peculiar form and sculpture of Group* 1; *the rostrum usually a little broader towards the tip, with the pterygia exposed.* (Species 39–52.)

This group contains also a considerable variety of forms; as a rule, the rostrum is perceptibly broader at the tip and the pterygia a little more conspicuous than in group 2; usually, too, the scrobes are a little broader.

39. **Epicærus squamosus,** sp. n.

Minus convexus, niger, ubique pallide griseo-squamosus; prothorace leviter inæquali, basi subconstricto; elytris ovalibus, regulariter seriatim punctatis, interstitiis haud omnino planis.

Long. 9–10 millim.

Hab. Mexico, Puebla (*Sallé*).

Rostrum moderately long, parallel, scarcely impressed on the middle, with a small fovea between the eyes; antennæ with the first joint of the funiculus rather longer than usual, a little longer than the second. Thorax a little narrower in front than behind, and slightly constricted at the base; the surface very feebly rugose, with no distinct punctures, and only traces of a depression along the middle. Elytra with series of moderately fine punctures, the interstices of which are not completely flat. Five specimens.

This species appears to a considerable extent to connect the three groups. The surface is uniformly covered with adpressed pallid scales, each scale being isolated from its neighbours. There is a very fine, indistinct basal margin to the thorax.

40. **Epicærus marginatus,** sp. n.

Gracilis, sat convexus, niger, subsquamosus; rostro prothoraceque dense punctatis, hoc paullulum inæquali, dorso longitudinaliter impresso; elytris regulariter seriatim punctatis.

Long. 10 millim.

Hab. Mexico, Pachuca in Hidalgo (*Höge*).

Rostrum closely punctate, squamose and setose, with a broad depression along the middle and a rather obscure fovea above it. Thorax narrower in front than behind, considerably constricted at the base, the basal margin raised, fine and definite; the surface slightly uneven, with a few irregular depressions of different sizes and also minutely punctate, but this punctuation concealed by a scale placed in each puncture; along the middle with a deep, somewhat irregular sulcus. Elytra elongate-oval, with

regular series of distant punctures somewhat concealed by the closely-adpressed scales; and also with a few suberect squamiform setæ that are quite conspicuous behind, but in front are much shorter and differ little from the other scales. One specimen.

This is not closely allied to any other species of the genus, though it to a considerable extent connects *E. pyriformis* and *E. scutellaris*; but the former has no distinct basal margin to the thorax, and the latter scarcely any squamosity on the elytra.

41. **Epicærus scutellaris,** sp. n. (Tab. IV. fig. 25, ♂.)

Elongatus, niger, nudus, subopacus; rostro dense punctato; prothorace rugoso et crebre subtiliter punctato, medio subsulcato; elytris oblongo-ovalibus, seriatim punctatis.

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

Hab. Mexico, Toluca (*Sallé*).

This species is distinguished by the fact that the scutellum is quite visible between the bases of the wing-cases in the shape of a small transverse process; the sculpture of the rostrum and thorax, too, is peculiar, consisting of a mixture of fine and larger punctures. Rostrum rather short, densely punctured, sparingly setose, with a deep fovea on the forehead, a very vague broad depression along the middle, and a short oval impression on each side; antennæ not elongate, the second joint of the funiculus slightly longer than the first. Thorax rather elongate, impressed with numerous fine, and more scanty large, punctures; along the middle of the basal part with a fine channel formed by confluent punctures. Elytra elongate, with regular series of rather fine punctures, the interstices bare. Two specimens.

The male has the front inner part of the apical portion of the hind tibia densely covered with pallid pubescence.

42. **Epicærus insolitus,** sp. n. (Tab. V. fig. 15.)

Niger, squamosus; prothorace angusto, medio irregulariter sulcato, punctis paucis irregulariter sitis; elytris elongatis, seriebus punctorum parum profundis.

Long. 12 millim.

Hab. Mexico, Zacualtipan (*Höge*).

Rostrum densely punctate, armed sparingly with white setæ, with a broad shallow depression on the middle and a small deep fovea on the forehead. Thorax 3 millim. long, and in its greatest width scarcely so broad as this, with a narrow irregular sulcus along the middle and a few large punctures or impressions distributed over the basal half. Elytra elongate, curved at the sides and a good deal narrowed at the shoulders, emarginate at the base—the base of the thorax not well fitted in the middle to the base of the elytra; the shoulders slightly overlapping each side of the base of the thorax; the punctures are small and not deep, and the interstices have no trace of carination.

This is one of the species that appears at first sight to be of a sordid black colour, though on examination under a lens it is seen to be covered with scales. It may be

distinguished from the allies by its shape, the narrow thorax and contracted shoulders being almost peculiar to it. Only one specimen has been received.

43. **Epicærus godmani,** sp. n. (Tab. IV. fig. 24.)

Angustus, niger, nudus, subnitidus; rostro medio obsolete impresso, utrinque fovea ovali profunda munito; prothorace subcylindrico, grosse rugoso; elytris seriebus punctorum majorum profundorum impressis.

Long. 9½ millim.

Hab. Mexico, in the pine-forest of Popocatepetl (*Godman*).

Rostrum with the pterygia but little prominent; with a broad, shallow, median impression, a very deep front fovea, and on each side of the front a deep oval impression; eyes rather large, subconvex; antennæ slender and elongate, the second joint of the scape a little longer than the first. Thorax elongate, covered with vague, coarse, rugose depressions, which form a very indistinct groove along the middle; it is slightly narrower in front than at the base, and the basal margin projects a little laterally, the upper surface at the base being rather abruptly distinguished from the sides. Elytra long and narrow, subparallel, with series of large, rather closely placed, deep punctures. Depressions of the under surface of the rostrum very deep, the supports of the mandibular pieces unusually elongate. Two specimens.

This is a remarkably distinct species, in some respects allied to the *E. vilis* group, in others to *E. mexicanus*.

44. **Epicærus pyriformis,** sp. n. (Tab. IV. fig. 23, ♂.)

Niger, capite prothoraceque obsolete squamosis, subnitidis, illo medio depresso, utrinque depressione minore munito; prothorace fere esculpturato, medio longitudinaliter impresso; elytris haud convexis, minus conspicue squamosis, seriebus punctorum majorum impressis, interstitiis 3°, 5°, 7° vix perspicue elevatis.

Long. 11 millim.

Hab. Mexico, Oaxaca (*Höge*).

Rostrum widened at the apex, the pterygia distinctly projecting laterally; on the middle with a broad deep depression, the frontal fovea scarcely visible; on each side of the front a short additional impression, and another depression adjoining the front of the eye; the surface bearing scanty obsolete scales, each of these placed in a very shallow puncture, which it exactly fills. Thorax rather depressed above, and with a vague depression along the middle not reaching the front or the base, slightly narrower in front than at the base; the surface appearing naked, but covered with imbedded scales, with scarcely any sculpture, and remarkably even, except for the median groove. Elytra covered with scales that are less obsolete than those on the anterior parts; a little broader at the sides from the base to behind the middle, with rather regular series of large impressions. Flanks and under surface covered with a squalid squamosity. One specimen of each sex.

It is very difficult to assign a satisfactory place in the genus to this species. By the

form of the rostrum it belongs to the *E. vilis* group ; but in the sculpture of the thorax and the general form it departs widely from the members of that group. The second joint of the scape, though not elongate, is distinctly longer than the first. The female is considerably broader than the male, and the declivity of the elytra is rather longer.

45. **Epicærus sexcostatus,** sp. n. (Tab. V. fig. 16.)

Niger, elytris sordide squamosis ; capite prothoraceque fere denudatis, illo trifoveolato, hoc dorso deplanato et in medio impresso ; elytris rude sculpturatis, interstitiis alternis bene elevatis.

Long. 10–12 millim.

Hab. MEXICO, Parada, Cinco Señores (*Sallé*).

Rostrum densely punctate, on each side of the upper face with an elongate depression somewhat interrupted near the front ; along the middle with a longitudinal depression, which is deep and abruptly limited in front, so as to form a sort of fovea ; on the forehead with a small, quite distinct fovea. Thorax much narrowed from the base to the front, depressed along the middle, and with two punctures in the depression ; the surface, like that of the head, is black, but is nevertheless really covered by scales that appear to be very delicate and closely adherent to it. Elytra rather broad, each with three raised carinæ, and between each two of these with two series of coarse, nearly confluent impressions ; covered with a squamosity that looks like dirt. Four specimens.

This is very distinct from the species near which I place it on account of the strong carination of the alternate interstices.

46. **Epicærus hœgei,** sp. n.

Elongatus, niger, nudus, subopacus ; rostro prothoraceque dense punctatis, punctis minoribus majoribus intermixtis ; elytris ovalibus, seriatim subtiliter punctatis, apice setigeris.

Long. 12 millim.

Hab. MEXICO, Salazar (*Höge*).

This species, of which only a single worn example of the female sex has been obtained, was at first placed by me as a slight variety of *E. scutellaris* ; but on examination it appears that the scutellum is normal, and not exposed as in *E. scutellaris*. Moreover, the channel on the posterior part of the thorax is not to be detected, and the hind margin of the thorax is conspicuously raised. The elytra, too, in their posterior part are very distinctly setigerous, the setæ being fine, short, quite erect hairs, whereas in *E. scutellaris* only a few short depressed setæ can be detected. These characters leave no doubt that the two are distinct, notwithstanding their great general resemblance.

47. **Epicærus tristis.**

Epicærus carinatus, var., Boh. in Schönh. Gen. Curc. vi. 2, p. 285 [1].

Synthlibonotus tristis, Chevr. Bull. Soc. Ent. Fr. 1880, p. xlii [2].

Niger; prothorace elongato, lateribus rotundatis, fortiter rugoso-punctato, dorso longitudinaliter depresso; elytris seriatim fortiter punctatis.

Long. 10–11 millim.

Hab. Mexico, Jacale, Vera Cruz [1 2] (*Sallé*).

Rostrum canaliculate along the middle, with a small fovea at the summit of the channel, on each side a deep, moderately long impression; the surface somewhat closely punctate. Thorax elongate, rounded at the sides, with the greatest width in front of the middle; the surface rendered very uneven by coarse punctures, and also with a minute interstitial punctuation, somewhat shining, with a vague depression along the middle. Elytra elongate and narrow, black, but rendered somewhat dull by a thin adherent squamosity; with regular series of rather large distant punctures, and on the declivous portion with a very scanty setosity. Legs elongate. Six specimens.

There is not much difference between the sexes of this species, the female having the elytra only a little broader than the male, and the suture behind more prominent. I have examined a type from Chevrolat's collection communicated by Dr. Aurivillius.

48. **Epicærus concolor,** sp. n.

Niger, opacus, brevissime setosus; prothorace fortiter profunde rugoso-punctato; elytris seriebus punctorum minus remotorum.

Long. $9\frac{1}{2}$–10 millim.

Hab. Mexico, Las Vigas (*Höge*).

This is one of the species that, though covered with scales, still appears quite black. It is closely allied to *E. tristis*, but is readily distinguished by the much smaller, more numerous punctures in the series of the elytra. The rostrum is deeply sulcate along the middle in the male, more broadly and less deeply so in the female; the lateral impressions are elongate and distinct; and there is a rather large fovea between the eyes. Thorax elongate, very coarsely and deeply punctate, a little flattened and impressed along the middle in the male, but scarcely at all so in the female. Elytra quite dull, furnished with very regular series of rather fine punctures, with a short minute serial setosity on the interstices.

Five specimens have been obtained of this species. There is a good deal of difference between the sexes, the female being a much broader and more obese insect than the male and having the apical portion of the elytra more elongate and perpendicular.

49. **Epicærus carinatus.**

Epicærus carinatus, Boh. in Schönh. Gen. Curc. vi. 2, p. 285 (excl. var.) [1].

Hab. MEXICO, Vera Cruz [1], Jalapa, Oaxaca (*Höge*), Juquila (*Sallé*); GUATEMALA, Calderas, Dueñas (*Champion*).

This is a considerably smaller insect than *E. tristis*, with a rather shorter thorax and much coarser setosity, the latter not being confined to the elytral declivity but evident over the whole surface; the antennæ are only about half as thick, being unusually slender. The female has the elytra broader and shorter, more abruptly narrowed behind, and with the suture before the apex more prominent.

This species is very variable, if all the specimens I refer to it are really conspecific. The length varies from a little less than 8 to rather more than 10 millim.; the clothing, sculpture, and the sexual distinctions in the shape of the body also vary much. Possibly there may be more than one species amongst these specimens, but if so it will be no easy task to discriminate them. I have examined about twenty-five examples, including a typical specimen from the Schönherrian collection.

50. **Epicærus biformis,** sp. n. (Tab. V. fig. 17, ♀.)

Niger, fusco-squamosus, sæpe vage viridi-variegatus; prothorace conico-cylindrico; elytris subovatis, pone medium latioribus.

Long. 9–12 millim.

Hab. GUATEMALA, Purula, Sabo, Sinanja, San Juan, all in Vera Paz (*Champion*).

Rostrum broad, subparallel, densely squamose, scarcely impressed along the middle; eyes rather prominent, between them a very small fovea. Antennæ elongate, the second joint of the funiculus very long. Thorax elongate, a little narrowed in front, the surface not distinctly punctured but with vague coarse impressions concealed by the squamosity. Elytra at the base only as broad as the base of the thorax, but becoming broader to behind the middle, and in the female very broad, furnished with regular series of coarse depressions, densely squamose, and with scanty, short, coarse setæ.

This insect is very closely allied to *E. carinatus*, but is larger, and has the elytra much broader—especially in the female,—and the rostrum broader and less impressed. Fifteen specimens.

51. **Epicærus pavidus,** sp. n.

Niger, fusco-griseo-squamosus, elytris fasciis duabus transversis fuscis sat distinctis; rostro lato, fere inimpresso; prothorace minus elongato, fortiter punctato.

Long. 6–8 millim.

Hab. GUATEMALA, El Tumbador, Cerro Zunil, San Isidro, Las Mercedes, Volcan de Atitlan (*Champion*).

Thickly covered with scales, and bearing some short, clavate setæ. Second joint of

the funiculus very long. Rostrum very slightly impressed in the male, flat in the female; a fovea between the eyes, these latter not very prominent. Thorax about $1\frac{3}{4}$ millim. long and fully 2 millim. broad, a little rounded at the sides, the surface bearing large deep punctures which are much obscured by the squamosity. Elytra short, abruptly declivous behind, bearing series of deep, rather large punctures; covered with squamosity and with two darker irregular transverse bands, one just in front of the middle, the second behind it.

This does not seem to vary quite so much as some of the other species of the genus, but there is a considerable difference between the sexes, the female being broader and the prominence on the suture behind remarkably abrupt. About two dozen examples were obtained, all from the Pacific slope.

52. **Epicærus impar,** sp. n.

Gracilis, niger, opacus, subtiliter squamosus; prothorace elongato, angusto, obsolete rugoso; elytris seriatim sat fortiter, minus profunde punctatis.

Long. 9–10 millim.

Mas elytris subparallelis, humeris anterius prolongatis.

Fem. elytris subovatis, humeris omnino obtusis.

Hab. GUATEMALA, Totonicapam 8500 to 10,500 feet (*Champion*).

Black, rendered somewhat grey by a thin squamosity which is most conspicuous on the elytra. Rostrum with a broad, shallow, angular impression on the front, this in the male being rather deeper and canaliculate all along the middle; at the summit of the impression there is a distinct fovea; the surface is rather finely punctate, and bears a setose squamosity. Thorax elongate, narrowed in front, the surface rendered uneven by coarse, very shallow depressions, the disc slightly deplanate; closely and finely punctate and clothed with depressed setæ. Elytra with series of moderately large, distant, shallow punctures, clothed with thin, closely adherent scales, and bearing also a scanty, very short squamosity. Under surface setose; the first ventral suture slightly arcuate; the male with the base of the ventral surface rather deeply depressed.

This species is remarkable on account of the great difference in the form of the base of the elytra in the sexes. Only one male and two female examples of it were obtained.

EPAGRIUS.

Epagrius, Schönherr, Gen. Curc. vi. 1, p. 119 (1840).

Graphorhinus (part.), Lacordaire, Gen. Col. vi. p. 133[1].

Epicœri proxime affinis; differt scrobibus latioribus, tibiarum posticarum corbellis subcavernosis.

The species placed in this genus have the scrobes broader than in *Epicærus*, and usually their terminal portion is less definite, the upper border more especially being less sharply defined.

This is the genus which Lacordaire referred to [1], and—speaking of one of its species—said that it must be separated from *Epicærus* on account of the posterior corbels being open. The posterior corbels I consider, however, to be feebly cavernous, and I think this difference alone would not be sufficient to substantiate the generic separation proposed. I find, however, that the scrobes also are considerably broader in *Epagrius* than they are in *Epicærus*, and the two characters taken together separate the genera fairly well. There is, however, considerable variety in the genus as to each of the characters—*Epagrius albosquamosus*, for instance, having the cavernous corbels as distinctly developed as they are in some *Epicæri*,—so that the location of some of the species in the genus is not quite satisfactory.

As regards the synonymy it should be remarked that Lacordaire considered *Graphorhinus* to consist of *G. operculatus* and *G. vadosus*, Say; the latter species was, however, unknown to him and he drew his characters from the former. Horn has since pointed out that these characters do not agree with those of the latter species—viz. *G. vadosus*, Say; and as this is the type of *Graphorhinus*, Say, another name must be found for the *Graphorhinus* as known to Lacordaire. *Epagrius* having been founded by Schönherr on a species—as I believe—of the present genus, the name appears to be available, although it was treated by Lacordaire as merely a synonym of *Graphorhinus*. Unfortunately I have not been able to see an example of *E. nubilosus*, on which Schönherr founded *Epagrius*, so that my application of the name may possibly prove to be erroneous.

For the purposes of determining the species the genus may be considered to consist of seven groups, viz.:—

1. Obese, comparatively large insects with a more or less definite sulcus along the middle of the thorax. Species 1–5.
2. Smaller insects without groove, but with some punctures placed in front of one another on the middle of the thorax. Species 6–8.
3. Insects of moderate or large size, with a broad impression or deplanation on the middle of the thorax. Species 9–15.
4. An insect of rather large size, without depression or channel on the thorax, but with the scutellum distinctly visible at the base of the elytral suture. Species 16.
5. Quite small insects, squamose, but with the front of the rostrum exhibiting a large, angular, glabrous space. Species 17, 18.
6. Individuals of medium size, with the rostrum broader towards the tip; very coarsely sculptured; scape much clothed. Species 19.
7. Size very large. Species 20, 21.

Group 1.

1. **Epagrius operculatus.** (Tab. V. fig. 18.)

Graphorhinus operculatus, Say, Curc. N. Am. p. 9 [1]; Complete Writings, i. p. 268.
Epicærus operculatus, Boh. in Schönh. Gen. Curc. vi. 2, p. 286 [2].

Brevis, elytris latis, convexis; niger, squamulis margaritaceis vestitus, prothorace elytrisque æneo-nigris, variegatis, illo brevi, medio late sulcato, his seriebus punctorum remotorum, interstitiis haud convexis.
Long. 9–10 millim.

Hab. MEXICO [1], Las Vigas, Mexico city, Morelia (*Höge*), Toluca, Puebla (*Sallé*), Volcan Ixtaccihuatl (*Richardson*), Mineral del Jimopan [2].

Upper surface much covered with pearly scales. Rostrum short, with a well-marked punctiform fovea on the forehead, a channel along the middle reaching from the apex to near the fovea, but obsolete in its posterior part, and also with a rather small oblong depression on each side of the upper surface. Thorax short, $2\frac{1}{2}$ millim. long, and about $3\frac{1}{4}$ millim. broad on the middle, with a broad depression along the centre, which sometimes has a few coarse punctures in it; the middle is dark in colour, except that there are usually some pearly scales along the depression; on each side there is a rather vague vitta of similar scales; there are usually one or two vague depressions placed on each side at about half the length. Elytra short and broad, much covered with pearly scales, but with dark marks on the alternate interstices; these darker stripes have irregular edges—the inner stripe is elongate, extending beyond the middle, and the next one to it is still longer; on the outer interstices the dark marks are smaller; the punctures of the series are very definite, but not variolose; and the interstices are not at all convex. Under surface black, with some scanty pale scales. Legs short; anterior tibiæ not curvate externally.

This species, on the upper surface, is entirely covered with scales: the dark marks that look like denuded spaces being actually covered with dark, very thin scales, that adhere very closely to the surface. It is possible, I think, that the pallid scales may change colour during the life of the insect, either by friction or staining or both; if this be the case, but little importance can be attached to the colour of this insect and its allies.

Höge has sent a series of nearly thirty specimens from Las Vigas; these appear to be in very fresh condition, and vary but little, even in colour. The examples from other localities are few, and none of them are so prettily and definitely coloured, the pale scales being deficient in quantity and irregularly distributed. This species may be known from its allies, however, independently of colour, by the short broad form, and the small size of the punctures on the elytra. I can find no external sexual distinctions.

I have examined an authentic example of the species from Schönherr's collection.

2. **Epagrius gravidus,** sp. n.

Brevis, convexus, niger, vix subænescens; prothorace medio sulcato; elytris seriebus punctorum majorum, interstitiis vix convexis.
Long. 10–11 millim.

Hab. MEXICO, Aguas calientes, Durango city (*Höge*), Guanajuato (*Sallé*).

This insect is very closely allied to *E. operculatus*, but is entirely dark in colour; this point is perhaps of little importance by itself, but it is confirmed by the impressed punctures on the elytra being larger, and the interstices not quite so flat. The surface has a peculiar lustre caused by closely adherent scales of dark colour, like those on the darker parts of *E. operculatus*. The mesosternal interval between the middle legs seems to be slightly greater than it is in *E. operculatus*.

A specimen in Sallé's collection of this species was labelled by Sturm *Epicærus inflatus*, Sturm.

3. **Epagrius morosus,** sp. n.

Minus brevis, convexus, nigro-subæneus, alutaceus, parce vageque pallido-squamosus; prothorace medio sulcato; elytris seriebus punctorum impressis.
Long. 12 millim.

Hab. Mexico, Zacualtipan and Pachuca, both in Hidalgo (*Höge*), Guanajuato (*Sallé*).

Closely allied to *E. operculatus*, but rather larger and more elongate, the surface more æneous, and the pallid scales quite irregularly distributed. The punctures on the elytra are rather small as in *E. operculatus*. The hind margin of the second ventral segment is broadly and abruptly perpendicular, and it appears to be slightly raised, giving rise to the appearance of a transverse impression across the segment near the hind margin.

Four specimens; the one from Guanajuato differs from the others in having the interstices of the elytra slightly convex.

4. **Epagrius curvipes,** sp. n. (Tab. V. fig. 19.)

Minus latus et convexus, niger, supra vage griseo-squamosus; prothorace medio depresso; elytris seriebus punctorum impressis.
Long. 11 millim.

Hab. Mexico, Jalapa (*Ferrari-Perez*), Izucar (*Sallé*), Pachuca (*Höge*).

This species also is closely allied to *E. operculatus*, but is distinguished from all the allies by the comparatively more elongate thorax and the considerable curvature of the front legs. The median and lateral impressions on the rostrum are not very deep; the frontal fovea is moderately large. The thorax is 3 millim. long, and about $3\frac{1}{4}$ millim. broad on the middle; it has a broad depression along the centre, becoming obsolete before it reaches the extremity. The punctures of the series on the elytra are moderately large, the interstices not convex. The front tibiæ are much curved at the apex; the hind tibiæ are also somewhat curvate and bear white hair on the inner face towards the extremity.

Six specimens.

5. **Epagrius variolosus,** sp. n.

Brevis, convexus, niger, subænescens, squamulis pallidis, parcis subvariegatus; rostro medio late impresso; elytris punctis seriatis fere variolosis impressis.

Long. 11 millim.

Hab. Mexico, Amula and Xucumanatlan, both in Guerrero (*H. H. Smith*).

In form similar to *E. operculatus*, but with a short broad impression on the rostrum and with larger punctures on the elytra. Antennæ with slender, quite black, club. Rostrum short and broad, with a broad, deep, short impression on the middle, this impression limited in front by a sharply marked elevation separating it from the apical angular depression; on each side there is a rather deep, short depression, and on the forehead a moderately large fovea. Thorax short and broad, $2\frac{5}{8}$ millim. long by $3\frac{3}{8}$ millim. broad, a little narrowed in front, the disc depressed and with a few large punctures and an obsolete canaliculation in the depression, two or three obsolete punctures on each side. Elytra covered with scales which are separated by rather large intervals, these scales to some extent pallid and disposed so as to indicate very vaguely two transverse irregular dark marks, one across the middle, and another between this and the extremity; they bear very deep punctures, placed in series, and separated by somewhat convex spaces. Legs short, with much pallid setosity.

Two specimens.

Group 2.

6. **Epagrius paradæ,** sp. n. (Tab. V. fig. 20.)

Niger, subænescens, nitidus, squamulis pallidis variegatus; rostro crasso, profundius tri-impresso; prothorace disco foveolis magnis impresso; elytris punctis seriatis subvariolosis impressis.

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

Hab. Mexico, Parada (*Sallé*).

Antennæ with much white setosity, extending quite to the base of the moderately broad club, the latter black. Rostrum broad and very short, nitid, finely punctate, with only a very minute punctiform fovea on the forehead, but in front of the eyes with three very deep impressions—the lateral one on each side unusually deep, the median one remarkably broad and abruptly terminated in front in a rounded manner. Thorax short and broad, slightly narrowed in front, at the sides covered with pale squamosity, on the disc with some large punctures or depressions, two of which form along the middle an interrupted sulcus abbreviated behind. Elytra with series of rather large, moderately deep punctures, separated by somewhat convex interstices, and with a pallid squamosity arranged so as to leave a dark mark behind the middle, which mark is dilated and angular on the suture behind. Legs short.

We have received only two specimens of this distinct species. They are probably male and female, the latter being much the broader.

7. **Epagrius hystriculus,** sp. n.

Niger, subænescens, nitidus, squamulis pallidis variegatus; rostro crasso, tri-impresso, impressione mediana latissima; prothorace fortiter parum argute punctato; elytris seriatim punctatis, interstitiis biseriatim setosellis.
Long. $7\frac{1}{2}$ millim.

Hab. Mexico, Yolos (*Sallé*).

Rostrum short and broad, with a very deep lateral impression on each side, and a vague, very broad median one, this latter only sharply limited in front; the space between the eyes is transversely very slightly depressed, and bears a small fovea on the middle; eyes rather convex. Thorax nearly as long as broad, but little narrowed in front, with numerous large but vague punctures; covered with pallid squamosity at the sides, but only very scantily so on the upper surface, which is somewhat brassy. Elytra brassy, the sides narrowly, the apex broadly covered with pale squamosity, and with a pallid mark of this nature curving inwards from the shoulders; bearing suberect scanty setæ on the somewhat convex interstices between the large but rather indefinite punctures. Under surface covered with pale squamosity.

Distinguished amongst its allies by the setosity of the upper surface. Only two specimens have been received.

8. **Epagrius hispidus,** sp. n. (Tab. V. fig. 21.)

Minor, angustus, niger, squamosus, setis erectis tenuibus adspersus, elytris albido fuscoque variegatis.
Long. $5\frac{3}{4}$ millim.

Hab. Mexico, Ventanas in Durango (*Höge*).

Antennæ stout, the second joint of the scape scarcely so long as the first; club elongate, as long as the three preceding joints together. Rostrum broad and short, with two slightly elevated carinæ, diverging towards the front, the space between them very slightly depressed, and forming at the summit a longitudinal depression or channel. Eyes rather prominent. Thorax not transverse, subcylindric, very little narrowed in front, almost without sculpture but covered with scales, with a small, short depression on the disc. Elytra with regular series of closely-placed, elongate, deep but fine punctures, and with fine slender erect setæ, scattered amongst the large round scales with which they are covered; these scales are of white and of tawny colours disposed so as to form a vague pattern, the most definite part of which is a white band just behind the middle. One specimen.

This is a most difficult insect to place. It does not at all resemble any other species of this genus, but in appearance suggests a small *Epicærus*; the scrobes are, however, too broad and too vague behind for that genus.

Group 3.

9. **Epagrius constans,** sp. n. (Tab. V. fig. 22, ♂.)

Nigerrimus, subopacus, nudus; prothorace dorso leviter impresso, punctis impressis paucis irregulariter sitis; elytris punctis magnis, profundis, seriatim dispositis, ornatis.

Long. 10–12 millim.

Hab. GUATEMALA, Totonicapam 8500 to 10,500 feet (*Champion*).

Rostrum much broader towards the extremity, nearly flat, finely punctate, alutaceous, dull, the lateral impressions wanting, the frontal fovea minute but distinct. Thorax very coarsely punctate at the sides, the disc slightly depressed, the depression separated from each side by a broad slight elevation which is free from punctuation; in the depression there are twelve or fifteen punctures irregularly arranged; basal margin very distinct. Elytra with rows of very sharply defined, deep, rather large punctures; the surface between the punctures is almost destitute of sculpture, and there is not the slightest elevation of any of the interstices.

Mr. Champion obtained a series of about 100 examples of this species, from beneath stones on an exposed portion of the Central Cordillera of Guatemala. The males are more slender than the specimens of the other sex, and they have the base of the elytra more deeply emarginate, so that the shoulders project rather more in front. Except in these sexual distinctions the series exhibits very little variation.

10. **Epagrius simplex,** sp. n.

Niger, subopacus, nudus; prothorace punctulato, dorso deplanato, lateribus utrinque subimpressis; elytris seriatim sat fortiter punctatis.

Long. 10 millim.

Hab. GUATEMALA, Quezaltenango 7800 feet (*Champion*).

Rostrum moderately finely and closely punctate, feebly impressed on the middle of the anterior part, with a fovea between the eyes, the latter a little prominent. Thorax elongate, rounded at the sides, the disc somewhat deplanate, and with two vague irregular, oblique depressions one in front of the other; the surface is rather closely punctulate and at the sides is rugose; the flanks are deplanate. Elytra with regular series of moderately large remote punctures, the interstices not at all elevated, finely punctate. One specimen.

This species differs from *E. constans* in the sculpture, and in the absence of the large punctures on the disc of the thorax. From *E. opacus* and its allies it differs in the details of sculpture, and in the fact that the disc of the thorax is only imperfectly flattened and impressed.

11. **Epagrius opacus,** sp. n.

Niger, opacus, nudus; prothorace densissime subtiliter punctato-ruguloso, dorso late leviter depresso, utrinque longitudinaliter leviter impresso; elytris opacis, seriatim sat fortiter punctatis.
Long. 12 millim.

Hab. MEXICO, Chiapas (*Sallé*); GUATEMALA, Totonicapam 8500 to 10,500 feet (*Champion*), Tepan (*Conradt*).

Rostrum densely punctulate, feebly impressed along the middle, with a small fovea on the forehead. Thorax elongate, densely covered with fine rugosities, but without any definite punctures; the middle is occupied by a large deplanate space limited on each side by a rather narrow elevation, outside which there is another longitudinal depression of the surface. Elytra with the surface coriaceous, and with series of not very large punctures placed at a considerable distance from one another.

We have received four specimens of *E. opacus*—all males. They have the base of the elytra remarkably deeply emarginate and the shoulders considerably prolonged in front. A specimen from Tepan is possibly a female of this species; it is very much larger and broader, has the shoulders not produced, and the elytra smoother.

This is one of two species that were labelled *Synthlibonotus viator*, Chevr., in Sallé's collection.

12. **Epagrius jugicola,** sp. n. (Tab. V. fig. 23.)

Niger, opacus, nudus; prothorace densissime punctato-ruguloso, dorso late depresso, utrinque longitudinaliter impresso; elytris peropacis, coriaceis, seriatim fortiter punctatis.
Long. $13\frac{1}{2}$ millim.

Hab. GUATEMALA, Volcan de Agua 8500 to 10,500 feet (*Champion*).

I separate from *E. opacus* two specimens of the male sex that have the sculpture of the upper surface coarser, and the rostrum rather longer and more distinctly impressed along the middle. The peculiar fine rugulose sculpture of the elytra is very remarkable in this species, and the serial punctures are considerably larger than they are in *E. opacus*. The shoulders of the elytra are remarkably prolonged.

13. **Epagrius foveicollis,** sp. n. (Tab. V. fig. 24, ♀.)

Elongatus, sat nitidus, sublævis; prothorace dorso longitudinaliter impresso, in impressione bifoveolato; elytris seriatim subtiliter remote punctatis.
Long. 14–16 millim.

Hab. MEXICO, Tepansacualco (*Sallé*).

Rostrum short and broad, rather densely punctate, a little impressed in front and canaliculate in the impression; a small, distinct fovea on the forehead. Thorax elongate, a little narrowed in front; an elongate, vague impression on the middle, in which are placed two foveæ or very large punctures, one in front of the other; each side bears a short, irregular impression; the surface generally is rather dull, and when

examined under a strong lens appears very minutely coriaceous and sparingly and very finely, obsoletely punctulate. Elytra elongate, gently curvate at the sides, intensely black, somewhat shining, very minutely punctulate, and also with regular series of fine, remote punctures.

This very distinct species is remarkable on account of the great depth of the orbital impression round the front of the eye, and the extremely deep depression at the base of the under surface of the rostrum. Four examples have been received of it; the male is smaller and more slender than the female, and has the elytra more parallel and the shoulders slightly prolonged. The insect was labelled "*Epicærus foveicollis*, Deyr.," in Sallé's collection.

14. **Epagrius smithi**, sp. n. (Tab. V. fig. 25.)

Gracilis, nigerrimus, politus; prothorace medio depresso, utrinque subimpresso; elytris sublævigatis, posterius tenuiter setosellis.

Long. 11–13 millim.

Hab. Mexico, Omilteme in Guerrero 8000 feet (*H. H. Smith*).

Antennæ slender, black, the club clothed with cinereous pubescence. Rostrum shining, sparingly punctate, a little impressed along the middle, finely canaliculate, with a fovea on the forehead. Thorax elongate, slightly narrowed in front; closely and minutely punctulate, shining; an elongate depression on the disc, and another on each flank. Elytra polished and shining, with the merest traces of the usual serial punctures, the apical half feebly setose, and bearing a dark, thin squamosity that renders the surface dull without much affecting its colour.

About twenty examples of this very distinct species were procured by Mr. Smith. The males are more slender than the females, and have the front angles of the elytra a little more prominent, the suture of the elytra behind being less prominent.

15. **Epagrius albosquamosus.**

? *Synthlibonotus albosquamosus*, Chevr. Bull. Soc. Ent. Fr. 1880, p. xliii [1].

? *Synthlibonotus viator*, Chevr. t. c. p. xlii [2].

Niger, tenuiter setoso-squamosus; prothorace dorso late impresso, lateribus utrinque longitudinaliter late subimpressis; elytris seriatim sat fortiter punctatis.

Long. 12–14 millim.

Hab. Mexico [1 2], Chiapas (*Sallé*); Guatemala [2] (*Sallé*), Tepan (*Conradt*), Dueñas, Calderas (*Champion*); Costa Rica (*van Patten*).

Rostrum moderately broad, closely and rather coarsely punctate, nearly flat in the female, slightly impressed in the male, with a small slender fovea on the forehead; eyes convex. Thorax rather elongate, much narrowed in front, densely and finely punctate-rugose, the larger part of the middle occupied by a broad, rather deep depres-

sion, and each side broadly but slightly longitudinally impressed. Elytra with regular series of somewhat large and distant punctures.

Chevrolat's description [1] is so full of clerical and grammatical errors as to be unintelligible; but it may possibly refer to this insect. The Guatemalan specimens of the species in Sallé's collection are labelled with the name I adopt, as is also an example from Chevrolat's collection communicated by Dr. Aurivillius. Sallé's pair from Chiapas, on the other hand, are ticketed *S. viator*, Chevr., and an example in my own collection is named "*Graphorhinus planidorsis*, Jekel." The species is apparently rare, and we have received but one or two examples from each locality. I treat them all at present as belonging to one species; but if this be the case it must be a very variable one. There is, however, no difficulty in identifying it, as none of the forms come very near to any other species.

The description of *Synthlibonotus viator*, Chevr., is also unintelligible; but a specimen communicated by Dr. Aurivillius from Chevrolat's collection is, I believe, a variety of the male of his *S. albosquamosus*.

Group 4.

16. **Epagrius præteritus,** sp. n. (Tab. VI. fig. 1.)

Latus, niger, subnitidus, fere nudus; prothorace subtransverso, irregulariter haud fortiter punctato; elytris seriatim obsolete foveolatis, interstitio tertio subelevato.
Long. 12 millim.

Hab. Mexico, Chiapas (*Sallé*).

Rostrum short, unimpressed in front, shining black, rather finely punctate, the eyes not convex. Thorax $2\frac{5}{8}$ millim. long, $3\frac{1}{4}$ millim. broad, slightly narrowed in front; at the sides somewhat coarsely and irregularly, on the disc more finely, punctate. Elytra with each shoulder and base a little rounded, the scutellum quite distinct; the sculpture is obsolete, as if worn down, and consists of rows of subobliterated, remote, moderately large punctures; the third interstice is obscurely elevated for the greater part of its length. First ventral suture greatly obliterated, the second, third, and fourth sutures extremely deep. One specimen.

This is a most peculiar species that may possibly prove to belong to the 'Otiorhynchinæ alatæ;' it has the scutellum and base of the elytra formed as in some members of that division, the mesosternum short, and the side-pieces divided so that the suture extends to the front. If *E. præteritus* proves to be provided with wings it will probably require a new genus for its reception; the insect has, however, more the appearance of *E. albosquamosus* than of any other form, and I place it provisionally near that species, though, as the two come from the same locality, it is possible the resemblance between them may be of the kind called mimetic.

Group 5.

17. **Epagrius lævinasus,** sp. n.

Parvus, piceus, fusco-squamosus, parce hispidus, parum variegatus, antennis tarsisque rufis; rostro anterius lævigato, inter oculos canalicula impressa.

Long. $6\frac{1}{4}$ millim.

Hab. GUATEMALA, Totonicapam 8500 to 10,500 feet (*Champion*).

This species agrees closely in its structural characters with *E. pumilus*, and, like it, has a large smooth surface on the anterior aspect of the rostrum. *E. lævinasus* has, however, the anterior face of the rostrum broader, and a distinct longitudinal channel between the eyes, which are convex. The squamosity of the elytra is dark, and the pale marks are therefore more conspicuous; the interstices are very broad and not in the least convex. The scrobes of the rostrum are broader than in *E. pumilus*, and the cavernosity of the hind corbels even more obscure. Two specimens.

18. **Epagrius pumilus,** sp. n. (Tab. VI. fig. 3.)

Minutus, niger, squamosus, parce hispidus, parum variegatus, antennis tarsisque rufis; rostro anterius lævigato.

Long. $4\frac{3}{4}$ millim.

Hab. GUATEMALA, Dueñas (*Champion*), Tepan (*Conradt*).

Antennæ slender; second joint of funiculus distinctly longer than the first; club dusky red, rather elongate. Rostrum rather broader towards the front, the anterior part free from scales, the vertex and the forehead squamose, the eyes scarcely convex. Thorax not quite so long as broad, a little rounded at the sides and a good deal narrowed in front, coarsely punctate, but the punctures concealed by the squamosity; this is slightly variegate, being mostly of a sordid grey colour, while down the middle, and again on each side, there are some white scales. Elytra a little rounded at the sides, the base quite truncate, furnished with regular series of fine, definite punctures, the interstices just perceptibly convex, squamose, and with numerous, rather short, upright setæ; the squamosity is of a sordid grey colour, and there are some obscure, apparently variable white marks. The legs are slender, the middle coxæ only minutely separated. Six specimens. The female is rather broader than the male.

In this species the corbels of the hind tibiæ appear to be open; but on careful examination it can be seen that there are two series of ciliæ at the apex, separated by a very minute space.

Group 6.

19. **Epagrius inæqualis,** sp. n. (Tab. VI. fig. 5.)

Grosse sculpturatus, squamosus, elytris pone medium fascia angulata albida; oculis convexis; prothorace in medio profunde biimpresso.

Long. 11–13 millim.

Hab. Guatemala, Dueñas, Capetillo, Zapote, Panajachel (*Champion*), Chimaltenango (*Conradt*); Honduras (*Sallé*); Costa Rica (*van Patten*); Panama, Bugaba (*Champion*).

Rostrum broader towards the apex, broadly depressed along the middle; eyes placed near the thorax, very convex; antennæ with the scape setose and squamose. Thorax rounded at the sides, the surface rendered uneven by large vague depressions, and with two large impressions placed along the middle, one in front of the other and more or less confluent. Elytra truncate at the base, with the humeral angles a little prominent and directed very slightly outwards, uneven, with coarse, closely-placed depressions; covered with a sordid squamosity of minute densely-placed scales, with an angulate whitish band across the middle, and with a more indistinct similar band before the middle, and another behind it. Legs squamose; posterior tibiæ without mucro at the hind angle.

We have received twenty-four examples of this very distinct species, several of them being more or less abraded and dirty. Although it looks as if it should be placed in a distinct genus, I can find no good characters to separate it; the front of the prosternum is somewhat incrassate and dependent, so as to form a sort of lip, but this character appears also, though to a less extent, in some other species.

Group 7.

20. **Epagrius samson,** sp. n. (Tab. VI. fig. 2, ♀.)

Maximus, niger, elongatus, elytris seriatim foveolatis, foveolis squamosis; tibiis plus minusve griseo-squamosis.

Long. 17–27 millim.

Hab. Mexico, Yucatan (*Sallé*), Temax in North Yucatan (*Gaumer*); Guatemala, El Tumbador, Volcan de Atitlan (*Champion*).

Rostrum distinctly broader at the tip, deeply and broadly impressed along the middle; lateral impressions deep, rather short; eyes convex, surrounded in greater part by a very deep sulcus. Thorax elongate, nearly straight at the sides behind, rounded and much narrowed in front; the surface minutely punctate, with a few remote larger punctures, and with a more or less interrupted and indistinct groove along the middle. Elytra elongate, marked with series of foveæ or very large punctures, which are smaller on the apical parts, the transverse interstices as distinct as the longitudinal ones; the foveæ are partially filled with small scales, and there is a minute, scanty setosity on the interstices. Posterior tibiæ armed at the apex with a large mucro. Fourteen specimens.

This species varies a great deal in size, and considerably in form and sculpture; the base of the elytra is more emarginate in some examples, so that the shoulders are more acuminate and prominent in front.

21. **Epagrius grandis,** sp. n. (Tab. VI. fig. 4.)

Major, latus, niger, opacus, rugosus, squamulis minutis parcius vestitus, capite supra oculos transversim depresso.

Long. 18 millim.

Hab. Mexico, Mochitlan in Guerrero (*Baron*).

Rostrum parallel, deeply canaliculate along the middle, the channel extending to the transverse depression at the back of the head; lateral impressions deep, slender; eyes quite prominent. Thorax very coarsely rugose, canaliculate along the middle; the sides nearly straight from the base to near the front, then very abruptly narrowed. Elytra very broad, convex, nearly twice as broad as the thorax; sculptured with very large vague depressions, the interstices between these very irregular and indistinct, the third more raised than the others for the greater part of its length, the fifth and seventh also somewhat raised; the surface studded with minute granules, and also with very small, squalid scales. Hind tibiæ furnished at the apex with a slender mucro, concealed by a tuft of hairs.

I have seen only one specimen of this very distinct species.

CACOCHROMUS, gen. nov.

Scrobes lateraliter sitæ, curvatæ, latæ, oculum vix attingentes. Antennæ scapo sat elongato, prothoracis marginem anteriorem attingente.

It is necessary to separate *Epicærus carteri*, Chevr., from *Epicærus* as here treated. The scrobes are broad, and do not quite reach the eye, and the scape is longer than it is in any *Epicærus*.

1. **Cacochromus carteri.** (Tab. VI. fig. 6.)

Epicærus carteri, Chevr. Bull. Soc. Ent. Fr. 1880, p. lxii [1].

Hab. Guatemala [1] (*Sallé*), Escuintla (*Conradt*); Costa Rica (*van Patten*).

We have received five examples of this conspicuous insect. Both sexes appear to be represented, and if so the male differs from the female only by being rather more slender and parallel.

BRADYRHYNCHUS, gen. nov.

Rostrum brevissimum, medio haud impressum; oculi convexi. Tarsi parvi; tibiæ posteriores truncatura apicali parva, extus simplices nullo modo incrassatæ, angulo inferiore mucrone tenui armato.

This genus is proposed for three species, which it is better to separate from *Epicærus*

on account of the above characters. Very few Otiorhynchidæ have so short and broad a rostrum. The eyes are surrounded by a slender depression, and close to them on each side there is a short depression to represent the lateral groove of *Epicærus*, but no median groove. The absence of any incrassation of the hind tibia external to the ciliæ would cause the insect to be placed in Lacordaire's series with open corbels; the insertion of the tarsi, according to Horn's phraseology, is intermediate between terminal and lateral. The scrobes are deep, arcuate, and moderately broad and definite, and the pterygia—although the rostrum is so broad—can be seen from the front.

Bradyrhynchus is the nearest approximation in our fauna to the N. American *Graphorhinus* as defined by Horn and Leconte.

1. **Bradyrhynchus brevirostris,** sp. n. (Tab. VI. fig. 7.)

Brevis, convexus, niger, parce griseo-squamosus, antennarum scapo rufo-piceo; rostro brevissimo, fere æquali, fronte foveolata; prothorace parce punctato.

Long. 6 millim.

Hab. Mexico, Salazar (*Höge*).

Club of antennæ acuminate-oval, not elongate. Rostrum extremely short and broad, its anterior face a little uneven, but without groove; the forehead bears a well-marked fovea, and there is a short lateral depression on each side close to the front of the eye. Thorax strongly transverse, rounded at the sides and narrowed in front, black, with a few pale, squalid scales; along the middle with some large punctures, those towards the base being united to form an abbreviated channel. Elytra with regular series of rather large punctures. Tarsi small.

We have received eight specimens of this species; they are all alike, and I do not think the black squalid condition of the surface is due to abrasion.

2. **Bradyrhynchus tolucæ,** sp. n.

Brevis, convexus, niger, fusco-squamosus, griseo-variegatus; rostro brevissimo, medio haud sulcato, fronte foveola parva; prothorace disco multipunctato.

Long. 6 millim.

Hab. Mexico, Toluca (*Sallé*).

Antennæ short; scape piceous at the base; club acuminate but short. Rostrum very short and broad, with two vague obsolete impressions on the front surface, the lateral depression on each side in front of the eye deep though short; the frontal fovea distinct. Thorax transverse, covered with fuscous squamosity, with a vague paler vitta on each side, some large punctures scattered on the upper surface. Elytra with regular series of rather fine punctures, covered with fuscous squamosity, with some white marks near the shoulder and a common **Y**-like white mark on the declivity. Two specimens, both in very decayed condition.

3. **Bradyrhynchus rugicollis,** sp. n.

Brevis, convexus, niger, griseo-squamosus, antennarum scapo rufo; rostro brevissimo, fronte transversim depressa; prothorace rugoso-punctato.
Long. 6 millim.

Hab. Mexico, Guanajuato (*Sallé*).

Head and rostrum separated by a broad vague depression; front of the latter without distinct impressions, even the lateral depressions vague; club of antenna elongate oval, acute. Thorax rugose-punctate, but the sculpture concealed by much squamosity. Elytra with series of not very large, distant punctures.

We have received only one badly-preserved specimen of this species. Although closely allied to *B. brevirostris*, it may be easily distinguished by the transverse depression across the front of the head.

SCIORHINUS, gen. nov.

Rostrum latum, brevissimum, pterygiis superne omnino occultis. Oculi perconvexi.

Rostrum as broad as long, separated from the head by a broad depression between the eyes; the front of the rostrum has a greater extension laterally than the pterygia, so that these are not at all visible from the front; eyes extremely convex; scrobes deep, lateral, strongly arcuate, so that their rather slender terminal part is directed downwards; scape short, smooth, and slender, except at the apex, which is much swollen. Mentum rather large, filling the buccal cavity and quite concealing the palpi. Mandibles very stout, the scars thick and prominent. Prosternum very much shorter than the pronotum. Metasternum extremely short. Corbels of hind tibiæ rather small, furnished with two very distinct series of apical ciliæ, separated by a slender glabrous space. Second ventral segment quite short.

The broad flat face of the rostrum, quite concealing the pterygia from the front, separates the single species for which this genus is formed from *Epicærus* and *Bradyrhynchus*. The insect has somewhat the facies of the genus *Strophosomus* of the European fauna.

1. **Sciorhinus pictus,** sp. n. (Tab. VI. fig. 8.)

Dense squamosus, hispidus, antennis tarsisque rufis; elytris brevibus, convexis, albido-variegatis.
Long. 4–5 millim.

Hab. Mexico, Chilpancingo 4600 feet, Amula 6000 feet, both in Guerrero (*H. H. Smith*).

Short and convex, densely covered with variegate scales, and bearing numerous fine erect setæ. Rostrum very short and broad, broader in front, unimpressed; seen quite from the front, nearly the whole of its anterior part seems to form a deplanate process, that is somewhat acuminate above, and is less densely squamose than the rest of the

surface; the eyes very prominent, between them a broad depressed space. Club of the antennæ elongate; second joint of the funiculus not longer than the first. Thorax elongate, rounded at the sides and narrowed in front, coarsely punctate, squamose, the clothing dark on the middle, pallid on the sides. Elytra short, convex, with truncate base, striate, the interstices not quite flat, densely covered with overlapping scales, and with numerous fine, erect, truncate setæ; from each shoulder there proceeds an irregular pallid mark, broken in an angular manner; behind the middle there is an irregular pallid transverse fascia, and on the declivous apex two or three small pallid marks. Twelve specimens.

Some examples are smaller and more slender than others, and these are probably males.

CLEISTOLOPHUS, gen. nov.

Scutellum ad apicem processu transverso instructum. Femora anteriora subtus denticulata.

The insects forming this genus have the facies of the elongate species of *Epicærus*, but they are well distinguished by the two characters given above. The very peculiar form of the scutellum is, so far as I know, unique in the Coleoptera: its use is very evident, for although the wings are completely rudimentary, the elytra in *Cleistolophus* are not soldered, but locked together by the transverse process that is placed on the top of the scutellum; this process can always be seen just behind the base of the elytra, where it forms a sort of peninsula, the extreme base of the wing-case extending in front of it on each side, but not quite meeting the similar projection from the other wing-case. The posterior femora are unarmed, but the anterior pair bear a distinct tooth, and the intermediate pair a tubercle beneath. The other characters are the same as in the typical forms of the genus *Epicærus*.

1. **Cleistolophus subfasciatus,** sp. n.

Oblongo-ovalis, parum elongatus, squamosus, colore variabilis, vel viridescens vel grisescens; rostro brevi, apice subattenuato, anterius fere inimpresso; prothorace transverso.

Long. 7 millim.

Hab. Mexico, Playa Vicente, San Andres Tuxtla (*Sallé*); Guatemala (*coll. Sharp*); Honduras (*Dyson*); Nicaragua, Chontales (*Belt*).

Rostrum distinctly narrowed at the tip, its anterior face rather convex and scarcely at all impressed on the middle; a fine channel between the eyes, which are rather small and but little convex. Thorax broader than long, the sides nearly straight behind the middle, much narrowed in front, the surface densely squamose, with scanty, indistinct, not coarse punctuation. Elytra not elongate, truncate at the base, with a very slight constriction immediately behind the basal margin, densely squamose and bearing series of fine punctures.

This species, although very variable, may always be distinguished from *C. instabilis* and *C. similis* by the form of the thorax. Most of the examples I have seen are labelled "*Epicærus subfasciatus*, Chevr." In some individuals there are indications of two vague dark fasciæ across the elytra; but in the majority of specimens these are not evident. I have seen but few examples, all differing more or less from one another. I cannot identify the sexes with certainty.

2. **Cleistolophus similis.**

Epicærus similis, Chevr. Bull. Soc. Ent. Fr. 1880, p. lxi [1].

Elongatus, niger, griseo-squamosus; prothorace subconico, squamoso, obsolete punctato.

Long. $8\frac{1}{2}$–15 millim.

Hab. MEXICO, Tapachula in Chiapas (*Höge*); BRITISH HONDURAS (*Blancaneaux*); GUATEMALA (*Salvin*, *Sallé*), Zapote (*Champion*); COSTA RICA [1] (*van Patten*), Caché (*Rogers*).

This is a very variable species. It is closely allied to *C. instabilis*, but is more densely covered with scales, and the punctuation of the thorax is quite indistinct; usually the punctures of the elytra are fine, but when the example is deprived of scales these punctures appear considerably larger, though not so large as they are in *C. instabilis*; the scales are lighter in tint than those of *C. instabilis*, and some of them —especially about the legs and the underside of the head—have a feeble metallic tint. The rostrum is only feebly impressed on the middle, and towards the tip is glabrous and shining; there is a minute fovea between the eyes. The thorax is not so long as broad and is narrowed towards the front; it is squamose, and very indistinctly punctured. The elytra are squamose and bear series of fine punctures.

I have before me a series of about forty examples that I assign to *C. similis*; they vary greatly in size, and a good deal in other points, such as the colour of the squamosity and the size of the punctures on the thorax and elytra, but I can find no means of distinguishing more than one species. The smaller examples very much resemble some of the varieties of *C. subfasciatus*, while, on the other hand, some of the larger specimens come very near to *C. instabilis*.

A specimen of *Epicærus similis*, from Costa Rica, communicated from Chevrolat's collection by Dr. Aurivillius, agrees exactly with examples our editors have received from Costa Rica. An example in my own collection was ticketed *Epicærus mopsurus*, Jekel.

3. **Cleistolophus instabilis,** sp. n. (Tab. VI. fig. 9.)

Elongatus, niger, plus minusve fusco-squamosus; prothorace subcylindrico vel subconico, fortiter punctato, antice leviter angustato; rostro in medio late impresso.

Long. 9–14 millim.

Hab. GUATEMALA, Senahu, San Juan, Chiacam, San Géronimo, all in Vera Paz (*Champion*), Coban (*Conradt*).

Scape of antennæ slender; second joint of funiculus elongate, longer than the first joint. Rostrum parallel, a little carinate on each side in front, and depressed between the carinæ, a small fovea between the eyes. Thorax nearly or quite as long as broad, very coarsely and irregularly punctate. Elytra elongate and slender, with very large punctures occupying the greater part of the surface, these becoming finer behind; the squamosity rather scanty, except on the apical part. Legs stout, the femora with but few scales.

We have a series of eighteen examples to represent this species; it appears to be distinct from *C. similis*, though both are variable. The male is more linear in form than the female, and in this latter sex there is a slight longitudinal incrassation along the middle of the apical portion of the last ventral plate.

BUFOMICRUS, gen. nov.

Corpus breve, squamosum. Antennæ scapo modice elongato, oculorum marginem posteriorem attingente. Scrobes profundæ, angustæ, laterales. Femora, vel omnia vel anteriora, dentata. Metasternum brevissimum.

The insects forming this new genus are remarkable on account of their broad, subcircular elytra. The mentum is large and completely conceals all the palpi. The rostrum is short, not any broader at the tip; the scrobes are deep, curvate, entirely lateral, sharply defined; the eyes are convex. The anterior coxæ are placed very near the front of the prosternum, which is not incrassate. The middle legs are but slightly separated and the metasternum is remarkably short. The corbels of the hind tibiæ are feebly cavernous. The claws are free.

These characters bring the genus very near to *Epicærus*, but the dentate femora, in conjunction with the peculiar shape of the body, are sufficient to distinguish it. One of the three species I place in it—*B. cristatus*—may have to be separated.

1. **Bufomicrus squamosus,** sp. n. (Tab. VI. fig. 10.)

Dense griseo fuscoque squamosus, breviter setosus, elytris transversim subvariegatis; prothorace minus elongato; femora omnia dentata.

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

Hab. British Honduras (*Blancaneaux*); Guatemala, Teleman, La Tinta, Chacoj, Tamahu, San Juan, Panima, all in Vera Paz (*Champion*).

Scape of antennæ clothed with scales and hairs; second joint of the funiculus slightly longer than the first. Rostrum and head densely clothed with scales, nearly flat, the former very slightly concave in front, the latter with a minute fovea between the eyes; the eyes slightly convex. Thorax not so long as broad, much rounded at the sides, very closely covered with scales that conceal the sculpture. Elytra very short and broad, at the base only as broad as the thorax, then becoming rapidly broader, densely covered with scales, and bearing numerous short, semi-erect setæ; the scales are usually

variegate, forming two or three vague, slightly darker, transverse fasciæ, but sometimes they are nearly or quite unicolorous; there are regular series of deep punctures—these, when the scales are intact, appear rather small, but when the scales are removed they are seen to be large and each to be separated from the one behind it by only a slender, transverse interstice. Legs squamose, the teeth on all the femora acute.

A good series was obtained of this species, all from the Atlantic slope, those from Guatemala coming from the Polochic valley.

2. **Bufomicrus globipennis,** sp. n.

Dense griseo-squamosus, subviridescens; prothorace elongato; femora omnia dentata.
Long. 6 millim.

Hab. GUATEMALA, Yzabal (*Sallé*).

This species is closely allied to *B. squamosus*, but can be recognized by the more elongate thorax, the more convex eyes, and by the setæ on the elytra being depressed and differing very little from the scales, so that at first sight they escape detection; the rostrum is flat in front, without depression or fovea.

I have seen only two examples of *B. globipennis*; they differ a little from one another in colour, and this character is probably of but little importance.

3. **Bufomicrus cristatus,** sp. n. (Tab. VI. fig. 11.)

Dense fusco-squamosus, parce hispidus, elytris cristis brevibus ornatis; femora intermedia et posteriora mutica.
Long. 6 millim.

Hab. GUATEMALA, Sinanja (*Champion*).

Scape of antennæ sinuous, slender and glabrous at the base, much thicker and clothed at the apex. Eyes rather convex, a fovea between them. Thorax elongate, rounded at the sides and narrowed in front, the surface apparently coarsely sculptured, but completely covered with squamosity. Elytra covered with dark squamosity, which is very obscurely variegate, bearing erect clavate setæ, and with several short, slight, cristiform elevations. Tibiæ rather slender, hispid. The front femora with a large angular dilatation beneath.

Only one specimen was procured of this remarkable species; it differs from its congeners not only in the unarmed posterior femora, but also in the fact that the nasal plate is surrounded by a curvate, glabrous, explanate space or margin; the scrobes, too, are broader.

MASEORHYNCHUS, gen. nov.

Femora anteriora tuberculata. Oculi convexi, prope prothoracis marginem anteriorem siti.

The insect I separate under this generic name differs from *Bufomicrus* in numerous

minor characters, in addition to the two mentioned above. The elytra are not so abbreviate; the rostrum is rather longer and not at all attenuate in front; the metasternum, though quite small, is not so short; and the posterior tibiæ have a large truncature outside the corbels, the truncature being densely setose. The scrobes are quite lateral and remarkably definite, extending quite to the underside of the anterior part of the eye, which they touch for some distance. The impressions on the under surface of the rostrum are remarkably deep. There is a feeble constriction of the vertex immediately behind the eyes.

1. **Maseorhynchus hondurensis,** sp. n. (Tab. VI. fig. 12, ♀.)

Convexus, griseo-squamosus et setosus; prothorace convexo, æquali, anterius rotundato-angustato.
Long. 6–9 millim.

Hab. British Honduras, Belize, R. Sarstoon, R. Hondo (*Blancaneaux*).

Var. Squamulis pallide subviridescentibus.

Hab. Guatemala, Panzos in Vera Paz (*Champion*).

Rostrum parallel, its anterior surface nearly flat, being scarcely at all impressed along the middle; eyes very prominent; first and second joints of funiculus elongate, the latter very slightly the longer. Thorax large, curvate at the sides and greatly narrowed in front, sparsely punctate, the sculpture quite concealed by the squamosity. Elytra truncate at the base, with a very obscure elevation forming a sort of basal margin; covered with densely crowded scales which are loosely fixed to the surface and very easily removed, also with numerous short, coarse, pallid, subdepressed setæ; bearing regular series of large punctures that are much obscured by the scales. Six specimens.

The male of this species is apparently considerably smaller and more slender than the female. Only one example of the elegant variety from Guatemala was obtained; it may possibly prove to belong to another species, as the scales on the elytra are larger in size and not so crowded together, as well as different in colour.

MESTORUS.

Mestorus, Schönherr, Gen. Curc. v. p. 910 (1839).

This genus was established for a single species from Mexico; to this, two others from the same country are now added. All appear to be very rare insects.

1. **Mestorus adumbratus.**

Mestorus adumbratus, Fahr. in Schönh. Gen. Curc. v. p. 911 [1].

Hab. Mexico [1], Juquila (*Sallé*).

2. **Mestorus crinitus,** sp. n. (Tab. VI. fig. 13.)

Dense griseo-squamosus, setis erectis adspersus; oculis convexis; prothorace elongato, subcylindrico, parce punctato; elytris convexis, regulariter seriatim punctatis.
Long. 6–8 millim.

Hab. Mexico (*Sallé, ex coll. Sturm*), Dos Arroyos in Guerrero (*H. H. Smith*).

Antennæ with the scape squamose; second joint of the funiculus slightly longer than the first. Rostrum very densely squamose, with erect setæ or scales near the inner margin of each eye. Thorax quite as long as broad, very slightly dilated at the sides in the middle, and scarcely narrowed in front, bearing distant punctures which are almost concealed by the dense squamosity. Elytra densely squamose, and bearing erect white setæ; convex and much rounded at the sides, greatly broader than the thorax, with very regular series of fine but deep punctures. Legs squamose and setose. Front femora angulate beneath.

This species may be readily distinguished from *M. adumbratus* by the elongate thorax, by the eyes placed nearer to the front margin of the latter, and by the more distinctly dentate front femora. I have seen only two examples, one of which is a very well-preserved specimen from Sturm's collection, in which it was labelled "*Lagostomus crinitus*, mihi." Our figure represents this individual. The scales are very little variegate in this species.

3. **Mestorus gracilis,** sp. n.

Angustus, dense albido-squamosus, setis erectis adspersus; oculis fortiter convexis; prothorace elongato, cylindrico; antennis pedibusque rufo-obscuris, albido-squamosis.
Long. $4\frac{1}{2}$ millim.

Hab. Mexico, Matamoros Izucar (*Höge*).

Rostrum broad and short, flat in front, canaliculate along the middle; eyes rather small but very prominent; antennæ short. Thorax quite as long as broad, straight at the sides and very slightly narrowed in front, coarsely sculptured, but covered with nearly white squamosity. Scutellum concealed. Elytra covered with white squamosity that nearly conceals the sculpture; rather slender; the erect setæ quite white, rather long, and almost transparent. Legs thick. One specimen.

The slender form and invisible scutellum distinguish this species from *M. crinitus*; besides this, it has no trace of armature on the front femora.

EUMESTORUS, gen. nov.

Rostrum breve, crassum; scrobes laterales profundæ, sub capite subtus ductæ; caput post oculos constrictum; femora anteriora tuberculata.

The insects of this genus may be readily distinguished by the head being constricted immediately behind the convex eyes, and by the scrobes being more prolonged beneath the head than they are in the allied genera. The rostrum is quadrate, separated from

the head on the under surface by a deep depression; the mandibular processes are very prominent, the palpi completely concealed. The prosternum is emarginate beneath, so that the anterior coxæ are placed close to the front. The metasternum is very short. The second ventral segment is as long as the following two segments together. The corbels of the posterior tibiæ are cavernous in a marked degree, there being a conspicuous apical truncature between the two rows of ciliæ external to the insertion of the tarsus.

1. **Eumestorus luctuosus.** (Tab. VI. fig. 14, ♀.)

Epicærus luctuosus, Chevr. Bull. Soc. Ent. Fr. 1880, p. lxii [1].

Gracilis, niger, cretaceo-pictus; capite inter oculos canaliculato-foveolato.
Long. 7–8 millim.

Hab. Mexico, Yucatan (*Pilate* [1]), Temax in North Yucatan (*Gaumer*).

Antennæ rather short; first and second joints of the funiculus equal in length, not elongate; club slender, acute. Rostrum very short, deeply triangularly emarginate in front; the eyes are convex, rather large, and encroach in front somewhat on the front of the rostrum, between them is an elongate depression. The thorax is elongate, slightly narrowed in front and a little curvate at the sides; it is rather coarsely and sparingly punctate, with a pale vitta along the middle, and a more obscure one on each flank. The elytra are rather broader than the thorax, and are coarsely and somewhat irregularly marked by series of distant impressions; they are covered in larger part by pale squamosity having a very chalky appearance, and leaving some large marks, the most conspicuous of which are an angulate band across the middle and an oblong or oval mark at the base at each side; the whole of the upper surface bears scanty, very minute depressed setæ, the size of the setæ being less than that of the scales.

A good series was obtained of this species, as well as of the next; the female is usually larger and broader than the male, and has the suture of the elytra at the declivity more prominent. We figure a specimen of this sex.

A type from his collection has enabled me to determine Chevrolat's description as belonging to this species.

2. **Eumestorus proximus,** sp. n.

Gracilis, breviter setosus, niger, griseo-squamosus, in elytris nigro-variegatus; capite inter oculos profunde impresso.
Long. 6–7 millim.

Hab. Mexico, Temax in North Yucatan (*Gaumer*).

This insect is excessively similar to *E. luctuosus*, but differs in several respects, and as a fair series was obtained there can be little doubt that the two are quite distinct. *E. proximus* has the head more distinctly constricted behind the eyes; the setosity of the upper surface erect and distinct, though quite short; and the markings of the upper

surface less abrupt and distinct. The rostrum is very short, and the margin of its apical notch is strongly raised; there is a depression between the eyes that becomes broader but more indefinite anteriorly, and is abruptly limited a little in front of the apical notch by a slight transverse elevation. The mark at the shoulder of the elytra is rather small, and in specimens that are not abraded is seen to consist of two smaller dark marks separated by the width of one of the interstices. The difference between the sexes is the same as in *E. luctuosus*.

EPITOSUS, gen. nov.

Antennæ scapo elongato, prothoracis marginem anteriorem superante; oculi convexi; scrobes laterales, latissimæ, posterius evanescentes; femora dentata.

Rostrum moderately long, slightly broader towards the tip. Scrobes entirely lateral, sharply limited in front, but becoming rapidly extremely broad and vague. Mentum large, entirely filling the buccal cavity. Metasternum quite short, its episterna as well as the mesothoracic epimera invisible. Apices of the posterior tibiæ a little enlarged, feebly cavernous.

This genus may be readily recognized: the very broad vague scrobes and the elongate scape suggest that it may be considered to have some affinity, or propinquity, with the Otiorhynchides proper; but as the position of the scrobes is entirely lateral and the direction of their lower border is inferior, I place the genus near *Epicærus* without hesitation. The metasternal side-piece is quite concealed, the elytron extending to its inner suture: in one or two specimens I think I see the mesothoracic epimeron as a small piece of equilateral-triangular form.

1. **Epitosus boops,** sp. n. (Tab. VI. fig. 15.)

Angustulus, rugosus, squamulis griseo-viridescentibus minus dense vestitus, breviter hispidus; rostro canaliculato.

Long. 6–7 millim.

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

Antennæ elongate; scape slender, passing on to the front margin of the thorax; first and second joints of the funiculus elongate, the second slightly longer than the first. Rostrum rather long, canaliculate along the middle; eyes convex. Thorax elongate, rounded at the sides, much narrowed in front; the surface uneven, being coarsely but irregularly punctured and feebly longitudinally impressed along the middle, bearing griseous and grey scales and short depressed setæ. Elytra rather elongate, truncate-emarginate at the base, and slightly constricted immediately behind it; marked with regular series of punctures and clothed with greenish and fuscous scales, distributed in a somewhat irregular manner, but not forming a pattern, also bearing short, suberect, pallid setæ. Legs rather slender, squamose and setose.

A small series was obtained of this species; but I do not observe any sexual

distinctions, except that some examples are a little broader than others, and may be females.

PSEUDELISSA.

Pseudelissa, Casey, Ann. New York Acad. iv. p. 273 (1888).

Casey has recently established the two genera *Elissa* and *Pseudelissa* for some small Curculionidæ from the Southern United States, and has distinguished them, *inter alia*, by the former possessing prothoracic vibrissæ, while in the latter the prothorax is said to be "almost completely devoid of vibrissæ." I now refer to the genus *Pseudelissa* an insect in which the prothoracic vibrissæ are present, though in a not very conspicuous manner. This I do because I find that the vibrissæ are undoubtedly present in *Pseudelissa cinerea*, Casey's typical species, though, as he says, in a most rudimentary manner—the front margin of the prothorax bearing all round it some setæ placed widely apart, and these just behind the eye being a little longer and slightly more approximate. It should also be noticed that in *P. cinerea* the eyes are placed quite close to the prothoracic margin. In the Mexican insect that I assign to *Pseudelissa* the eyes are placed some distance in front of the prothorax, and one or two of the setæ of the prothoracic margin are elongated so as to form true vibrissæ. Casey gives as another character of *Pseudelissa* that the mentum is rather deeply seated; this character was no doubt observed correctly in the specimen examined, but it was almost certainly due to a post-mortem contraction, as the mentum is quite superficial in the specimens I have examined of *P. caseyi* and *P. cinerea*. Notwithstanding these slight detractions from the validity of the characters given to differentiate *Pseudelissa* from *Elissa* I think the two should be maintained as distinct, *Elissa* possessing a well-marked scutellum and a remarkably broad mentum, as well as a very peculiarly-shaped prothorax.

Casey, making use of Lacordaire's classification, correctly assigned *Elissa* to the "Tanymécides," which group is supposed to receive all the Otiorhynchids that have no trace of ocular lobes, but that do possess vibrissæ. *Elissa* and *Pseudelissa* are, however, unnaturally placed amongst the "Tanymécides," and I should limit that group to forms that possess wings, while the two genera under discussion are certainly apterous. I accordingly place them in the "Otiorhynchinæ apteræ," where they will form a small group characterized by the scrobes being lateral in situation and angulate in front, and by the anterior margin of the prothorax being provided with a peculiar, membranous border, formed of agglomerated scales.

1. **Pseudelissa caseyi**, sp. n. (Tab. VI. fig. 16.)

Niger, indumento griseo, in elytris fusco-submaculato vestitus; capite prothoraceque profunde rugosis; elytris interstitiis alternis breviter setosis.

Long. 4–5 millim.

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

Antennæ rufescent, the club fuscescent. Rostrum very short, entirely covered with deep rugæ; head very prominent between the eyes, these being small, quite circular, convex, and placed at some distance in front of the thoracic margin. Thorax cylindric, scarcely so long as broad, truncate in front and behind, very coarsely and deeply rugose. Elytra considerably broader than the thorax, with free but rounded shoulders there is no visible sculpture, but the surface is densely covered with a squamosity irregularly spotted with whitish and blackish colour, the alternate interstices just perceptibly more elevated and furnished with short setæ. Legs slender, rufescent, clothed with whitish setæ.

About a dozen examples have been received; the surface in old specimens becomes very sordid, and the serial setæ can then scarcely be detected. The insect is probably subaquatic in its habits like its North-American congeners. Of the latter I have received types from Capt. T. L. Casey, after whom I have much pleasure in naming this interesting species.

In *P. caseyi* the metanotum is entirely membranous, and the elytra are completely consolidated along the suture.

PANTOMORUS.

Pantomorus, Schönherr, Gen. Curc. v. p. 942 (1839) [1].
Athetetes, Pascoe, Ann. & Mag. Nat. Hist. (5) xvii. p. 415 (1886).

This genus is closely allied to *Naupactus*, from which it differs in the species being apterous. The brief characters given for the genus by Lacordaire are erroneous, the insertion of the antennæ being terminal as in the allied genera. Thus it is not surprising that a fresh name should have been proposed for the genus by Pascoe, who distinguished it correctly from *Naupactus* by the absence of shoulders. Schönherr understood the genus so imperfectly that he placed most of the species known to him in *Naupactus.*

Pantomorus appears to be specially characteristic of our region, a few species only having as yet been found in S. America, while none have been recognized as occurring in the United States.

Two of the species described here—*P. distans* and *P. robustus*—are assigned only with considerable doubt to the genus; and I think it probable that when specimens can be obtained for examination they may prove to possess partially developed wings.

Two natural groups of *Pantomorus* exist, viz.:—

1. Male without mucro on the middle tibia. (Species 1–23.)
2. Male with a mucro at the inner edge of the extremity of the middle tibia. (Species 24–32).

Group 1.—*Middle tibiæ of male unarmed.*

1. **Pantomorus albosignatus.**

Pantomorus albosignatus, Boh. in Schönh. Gen. Curc. v. p. 943[1].

Hab. Mexico[1], San Luis Potosi, Saltillo in Coahuila (*Dr. Palmer*), Durango city, Iguala, Tula, Tehuacan, Mexico city (*Höge*), Guanajuato, Etla, Aculzingo (*Sallé*).

We have received a fair series of examples of this species from the above localities, and from some other localities a few single specimens that may possibly belong to it or to one or more distinct species; but these latter more probably are extreme varieties of *P. albosignatus*, the variation affecting the colour and markings, and even to a slight extent the elongation of the hind-body. One of these varieties is labelled *Naupactus rotundipennis*, Chevr., in Sallé's collection.

2. **Pantomorus maculosus.**

Naupactus maculosus, Boh. in Schönh. Gen. Curc. vi. 1, p. 21[1].

Hab. Mexico (*mus. Sommer*[1]).

I am unable to identify any of the Mexican insects we have received with this description, and I cannot ascertain whether the types from Sommer's collection are still in existence or not. Boheman places this species next *P. crinitus*.

3. **Pantomorus parvulus,** sp. n.

Squamulis fuscis cinereisque variegatus, elytris setis tenuibus elongatis vestitis; prothorace brevi.
Long. $5\frac{1}{2}$–7 millim.

Hab. Mexico, Juquila, Etla, Las Peras (*Sallé*), Jalapa, Cerro de Plumas (*Höge*).

This is similar to some of the varieties of small size of *P. albosignatus*, but it has the scrobes quite slender, sharply defined behind, and passing close to the eye. The antennæ are slender, with the third joint twice as long as the second. The rostrum and head are canaliculate, the eyes moderately prominent. The thorax is short, rounded at the sides, covered with scales that conceal the sculpture, finely canaliculate along the middle; the scales are pale grey in colour, but there are three vague darker fuscous stripes, and there is also a very short setosity. The elytra are rather narrow, the base scarcely broader than the base of the thorax, the shoulders not rounded, the sides very little curved, but becoming a little broader to behind the middle; they bear long, erect setæ, and are covered with scales, which are, over the larger part of the surface, pale grey or whitish, but in other parts—especially about the sutural region—are dark brown. The under surface is clothed with whitish scales. Six specimens.

The individuals of this species are smaller than any other *Pantomorus* or *Naupactus* known to me. In Sallé's collection it was labelled "*Naupactus perarduus*, Chevr."

4. **Pantomorus longulus,** sp. n.

Sat elongatus, fusco-griseo-squamosus, vix variegatus, subtiliter hispidus; prothorace fortiter transverso.
Long. 8–8½ millim.

Hab. Mexico, Parada, Capulalpam (*Sallé*).

Antennæ moderately long and stout; second joint of the funiculus distinctly longer than the first. Head and rostrum short and broad, somewhat convex, canaliculate along the middle, not in the least carinate at the sides. Thorax broad and very short, obscurely sculptured, without vittæ, being nearly uniformly covered with fine griseous scales. Elytra elongate, uniform in colour with the thorax, with some obscure lateral paler markings; the punctures of the striæ quite fine, the erect hairs fine and moderately numerous. Legs red, or nearly black. Two specimens.

The much more elongate elytra will prevent this insect from being mistaken for a variety of *P. albosignatus*. In respect of the length of the antennæ it is intermediate between that species and *P. contractus*.

5. **Pantomorus contractus.**

Naupactus contractus, Boh. in Schönh. Gen. Curc. vi. 1, p. 25 [1].

Hab. Mexico [1], Tepansacualco, Tepanistlahuaca, Panistlahuaca (*Sallé*).

Var.? Pallide griseo-squamosus, concolor.

Hab. Mexico, Acapulco in Guerrero (*Höge*).

This insect bears a considerable resemblance to *P. albosignatus*, but it may always be distinguished therefrom by the longer and more slender antennæ. It varies somewhat in the extent of the pallid marks, but not so as to obscure their disposition, except in the case of the variety noticed above. I have seen only eight examples of the species, two of which are from Sturm's collection and are labelled—one *N. pulchellus*, the other *N. formosus*, Sturm.

6. **Pantomorus picipes,** sp. n.

Niger, tenuiter squamosus, variegatus, parce breviterque hispidus; prothorace vittis quinque pallidis; elytris linea elongata irregulari laterali lineaque interna bis interrupta pallido-squamosis; pedibus piceo-rufis; antennis sat elongatis.
Long. 6–7½ millim.

Hab. Mexico, Etla, Parada, Juquila (*Sallé*), Jalapa (*Höge*).

Var. Elytrorum linea interna pallida integra.

Hab. Mexico, Puebla, Mazatlan (*Sallé*).

Antennæ rather slender, only moderately long, the third joint not twice as long as the second. Rostrum broad and short, very delicately canaliculate, closely and finely sculptured, bearing numerous minute scales of various metallic tints. Thorax mode-

rately short, very densely and finely sculptured; black, setose, with a very distinct band of pale scales on the flank, another between this and the middle, and a much more slender one along the centre. Elytra with numerous rather long, erect, black setæ; black, with an elongate lateral mark of pallid scales, and between this and the suture with another line of scales—this line commences at the base of the third interstice, but then passes to the fourth interstice, and is interrupted just before the middle, reappearing behind the middle as a small spot on the third interstice, and as a longer mark just before the apex; there are also numerous scales about the sutural portion; the punctures of the striæ are rather large and are quite distinct, not being concealed by the squamosity. Legs obscure red.

We have received seven specimens of this species; those in Sallé's collection are labelled *Naupactus picipes*, Chevr. The very dense fine sculpture of the thorax, the third joint of the antennæ not so long as in most of the other species, and the markings are the characters that will lead to its recognition.

The three specimens with an uninterrupted line down the elytra that I have treated as a variety may possibly prove to be distinct.

7. **Pantomorus salvini,** sp. n. (Tab. VI. fig. 17.)

Minor, gracilis, setis erectis minus brevibus vestitus, niger, pedibus rufis; elytris linea suturali aliaque laterali lætæ viridi-squamosis.

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

Hab. Guatemala, Aceytuno 5100 feet (*Salvin*).

Rostrum densely sculptured, almost without scales, deeply canaliculate, and with an obscure lateral margin in front. Thorax rather coarsely rugose, with an indistinct median line, and a still more obsolete lateral vitta. Elytra with series of large, very distinct punctures; the sutural and lateral vittæ of green scales very distinct and regular.

Only two specimens of this species were obtained; it is one of the easiest to recognize of the genus.

8. **Pantomorus mollis,** sp. n.

Niger, minus dense griseo-viridi-squamosus, subvittatus, breviter hispidus; rostro profunde canaliculato, utrinque carinato.

Long. $6\frac{1}{2}$–7 millim.

Hab. Mexico, Chilpancingo in Guerrero (*Höge*).

Not very densely clothed with greyish scales tinged slightly with green; these are more condensed in certain places, so as to give a slight appearance of longitudinal bands. The antennæ are black, elongate, the second joint of the funiculus nearly twice as long as the first. Head and rostrum setose and sparingly squamose, deeply canaliculate along the middle, with a slight carination of the side over the insertion

of the antennæ. Thorax with a short, very deep canalicular impression at the base in the middle; the sculpture moderately coarse and not close, obscured by the clothing. Elytra with fine, erect, short hairs, the greenish-grey squamosity not so distinct in some places and thus giving rise to the appearance of two somewhat abbreviate and indefinite black bands.

Fourteen examples have been obtained of this species; they do not vary much. There is a well-marked difference between the sexes, the male having the rostrum longer, more distinctly carinate on each side, and the antennæ a little longer and thicker than in the female.

9. **Pantomorus facialis,** sp. n.

Niger, irregulariter sculpturatus, griseo-squamosus, brevissime squamoso-hispidus; rostro late et profunde canaliculato, utrinque evidentius carinato.

Long. 7–8 millim.

Hab. Mexico, Putla (*Sallé*).

Antennæ moderately stout, very long, the second joint elongate, but only about half as long as the third joint. Rostrum moderately long, not rugose, bearing a few scales; the channel very deep and broad in front, the edges distinctly subcarinate, so that the lateral depression in front of the eye and the insertion of the antenna on each side is unusually distinct. Thorax short and broad, canaliculate along the middle, the channel deep at the base. Elytra with the punctures rather coarse. Three specimens.

I have not described the squamosity, as the examples are a good deal abraded; but the scales evidently do not form any definite pattern, and probably are very easily removed. *P. facialis* may be distinguished from *P. mollis* by the hispid clothing being very short, and the head being broader and with broader channel, as well as by the antennæ being a little thicker and shorter.

10. **Pantomorus asperatus,** sp. n.

Fusco-squamosus, griseo-lineatus, dense breviterque fusco-hispidus; antennis longioribus.

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

Hab. Mexico, Acapulco (*Höge, H. H. Smith*), Dos Arroyos in Guerrero (*H. H. Smith*).

This insect is narrower in form than *P. albosignatus*, and has much longer antennæ; it is remarkable on account of the character of the setæ, which are shorter, stouter, and more numerous than they are in most of the other hispid species. The antennæ are rather stout, very long, the last joint of the funiculus more than twice as long as broad, the club very long. The rostrum is long, depressed along the middle, rather deeply canaliculate, carinate on each side. Thorax stout, rather coarsely sculptured, fuscous, with five vague pale vittæ, the central one quite indistinct, the outside one

placed on the flank. Elytra fuscous, with a narrow elongate pallid stripe near the suture, a lateral elongate mark, and between these with more or less indistinct smaller marks; the short dense setæ give them a rough appearance. Four specimens.

One of the examples of this species has a curious malformation of the antennæ, there being only five joints in place of seven in the funiculus of each, and the joint preceding the club bearing a small tubercular prominence.

11. **Pantomorus affinis,** sp. n.

Niger, fere uniformiter griseo-squamosus, sutura lateribusque pallidioribus, hispidus; rostro in medio canaliculato, utrinque carinato.

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

Hab. Mexico, Oaxaca (*Höge*).

I have before me only two specimens of this species, both apparently of the male sex. Though very similar to the more uniformly coloured examples of *P. crinitus*, I cannot associate them therewith, the rostrum being longer, distinctly carinate on each side, and the antennæ longer and stouter; as these characters are not likely to be so conspicuous in the female, that sex will no doubt be very difficult to distinguish. The antennæ are remarkably long, moderately stout, the second joint of the funiculus quite twice as long as the first. The rostrum is a little depressed along the middle, with the lateral carinæ strongly marked, the channel only moderately deep and fine. The thorax is almost uniformly covered with scales, not vittate. The elytra bear very distinct fine erect setæ, and the punctures in the striæ are large.

12. **Pantomorus crinitus.**

Naupactus crinitus, Boh. in Schönh. Gen. Curc. vi. 1, p. 20[1].

Pantomerus crinitus, Chevr. Bull. Soc. Ent. Fr. 1879, p. cxxx.

Hab. Mexico[1], Orizaba, Toxpam, Vera Cruz, Playa Vicente (*Sallé*), Atoyac (*H. H. Smith*), Cordova, Tapachula in Chiapas (*Höge*).

This I look upon as a very variable species, not being able to find any good distinctive characters for separating some forty or fifty examples of it. It varies greatly in colour, being nearly uniformly greenish-grey, or of the yellowish-grey colour described by Boheman, with metallic sides, or pallid grey with brown spots. It includes not only the examples labelled *P. crinitus* in collections, but also most of those that I have seen named *P. nobilis*.

The antennæ are quite slender, the rostrum finely canaliculate; the scales are small and neatly arranged; the sculpture is fine, and the surface bears fine, not very numerous erect hairs.

13. **Pantomorus nobilis.**

Naupactus nobilis, Boh. in Schönh. Gen. Curc. vi. 1, p. 19 [1].
Pantomerus nobilis, Chevr. Bull. Soc. Ent. Fr. 1879, p. cxxx.

Hab. MEXICO, Alvarado (*coll. Chevrolat* [1]).

The type of this species communicated to us by Dr. Aurivillius from Chevrolat's collection does not quite agree with any other example before me. It comes very close indeed to some of the greenish-grey unicolorous examples of *P. crinitus*; but the head is more convex between the eyes, and the rostrum more deeply canaliculate, so that it is possible the insect may prove to be distinct from *P. crinitus*.

14. **Pantomorus sobrinus,** sp. n. (Tab. VI. fig. 18.)

Niger, capite prothoraceque parce squamosis; elytris densius fusco-griseo-squamosis, haud variegatis, setis erectis, brevibus, tenuibus vestitis; tibiis piceis.
Long. 8–9 millim.

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

Antennæ rather long and slender; second joint of funiculus long and slender, more than one and a half times as long as the first. Rostrum moderately long, canaliculate. Thorax strongly transverse, much narrowed in front, sprinkled with minute scales, the interspaces black and shining. Elytra with very regular series of rather fine punctures, moderately densely covered with minute scales, which are tawny-fuscous, greyish along the flanks, in colour, and bearing short, very fine, quite erect hairs.

We have received ten examples of this species. It is allied to *P. crinitus*, though the two are not very much alike when seen together; but, independently of the facies, it may be distinguished by the fact that the mucro of the front tibia—which is present in all the varieties of *P. crinitus*—can scarcely be detected in *P. sobrinus*. I do not perceive any sexual distinctions. The depth of the colour is variable.

15. **Pantomorus subcinctus,** sp. n.

Niger, minus dense griseo-squamosus, elytris setis erectis regulariter vestitis; prothorace vitta sublaterali, elytrisque signaturis post humeros densius pallide-squamosis.
Long. $7\frac{1}{2}$–8 millim.

Hab. GUATEMALA, near the city at an elevation of 5000 feet (*Salvin*), San Gerónimo (*Champion*).

Antennæ moderately long and slender; second joint of funiculus only one and a half times as long as the first. Rostrum quite short, very finely canaliculate. Thorax strongly transverse, with very little sculpture, and only sparingly squamose, so that the surface between the scales is quite distinct and is shining; there is no trace of any channel; on the flanks there is a line of dense squamosity of a pallid colour, but

frequently tinged with yellow by some efflorescence. Elytra rather elongate, the series of punctures somewhat indistinct, the interstices more densely clothed with scales than the thorax; at the anterior part of the sides with two separated marks of paler and denser squamosity; armed with fine, long, erect, scanty hairs; there is usually a slight condensation of the scales along the suture.

A good series of this insect, which is known in collections as *P. subcinctus*, Jekel, was obtained by Mr. Salvin, and one specimen by Mr. Champion. It comes somewhat near to *P. crinitus*; but the elytra are usually more elongate, and their clothing is different from what it is in any of the varieties of *P. crinitus*.

16. **Pantomorus faber,** sp. n.

Niger, sat dense squamosus, antennarum scapo tibiisque rufis; elytris ovalibus, ad latera circaque suturam pallide squamosis, setis tenuibus erectis parce vestitis.
Long. 7–8 millim.

Hab. Costa Rica, Volcan de Irazu 6000 to 7000 feet (*Rogers*).

Antennæ rather long, moderately stout; second joint of funiculus less than one and a half times as long as the first; the joint before the club nearly twice as long as broad. Rostrum sparingly squamose, not elongate, the channel deep. Thorax strongly transverse, much rounded at the sides; black, with a line of dense pallid squamosity on the flank and with a slight condensation of the scanty scales along a vague space on each side of the middle; obsoletely canaliculate. Elytra slender, curvate at the sides; with an elongate lateral mark of pallid scales, twice nearly interrupted by the dark colour, and also with pallid scales distributed broadly along the sutural region; the erect hairs fine and rather long, but scanty. Legs red, with the femora more or less obscure. Two specimens.

The only species this much resembles is *P. subcinctus*; but besides differing from that insect in colour and in its more oval elytra, it has the second joint of the funiculus rather shorter and thicker.

17. **Pantomorus dorsalis,** sp. n.

Angustus, niger, capite prothoraceque griseo-setosis, hoc ad latera elytrisque griseo-squamosis; his ad suturam late nigricantibus, setis erectis tenuibus vestitis.
Long. 7–8 millim.

Hab. Guatemala, Capetillo (*Champion*).

Rostrum deeply canaliculate on the middle. Antennæ long, moderately thick; second joint of funiculus not quite twice as long as the first. Thorax rather short, much rounded at the sides, scarcely at all narrowed in front; it and the head and rostrum are of an intense black colour, rendered grisescent by depressed pallid setæ; on the flank there is a longitudinal area clothed with pallid scales. The elytra bear series of very coarse punctures, and at the sides are clothed with griseous scales, but

these leave a broad area along the suture black; the erect setæ are very fine, rather long and numerous.

A series of nearly twenty examples was obtained of this species; it exhibits but little variation.

18. **Pantomorus picturatus,** sp. n. (Tab. VI. fig. 19, ♂.)

Niger, ochraceo-viridi- vel viridi-squamosus; prothorace subvittato; elytris vitta suturali nigra, breviter setosis.

Long. 7–8½ millim.

Hab. Mexico, Tapachula in Chiapas (*Höge*); Guatemala (*Sallé*), Zapote (*Champion*), Tepan (*Conradt*); Costa Rica (*Van Patten*).

Antennæ very long; second joint of funiculus twice as long as the first. Rostrum rather long, deeply canaliculate. Thorax much rounded at the sides, but little narrowed in front; black, but clothed with ochraceous-viridescent scales in such a manner as to leave three more or less obsolete longitudinal black vittæ. Elytra with rather fine series of punctures, densely clothed with scales, the lateral parts of which are greenish-yellow; the suture is broadly black from the base to the apex, and the scales next the black portion are usually more viridescent than those outside them; the erect setosity is short and is pallid in colour. The male is considerably more slender than the female.

This insect may be readily distinguished from *P. dorsalis* by the colour, and by the different setosity on the elytra; it has always some scales on the thorax, and the antennæ have the second joint of the funiculus considerably longer and more slender than it is in *P. dorsalis*. Sixteen examples are before me.

19. **Pantomorus circumcinctus,** sp. n. (Tab. VI. fig. 20.)

Niger, prothorace elytrisque versus marginem exteriorem vitta tenui sulphureo-squamosa; tibiis intermediis et posterioribus rufis.

Long. 8–9 millim.

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

Antennæ very elongate. Rostrum rather long, deeply canaliculate, not squamose and only sparingly setose. Thorax strongly transverse, much rounded at the sides, free from squamosity except at the sides, black, a little shining, rather closely but subobsoletely sculptured. Elytra with series of large but not deep punctures, these becoming obsolete behind; near the sides with an elongate slender vitta of yellow or yellowish-white scales or setæ—continuous with a similar one at the sides of the thorax,—this near the apex extending inwards but not quite meeting the one on the opposite elytron; there are a few setæ at the apex. The front legs are very long, black, with the tibiæ picescent or black; the intermediate and hind tibiæ are distinctly red. Under surface clothed with pallid scales or setosity.

About a dozen specimens were procured of this distinct species.

20. **Pantomorus stupidus.**

Naupactus stupidus, Boh. in Schönh. Gen. Curc. vi. 1, p. 18[1].
Pantomerus stupidus, Chevr. Bull. Soc. Ent. Fr. 1879, p. cxxx.

Hab. Mexico, Alvarado (*coll. Chevrolat*[1]), Vera Cruz (*Sallé*, *Höge*).

We have received a fair series of this species from Höge. It varies a good deal in colour, the variegation of the elytra being in some examples very slight: such individuals appear at first sight intermediate between *P. stupidus* and *P. uniformis*; but the scales in *P. stupidus* are never brilliant, and the surface is destitute of the short rough setosity that exists in *P. uniformis*.

21. **Pantomorus uniformis,** sp. n. (Tab. VI. fig. 21.)

Dense læte viridi-squamosus, obsoletissime subvittatus, dense, omnium brevissime, setosus.
Long. $8\frac{1}{2}$–$11\frac{1}{2}$ millim.

Hab. Mexico, Vera Cruz (*Höge*).

Antennæ slender, black, clothed with much pallid setosity; third joint twice as long as the second; club very slender. Rostrum deeply canaliculate. Thorax short and broad, much narrowed in front. Striæ of the elytra fine, obscured by the pubescence. Rostral scrobes deep and definite, rather slender.

We have received a series of about forty examples of *P. uniformis*; it cannot be confounded with any other *Pantomorus* on account of the dense uniform covering of golden-green scales. The male is more slender than the female, and has the front of the rostrum slightly depressed along the middle.

22. **Pantomorus rufipes,** sp. n.

Elongatus, dense viridi-squamosus, pedibus antennarumque scapo rufis.
Long. $8\frac{1}{2}$ millim.

Hab. Mexico, Parada (*Sallé*), Playa Vicente (*Höge*).

Antennæ moderately long; second joint of the funiculus hardly one and a half times as long as the first. Rostrum rather short, canaliculate, subcarinate on each side. Thorax short, very finely sculptured, canaliculate along the middle, the channel obsolete in front, moderately deep behind, covered with minute green scales. Elytra long and narrow, not convex longitudinally, covered with minute green scales, and bearing a minute, very short setosity; the punctures fine. Legs red, elongate; anterior femora a little incrassate.

We have received only two examples of this distinct species. The scutellum is more distinct than in any other member of the genus, but I have very little doubt as to *P. rufipes* belonging to the apterous series.

23. **Pantomorus rudis,** sp. n. (Tab. VI. fig. 22.)

Niger, subnudus ; prothorace magno, lato, rugoso ; elytris brevibus.
Long. 7 millim.

Hab. Guatemala (*Sallé*), San Gerónimo (*Champion*), Chimaltenango (*Conradt*); Costa Rica (*Van Patten*).

Antennæ stout, rather long; second joint of the funiculus about twice as long as the third. Rostrum short, deeply canaliculate on the middle, subcarinate on each side. Thorax broad, much rounded at the sides and narrowed in front, densely rugose; with an indistinct channel along the middle, becoming deep at the base. Elytra short, with series of coarse punctures, emarginate at the base, and near the obliterated shoulders with a short prominence that is somewhat turned upwards. Legs stout and long.

We have received about a dozen examples of this species. In some of them there is an obscure squamosity that renders the surface somewhat grisescent; these are probably quite fresh examples, and this slight clothing is no doubt very readily rubbed off. The scrobes are broad, slightly broader than they are even in *P. albo-signatus*.

Group 2.—*Middle tibiæ of male armed at the apex internally with a sharp mucro projecting inwards.*

24. **Pantomorus distans,** sp. n. (Tab. VI. fig. 23.)

Elongatus, niger, fulvo-ochraceo-squamosus; elytris sutura in medio denudata, setis subtilissimis, erectis, adspersis.
Long. 9–10 millim.

Hab. Panama, Bugaba, Caldera (*Champion*).

Antennæ elongate; second joint of the funiculus more than twice as long as the first, the following joints each elongate. Rostrum rather long, very deeply canaliculate, subcarinate at the sides. Thorax greatly rounded at the sides, densely covered with tawny scales, with a broad channel along the middle in front. Elytra slightly broader at the base than the thorax, the shoulders being a little oblique; densely covered with scales similar to those on the thorax, with an indefinite denuded space on the middle of the suture, near which there may be a few greenish scales; there are some very fine, erect, pallid setæ. Legs elongate; a well-marked mucro at the apex of the front tibiæ, and a smaller one on each of the middle tibiæ. Two specimens.

This species resembles *P. picturatus* rather than any species of the group in which I place it; although the mucro on the intermediate tibia is small, its existence is certain.

25. **Pantomorus brevipes,** sp. n. (Tab. VI. fig. 24, ♀.)

Griseo-squamosus, submaculatus, breviter setosus; rostro latiusculo, anterius vix angustato; elytris discrete seriatim punctatis.

Long. $9\frac{1}{2}$–10 millim.

Hab. Mexico (*Sallé*).

Antennæ slender, only moderately long; first joint of funiculus elongate, the second scarcely one and a half times so long as it, the last joint not one and a half times as long as broad. Head and rostrum broad, finely canaliculate. Thorax much narrowed in front, not canaliculate, coarsely punctate. Scutellum distinct. Elytra broad, narrowed at the shoulders, scarcely striate, but with rows of more than usually distinct and definite punctures. Three specimens.

In this species the scales are not crowded, each one being isolated, and they are nearly evenly distributed over the surface; the elytra are obscurely variegate with pale grey elongate spots. The male is much narrower and more parallel than the female, the sex represented on our plate, and has three minute black tubercles placed in a transverse row on the middle of the second abdominal segment. *P. brevipes* was mixed with *P. globicollis* in Sallé's collection, and the females of the two species almost exactly resemble one another; but *P. brevipes* has differently formed antennæ, a quite distinct scutellum, and hispid surface.

26. **Pantomorus annectens,** sp. n.

Niger, pallide griseo-squamosus; elytris longitudinaliter haud convexis, posterius tenuiter hispidis, punctis impressis mediocriter distinctis; prothorace sat elongato, maris longiore magisque rotundato.

Long. 8–10 millim.

Hab. Mexico, Matamoros Izucar (*Höge*).

Rostrum moderately long, deeply notched at the tip, finely canaliculate on the middle. Antennæ rather long, slender, the scape elongate; second joint of funiculus not quite twice as long as the first. Thorax considerably narrowed in front, in the male rather longer and more rounded at the sides than in the female. Elytra almost uniformly pale grey, being scarcely at all maculate, with series of distinct distant punctures. Scutellum very indistinct. Legs not elongate, the front femora only slightly incrassate. Male with three black tubercles on the middle of the second ventral plate.

We have received eight examples of *P. annectens*; in its shape it, to a considerable extent, connects the species with incrassate femora, and elongate male thorax, with the more ordinary forms of the genus.

27. **Pantomorus globicollis.**

Athetetes globicollis, Pasc. Ann. & Mag. Nat. Hist. (5) xvii. p. 416[1].

Pallide griseo-squamosus, fere unicolor, brevissime setulosus; elytris longitudinaliter convexiusculis, punctis impressis distinctis; maris prothorace longiore magisque globoso.

Long. 8–10 millim.

Hab. Mexico [1] (*Sallé*), Jalapa, Cordova (*Höge*).

Antennæ very slender; second joint of funiculus nearly twice as long as the first. Rostrum rather long, narrower at the tip, finely canaliculate. Thorax in the male not transverse, much rounded at the sides and convex, in the female shorter and broader. Scutellum quite small. Male with three tubercles on the second ventral plate.

Very similar to *P. annectens*, but distinguished by the greater convexity of the thorax and elytra, so that longitudinally they form two curves. Specimens of this species and of *P. brevipes* are labelled *Naupactus leucolepis*, Chevr., in Sallé's collection. I am indebted to Mr. Pascoe for the loan of his type of *Athetetes globicollis*.

28. **Pantomorus albicans,** sp. n. (Tab. VI. fig. 25, ♂.)

Elongatus, albido-squamosus, fere unicolor; elytris sutura posterius subcarinato-elevatis; mare magis elongato linearique, prothorace multo longiore.

Long. 10 millim.

Hab. Mexico, Acapulco (*Höge*), Venta de Zopilote 2800 feet, Dos Arroyos 1000 feet, both in Guerrero (*H. H. Smith*).

Antennæ very slender; second joint of the funiculus quite twice as long as the first. Thorax elongate, in the male longer than in the female and more convex longitudinally. Elytra with the suture distinctly prominent on the declivity; furnished with excessively short, minute, pallid, recumbent setosity, in addition to the dense clothing of pallid scales; this setosity more distinct on the elevated part of the suture. Male with a transverse series of five or six tubercles on the second ventral plate.

Distinguished by the very pallid colour and the great sexual disparity; the males and females looking at first sight as if they belonged to distinct species on account of the great difference of outline. We have received ten examples of the species; it varies a little in colour, a few of the scales being in some cases tinged with pallid ochreous-brown so as to cause a slightly vittate appearance. Our figure is taken from the male example procured at Venta de Zopilote.

29. **Pantomorus viridicans,** sp. n.

Pallide griseo-squamosus, viridi-tinctus; maris prothorace convexo.

Long. 7–7½ millim.

Hab. Mexico, Presidio de Mazatlan, Ventanas (*Forrer*).

Smaller than the individuals of the allied species, covered uniformly with pallid scales faintly tinged with green, without any appearance of maculation. Head and rostrum finely canaliculate; the latter narrowed in front, rather longer in the male than in the female. Thorax elongate, rounded at the sides, a little narrowed in front, and in the female slightly narrower than the elytra; in the male longer and more globose. Elytra slender; the punctures of the series rather fine. Male with a series of about six small tubercles on the middle of the second abdominal plate.

30. **Pantomorus strabo,** sp. n. (Tab. VII. fig. 1, ♂.)

Pallide griseo-squamosus, fusco-variegatus, breviter hispidus, prothorace elytrisque convexiusculis; oculis vix prominulis.

Long. 9 millim.

Hab. NICARAGUA, Chontales (*Belt*).

We have received only a single specimen of this species. It is a male, of slender form, greatly resembling *P. globicollis*, but distinguished from it and all other species of the genus by the slight convexity of the eyes. The rostrum is parallel-sided, scarcely at all narrowed in front. The antennæ are obscure red, with the club black, the second joint of the funiculus not quite twice as long as the first. The thorax is convex longitudinally, as well as rounded at the sides; it is covered with scales and squamose setosity, the clothing being a little darker along the middle than at the sides. The elytra are clothed with scales, mingled with much thick suberect setosity, the colour being nearly white, with fuscous markings across the middle and base; the punctures in the striæ are very approximate. There are two tubercles on the second ventral plate; the front and middle tibiæ are each armed with a sharp mucro on the inner part of the apex, but there is no mucro on the hind tibia.

31. **Pantomorus femoratus,** sp. n. (Tab. VII. fig. 2, ♂.)

Longulus, niger, brunneo-griseo-squamosus, tenuiter setosus; prothorace lato, subgloboso; femoribus anterioribus crassis.

Long. 10 millim.

Hab. NICARAGUA, San Juan del Sur (*Salvin*).

Of this species only one example has been obtained; it is a male and has all the tibiæ furnished with an acute mucro at the apex internally. *P. femoratus* is as yet the only species of *Pantomorus* known to have the hinder tibiæ of the male mucronate. There are no tubercles on the second ventral plate; but the basal portions of the middle and hind coxæ, the middle of the breast, and the first ventral segment are strongly pubescent. The front femora in this sex are more inflated than they are in any other *Pantomorus*. The antennæ are rather elongate, the second joint of the funiculus not quite twice as long as the first. The rostrum is much narrowed in front, the channel on it short but somewhat deep; the eyes are very convex. The thorax is rather short, and is remarkable on account of the great rounding of its sides in front; it is convex longitudinally, obscurely canaliculate along the middle, evenly covered with uniformly coloured scales, mixed with very minute recumbent setæ. Elytra slender, with the shoulders slightly prominent, bearing very regular series of punctures, uniformly covered with pale fawn-coloured scales, and bearing very fine erect setæ.

32. **Pantomorus robustus,** sp. n. (Tab. VII. fig. 3, ♀.)

Latior, niger, pallide griseo-squamosus; elytris breviter subtiliterque hispidis, prothorace evidenter latioribus. Long. 13 millim.

Hab. NICARAGUA, Chontales (*Belt*).

Antennæ rather short. Head and rostrum broad, with a short channel on the middle, the rostrum short, a little narrowed in front. Thorax broad and short, much rounded at the sides, finely canaliculate along the middle, the basal portion depressed. Scutellum small, subelevated. Elytra at the shoulders broader than the thorax, the shoulders a little oblique, with series of fine punctures, uniformly squamose, and bearing very fine short, erect, pale setæ.

I have described this species from two examples of the female sex. Its position is altogether doubtful; but as it has more resemblance to the female of *P. albicans* than to any other insect known to me, I therefore place it here. It is, however, far from improbable that when the condition of the wings can be examined, *P. robustus* may prove to be a *Naupactus*, or, as is I think even more likely, the type of a genus between *Naupactus* and *Pantomorus*.

PYCNOPHILUS, gen. nov.

Corpus setosum; elytris prothorace latioribus. Scrobes latæ et profundæ, curvatæ.

Rostrum broad and short, not emarginate at the tip, which is formed in front all across of a shining substance more prominent than the upper part of the rostrum; eyes rather large and convex. Scrobes quite lateral, broad, deep and definite, the upper margin directed to the middle of the eye, the lower in front of and below it. Scape attaining the posterior margin of the eye, setose. Mentum small, the maxillæ and all the palpi exposed. Prosternum short; anterior coxæ contiguous, placed near the front margin and about twice as far from the hind margin. Metasternum rather short. First two ventral plates elongate, the suture between them strongly angulate; the third and fourth plates short. Legs slender; femora unarmed; tips of the hind tibiæ slender, but terminated by two series of ciliæ enclosing a small space; claws moderate in size, free. The outer elytral stria distinct at the base only.

This genus, in my first arrangement of the Otiorhynchidæ of our Editors' collection, was excluded from the Epicærina on the supposition that it belonged either in the neighbourhood of *Sciaphilus* or to the winged series. On examination it appears that it can be placed in neither of these categories, but that it may come near to *Pantomorus*. For this reason, *Pycnophilus* is not included in the Key to our genera of Epicærina on p. 101. On the whole, it seems, as I have said, best placed near *Pantomorus*, from which, however, it differs strongly in the scrobes, as well as in general appearance.

1. **Pycnophilus piceus,** sp. n. (Tab. VII. fig. 4.)

Piceus, parce griseo-squamosus, setis tenuibus erectis vestitus, elytris seriatim fortiter punctatis.
Long. $5\frac{1}{4}$ millim.

Hab. Costa Rica, Volcan de Irazu 6000 feet (*Rogers*).

Rostrum finely canaliculate on the middle, squamose and setose, with the tip shining and elevated. Antennæ red; second joint of funiculus as long as the first; club abrupt. Thorax transverse, strongly rounded at the sides, obscurely rugose, squamose, and bearing erect setæ. Elytra broad at the base, but with the shoulders quite rounded; somewhat convex, sparingly squamose, and bearing numerous erect, rather long, fine hairs, which, however, are not acuminate, and with distinct series of large punctures. Legs slender, setose; tarsi red. Under surface clothed with only a very few scales. One specimen.

Group **SCIAPHILINA.**

This group includes such of our apterous Otiorhynchidæ as have no ocular lobes, but have the claws connate and the scrobes lateral, descending rapidly at some distance in front of the eyes. All the genera have a small mentum, leaving the maxillæ exposed, slender antennæ, and posterior tibiæ with delicate tips, the corbels being quite simple. There are numerous European forms very closely allied to those of our region; but the only North-American genus in Horn's work that I can indicate as pretty certainly belonging to the group is *Mitostylus*, which he places in the Phyllobiini. The Phyllobiina should, however, be restricted to winged forms, with vague, superior scrobes.

It is, nevertheless, highly probable that there are other North-American genera belonging to this group. I think it will be found to be the rule in the Otiorhynchidæ that when the mesosternal epimera are intermediate in size the species belong to the apterous series. Horn, however, appears to have referred most of the Otiorhynchidæ with an intermediate form of epimera to his second division, which consists principally of winged forms.

If these apterous forms were transferred from Horn's Division II. to his Division I., they would be probably found to agree partly with the Sciaphilina as here treated, though some of them almost certainly belong to the Epicærina. The group "Artipi" seems to belong to the Epicærina (indeed, I feel little doubt from the description that some of the species of *Aramigus* and *Phacepholis* placed in it belong to the genus *Pantomorus*); while the "Aphrasti" may possibly prove to belong to a group not represented in our region, but allied to the Cneorhini of the Old World. The group "Omilei" probably belongs to the Epicærina, as suggested by Horn; and *Mitostylus* of Horn's group Phyllobiini I have already noticed as being probably near *Sciaphilus*.

If these comparatively slight changes were made, the arrangement of the North-

American Otiorhynchidæ would, I think, nearly correspond with that I have used for the forms found in our region.

DEROSOMUS, gen. nov.

Antennæ scapo valde elongato, tenuissimo; coxæ posteriores late distantes; abdomen segmento secundo ventrali tertio longiore.

Form elongate and slender; with long, very slender antennæ, whose scape extends back on to the front of the prothorax. Rostrum not dilated at the tip; nasal plate elongate, with slightly elevated margin. Lower border of the scrobe very definite, the lateral border rapidly descending at a considerable distance in front of the eyes, the upper border indefinite, but defined by the scales. Eyes oval, only moderately prominent. Mentum very small, leaving the maxillæ exposed at its sides and all the palpi visible. Scutellum small, acuminate. Metanotum short, semimembranous; wings absent. Metasternum moderately long. Hind coxæ widely separated. Lateral edge of the elytra very strongly sinuate, the tenth series of punctures quite indistinct. First ventral suture nearly straight; third and fourth ventral plates rather long.

The facies of the species of this genus is quite that of the European *Eusomus*; but in *Derosomus*, and indeed in all of the Sciaphilina of our region, the femora are unarmed. Horn's description of *Mitostylus* ('N. Am. Rhynchophora,' p. 107) seems to indicate with certainty that it is an apterous form; but I doubt very much whether *Derosomus*, or any of the genera I describe below, will prove to be congeneric with it.

1. **Derosomus fragilis,** sp. n. (Tab. VII. figg. 5, ♂; 5 *a*, front tibia.)

Gracilis, piceo-niger, griseo-squamosus, fusco-subfasciatus; antennis testaceis, scapo apice clavaque fuscis; tibiis fusco-testaceis.

Long. 5–6 millim.

Hab. Mexico, Temax in North Yucatan (*Gaumer*).

Covered with pallid fine scales which conceal the sculpture, but without setæ. Antennæ very slender; second joint of funiculus scarcely longer than the first. Thorax about as broad as long. Elytra slender, oblong-oval, with series of large punctures concealed by the clothing; this is of a pale colour, but there are one or two irregular transverse fasciæ darker. Male with the front and middle tibiæ dilated towards the extremity, and with a very large excision on the inner side.

Gaumer obtained a large series of this species; it is variable in colour, the scales in some examples being strongly tinged with green. The absence of setæ and the peculiar tibiæ of the male distinguish the species very satisfactorily from its congeners.

2. **Derosomus setosus,** sp. n.

Pallide griseo-squamosus, fusco-subvariegatus, setis elongatis erectis vestitus; antennis fusco-testaceis.

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

Hab. MEXICO (*Truqui, in coll. Fry*), Saltillo in Coahuila (*Dr. Palmer, Wickham*), Durango (*Dr. Palmer, in U.S. Nat. Mus.*), Guanajuato (*Sallé, Dugès*), Dublan (*Hay, in U.S. Nat. Mus.*).

Antennæ, except the scape, only moderately long; scape extremely slender, yellow, with the apical incrassation fuscous; first joint of funiculus much thickened towards the extremity, rather longer than the following joint. Rostrum quite short, the eyes scarcely convex. Thorax cylindric, with very deep large punctures, clothed with pale scales and with erect, slender, black setæ. Elytra oval, moderately long, convex, with series of rather fine punctures, clothed with pale scales, and with more or less distinct dark marks, and with very fine, long, erect, black hairs. Legs piceous, hispid.

The long setæ and the deep, definite punctures on the thorax are the prominent characters of this species. The insect seems to have been distributed by the late E. Dugès under the MS. name of *Naupactus gratus*.

3. **Derosomus scutellaris,** sp. n.

Elongatus, niger, viridi-griseo-squamosus; elytris fusco-subvariegatis, setis erectis vestitis; pedibus piceis; antennis elongatis, testaceis, clava fusca.

Long. 6 millim.

Hab. GUATEMALA, Chimaltenango (*Conradt*).

Antennæ very long, the scape passing the front margin of the thorax; second joint of funiculus very long, but a good deal shorter than the first joint. Rostrum rather long, nasal incision deep; eyes oval. Thorax subcylindric, about as long as broad, covered with pallid scales that quite conceal the sculpture. Scutellum forming a black, shining tubercle. Elytra oval, rather convex, covered with greyish-green scales, and bearing moderately long, erect, fine hairs; just before the middle an indefinite black fascia, interrupted at the suture, and also with a small black spot on each behind the middle; the striæ and their punctures fine. Under surface squamose. Legs clothed with depressed pallid setosity, but without erect hairs.

The two examples of this species are in very mutilated condition, but the species cannot fail to be recognized on account of the peculiar scutellum.

CAUTODERUS, gen. nov.

Antennæ scapo elongato, coxæ posteriores late distantes; abdomen segmentis secundis et tertiis longitudine subæqualibus.

This genus agrees fairly well with *Derosomus*, except that the structure of the ventral plates is peculiar, the second segment being remarkably short, while there appears at first sight to be a sixth ventral plate present at the extremity of the body; this is, however, owing to the margins of the dorsal plate being deflexed to the ventral surface. The scrobes appear to be rather more sharply limited than they are in *Derosomus*. The absence of wings, though pretty certain, has not been verified.

1. **Cautoderus mexicanus,** sp. n. (Tab. VII. fig. 6, ♂.)

Gracilis, griseo-viridi-squamosus, setis erectis brevissimis vestitus; antennis testaceis, apicem versus apicibusque articulorum fuscis.
Long. 4 millim.

Hab. Mexico (*coll. Solari*: ♀), Cuernavaca in Morelos (*Höge*: ♂).

This species is very similar to the variety of *Derosomus fragilis* that has the scales tinged with green, but in *C. mexicanus* the elytra bear numerous very short erect setæ. The antennæ are moderately long and the second joint of the funiculus is much shorter than the first. The eyes are large and convex. The thorax is slender, subcylindric, about as long as broad, a little narrowed towards the front. The elytra are broader at the base than the thorax, and become a little wider till just behind the middle; they are rather finely punctate-striate. The legs are black, and the middle tibiæ of the male bear an emargination on the inner face just above the apex. Three specimens.

CHÆTOPANTUS, gen. nov.

Antennæ scapo elongato, prothoracis marginem anteriorem fere attingente; coxæ posteriores modice distantes; abdomen segmentis ventralibus primo et secundo subæqualibus, tertio multo breviore.

I am obliged to separate the species referred to this genus from *Derosomus* on account of the more approximate hind coxæ; it has, too, the pleural edge of the wing-case but little sinuate. In other characters, except that the scape is not quite so long, *Chætopantus* seems to agree with *Derosomus*. The mentum appears to be remarkably slender, and the labial palpi exposed at its apex excessively minute.

1. **Chætopantus illustris,** sp. n. (Tab. VII. fig. 7.)

Niger, viridi-squamosus, setis tenuibus erectis vestitus; antennis fusco-rufis, basi rufo.
Long. $4\frac{1}{2}$ millim.

Hab. Mexico, Tacambaro in Michoacan (*Höge*).

Antennæ with the second joint of the funiculus only half as long as the first, this latter not nodose at the tip, but becoming gradually broader there, the other joints of the funiculus elongate and setigerous. Rostrum short, feebly rugose, bearing brilliant green scales, the nasal plate broad and short, its margin elevated. Thorax slender, a little rounded at the sides and narrowed in front, coarsely rugose, bearing brilliant green scales and fine, erect setæ. Scutellum small, but distinct, narrow. Elytra slender, oval, scarcely broader at the base than the thorax, with large, closely-placed punctures in the broad striæ, bearing small brilliant green scales and numerous fine, elongate setæ. Legs setose. Under surface squamose, like the upper. Two examples.

The remains of a specimen from Sturm's collection, labelled by him "*Polydrosus malachiticus*, mihi," belong, I think, to this species.

AMELADUS, gen. nov.

Antennæ scapo elongato ; coxæ posteriores late distantes ; elytra striis nono et decimo bene discretis.

This genus is proposed for a more robust insect than the species of *Derosomus*, and at the same time having the body beneath destitute of scales, the eyes are round and coarsely facetted, and the ninth and tenth striæ of the elytra distinct and uninterrupted. The nasal plate is short and has no free margin ; its surface is flat, and exhibits a fine sculpture, giving it a silky appearance. The scrobes are visible from above, their lower margin prominent and very abruptly defined, their upper margin indefinite. The mentum is quite minute and leaves the maxillæ fully exposed. The first and second ventral segments are elongate. The claws are connate, but are larger than is usually the case with the connate claws of the members of this group.

1. **Ameladus inornatus,** sp. n. (Tab. VII. fig. 8.)

Sat robustus, piceus, parce setoso-squamosus, setis crassiusculis brevibus vestitus ; antennis tarsisque rufis ; prothorace rugoso, elytris fortiter seriatim punctatis.

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

Hab. Mexico (*Sallé*), Jalapa, Matamoros Izucar, Puebla (*Höge*).

Antennæ only moderately long and slender, first joint of funiculus elongate, much longer than the second, club elongate. Rostrum short and broad; head wide; eyes convex, circular, coarsely facetted. Thorax moderately broad, rounded at the sides and a little narrowed in front, coarsely and deeply rugose, covered scantily, like the head, with greyish setosity intermediate between setæ and scales. Elytra at the base considerably broader than the thorax, with rather large and deep punctures placed in rows; sparsely clothed with a greyish and fuscous setosity and bearing short, stout, upright setæ. Under surface not squamose, clothed with a few fine hairs.

SCIADRUSUS, gen. nov.

Elytra humeris sat distinctis ; alæ rudimentariæ adsunt.

The species constituting this genus is remarkable in that it possesses small wings having veins, but quite useless for purposes of flight ; the other characters that are correlative with the presence or absence of wings seem also to be in an intermediate condition in this interesting insect. The scape of the antenna does not attain the thorax ; the eyes are slightly angular in outline beneath, the scrobes are lateral and form a regular curve quite separated from the eye. The elytra are broader at the base than the thorax ; the 9th and 10th striæ are distinct throughout ; the scutellum is distinct and is rounded behind ; the metanotum is semichitinous ; the buccal cavity is rather large, the mentum quite small, the maxillæ being exposed. The hind coxæ are not widely separated ; the first and second ventral plates are elongate, the 3rd and 4th much shorter. The body is squamose beneath.

1. **Sciadrusus propheticus,** sp. n. (Tab. VII. fig. 9, ♀.)

Sat elongatus, niger, pallide griseo (fere albido) squamosus; elytris pone medium nigro-fasciatis vel maculatis; setis erectis tenuibus superne ubique vestitus.

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

Hab. Mexico, Chilpancingo and Tepetlapa in Guerrero (*H. H. Smith*), Iguala (*Höge*).

Antennæ not elongate; first joint of funiculus rather long, greatly longer than the second, which differs but little from the third. Rostrum rather long and slender; eyes oval, finely granulated. Thorax hardly as long as broad, rounded at the sides and a good deal narrowed in front. Scutellum small, but distinct. Elytra suboblong, much broader at the base than the thorax, the striæ quite fine. Legs hispid.

This species is deep black, but is covered everywhere with a peculiar fine setosity—intermediate between setæ and scales—which obscures the sculpture; this clothing is very readily removed, and black spaces are then left; but in addition to these abraded spots, there appears to be a small fascia behind the middle which is naturally black.

SCIOMIAS, gen. nov.

Mentum minutissimum, a maxillis cinctum; corpus plus minusve abbreviatum, elytris convexis.

Scape of antennæ slender, rather long, bare. Rostrum short, broader at tip; scrobes visible from above, descending obliquely and directly from the insertion of the antennæ, without any previous lateral prolongation. Mentum very small, forming as it were a shining tubercle embraced by the maxillæ. Prosternum in front of coxæ excessively reduced. Hind coxæ only moderately distant. Body not squamose beneath. First and second ventral plates rather elongate, the suture between them straight, or but little angulate; third and fourth plates short. Ninth and tenth striæ of elytra distinct throughout.

This genus may be distinguished by the form of the scrobes, which, owing perhaps to the abbreviation of the rostrum, pass directly downwards, and leave well-marked pterygia exposed. The facies is somewhat that of the European genus *Platytarsus*, but is still more like *Dinas*, Woll., from the Cape Verde Islands.

1. **Sciomias elegans,** sp. n. (Tab. VII. fig. 10.)

Fusco-brunneus, parce griseo-squamosus, setis erectis, crassis, pallidis armatus; antennis, tibiis tarsisque testaceis; elytris valde convexis, fortiter punctatis.

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

Hab. Mexico (*Truqui*), Amula in Guerrero (*H. H. Smith*).

Antennæ unicolorous, yellow, scape bisinuate, first joint of the funiculus twice as long as the second. Rostrum quite short, broader at the tip; eyes round, convex,

placed as near to the insertion of the antennæ as to the front of the thorax. The latter subcylindric, not longer than broad, very slightly rounded at the sides in the middle, the sculpture obscured by the squamosity, which, however, is not dense. Scutellum not distinct. Elytra convex, rising suddenly from the base of the thorax, their base not wider than the base of the thorax, but becoming rapidly broader, much narrowed towards the apex, so as to be acuminate behind; with series of coarse punctures, and clothed with a white squamosity distributed vaguely into spots, and also set with erect truncate setæ. Under surface not squamose; second, third, and fourth ventral plates armed with erect, pallid, rigid setæ or bristles. Three specimens.

2. **Sciomias subtilis,** sp. n. (Tab. VII. fig. 11.)

Fusco-brunneus, subtiliter ochraceo-squamosus, subvariegatus; antennis tibiis tarsisque testaceis; elytris ovalibus, convexis; setis subtilibus raris armatus.

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

Hab. MEXICO, Omilteme, Chilpancingo (*H. H. Smith*).

Antennæ not elongate, unicolorous, yellow; first joint of funiculus moderately long, stout, nearly twice as long as the second. Rostrum moderately long, a little broader at the tip; eyes convex, coarsely facetted, placed but a short distance in front of the thorax, very widely separated from one another. Thorax cylindric, covered with a delicate squamosity or setosity, which, however, is not dense. Elytra convex, almost regularly oval, with striæ that are well marked and moderately coarsely punctured; with a fine squamosity arranged so as to give a slight variegate appearance, and with some distant, excessively fine, rather short, erect hairs. Under surface piceous, not squamose, bearing only a few extremely fine hairs. Five specimens.

3. **Sciomias rugicollis,** sp. n.

Piceus, parcius squamosus, parcius breviterque hispidus; antennis pedibusque rufis; prothorace angusto, fortiter rugoso-punctato; elytris profunde punctatis, interstitiis subconvexis.

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

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

Antennæ unicolorous, not long, scape slightly bisinuate; first joint of funiculus not elongate, second quite small. Rostrum a little broader towards the tip, very coarsely sculptured; eyes not very widely separated, placed at a considerable interval in front of the thorax. The latter slender, but rounded at the sides, very densely and coarsely sculptured. Elytra oval, with very regular series of large punctures, the interstices somewhat convex, bearing a scanty squamosity and also an exudation which when removed brings away the scales; there are also very short, erect, truncate, pallid setæ. Two specimens.

4. **Sciomias latipennis,** sp. n. (Tab. VII. fig. 12.)

Brunneus, ochraceo fuscoque squamosus; antennis pedibusque rufis; elytris setis minutis subtilis vestitis, sat fortiter seriatim punctatis, interstitiis parum convexis.

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

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

This species is remarkable by the form of the elytra, which are broad and convex, but nevertheless with the dorsum somewhat flattened. Antennæ rather short, yellow, unicolorous, second joint of funiculus small. Head and rostrum covered with scales as far forward as the deep scrobes. Thorax small, subcylindric, deeply punctured, but the sculpture concealed by scales, with a slight shining carina-like space on the middle. Elytra at base just as broad as the base of the thorax, but becoming very rapidly wider, so that the shoulders are perfectly rounded; covered with scales, which are slightly variegate, and bearing erect, short, truncate setæ. Two specimens.

PARASOMUS, gen. nov.

Femora dentata. Unguiculi vix connati.

The insect for which I establish this genus much resembles the European *Sciaphili* and *Eusomi*, except that it is of rather shorter form; it is distinguished from them, as well as from the other genera of Sciaphilina found in our region, by the fact that the claws at their bases are very narrowly separated; possibly they may prove to be connate at their articulation within the claw-joint. Independently of this, the genus may be identified by the dentate femora. If the claws prove to be really free, I think the insect would be better placed in the Epicærina near *Cleistolophus* and the other genera of that group with dentate femora.

The antennæ are moderately stout, the scape about attaining the front margin of the thorax. The rostrum is moderately long, slightly broader at the tip, which is provided with a small, deeply-impressed nasal plate; the eyes encroach on the front and are oval, only slightly prominent; the scrobes are short, slightly descending, broader behind, not nearly reaching the eye. The mentum is not broad, but fills the buccal cavity, neither the maxillæ nor the palpi being exposed. The prosternum is short, the coxæ are contiguous and placed very near the front of the thorax. The metasternum is short; the first ventral segment is much longer than the second. The anterior tibiæ are armed with a long slender claw at the inner apical angle. The tips of the hind tibiæ are simple; the corbels not in any degree cavernous. The under surface is squamose.

1. **Parasomus jansoni,** sp. n. (Tab. VII. fig. 13, ♂.)

Subcylindricus ♂, oblongo-obovatus ♀, niger, fusco griseoque squamosus; antennis rufo-obscuris; elytris discrete seriatim punctatis.

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

Hab. NICARAGUA, Chontales (*Janson*), Chinandega, Granada, San Marcos (*Baker*), Managua (*Solari*).

Antennæ long, moderately stout, first and second joints of the funiculus elongate, equal, club long and rather slender. Head and rostrum densely squamose. Thorax as long as broad, subcylindric, very slightly narrowed before and behind the middle; densely squamose, with some distant punctures rendered obscure by the squamosity, which is pallid grey, fuscous along the middle, where also there is a very fine channel. Elytra rather short, narrow, with very distinct series of punctures; with a dense squamosity, fuscous mottled with grey in colour, and with some excessively short white setæ, which attract attention only on the declivous part. Legs rather long, all the femora acutely dentate; the tibiæ and tarsi obscure red, clothed with pallid setosity. Nine specimens.

ISODACRYS, gen. nov.

Rostrum deflexum; pronotum elongatum; coxæ anteriores leviter distantes; tibiæ anteriores denticulatæ.

This genus is proposed for four very small apterous Otiorhynchids having some resemblance to *Pandeleteius* and various allied forms in the winged series. The rostrum is very short, provided with slender scrobes, placed laterally and abruptly bent, so as to reach the under surface at a considerable distance from the eye; the buccal cavity is rather small and filled by the mentum, which is broader than long; the nasal plate is quite small; the head is broad; the eyes are round, lateral, placed a short distance in front of the thorax; the antennæ are short, the scape slender, not so long as the width of the head between the eyes, but slightly longer than the width of the apex of the rostrum, the funiculus very short, except its first joint, the club short, oval, compact. Pronotum greatly longer than the prosternum. Coxæ placed near the front of the latter, and far from its base, minutely but distinctly separated from one another. Metasternum short, hind coxæ rather widely separated; first and second ventral plates subequal, the latter quite as long as the third and fourth together. Legs short and stout; anterior tibiæ denticulate and mucronate; tarsal claws small, free.

1. **Isodacrys guatemalenus,** sp. n. (Tab. VII. fig. 14.)

Dense griseo-squamosus; elytris setis elongatis erectis vestitis; antennis rufis, clava fuscescente.

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

Hab. GUATEMALA, Dueñas (*Champion*).

Head and rostrum densely covered with scales, and with a very fine scarcely visible longitudinal channel on the middle. Thorax elongate, slightly constricted before and behind the middle, densely covered with scales, and bearing some short curved setæ. Elytra suboval, at the base just as broad as the thorax, densely covered with scales, which are very slightly variegate, and bearing long, very conspicuous, erect, pointed setæ. Legs short, squamose and setose. Fifteen specimens.

2. **Isodacrys orizabæ,** sp. n. (Tab. VII. fig. 15.)

Piceus, dense griseo-squamosus, subvariegatus, breviter parceque albido-squamosus.
Long. $3\frac{1}{4}$ millim.

Hab. Mexico (*Truqui*), Orizaba (*Sallé, H. H. Smith*).

This species is apparently closely allied to *I. guatemalenus*, but the erect setæ are replaced by short white scales. In addition to this, there is a considerable difference in form, the thorax in *I. orizabæ* being more slender, and the elytra become abruptly broader near the base and are acuminate behind. Nine specimens.

3. **Isodacrys mexicanus,** sp. n. (Tab. VII. fig. 16.)

Angustus, dense griseo-squamosus, prothorace elongato; elytris angustis, sutura posterius compresso-subelevata.
Long. $2\frac{3}{4}$–$3\frac{1}{4}$ millim.

Hab. Mexico, Guanajuato (*Sallé*).

Antennæ red, more obscure towards the apex. Rostrum rather broad; eyes widely separated. Thorax very long, rather broad, slightly inflated in the middle, covered with an indumentum, looking like scales, and definitely punctate. Elytra very convex transversely but not longitudinally, scarcely broader behind the shoulders, at which point they are just a little wider than the base of the thorax, with the suture on the declivous part a little compressed and prominent; covered with a griseous scale-like indumentum, which is slightly variegate; and with an obsolete striation. Five specimens.

This interesting little insect need not be confounded with *I. guatemalenus* or *I. orizabæ* on account of the apparent absence of setæ; the setæ are, however, really present, but are so minute and short that careful observation is required to detect them. The three species, nevertheless, have a common peculiarity, inasmuch as there are one or two fine bristles on each side of the anterior margin of the thorax in such a position as to make it proper to call them rudimentary vibrissæ.

4. **Isodacrys minutus,** sp. n. (Tab. VII. fig. 17.)

Ferrugineus, dense squamosus, setis brevissimis vestitus; prothorace sat elongato.
Long. $2\frac{3}{4}$ millim.

Hab. Mexico, Omilteme (*H. H. Smith*).

Antennæ short, the joints of the funiculus, after the second, extremely small and difficult to count, the club large. Rostrum very short, only moderately broad; eyes slightly convex. Thorax slender, as long as broad, subcylindric, a little dilated in the middle. Elytra rather narrow, a good deal rounded at the sides and shoulders, very slightly convex longitudinally; densely clothed with scales, and bearing minute setæ, which are only conspicuous towards the apex, where they are a little longer; finely striate. Legs stout. Four examples.

This tiny weevil has the pronotum rather less elongate than its congeners, thus

approaching *Pandeleteius*; the front coxæ are, however, only minutely separated, there are no vibrissæ, and the wings are almost certainly wanting.

Group **PERITELINA.**

The single genus referred by me to this group has the scrobes superior and the tarsal claws connate, the first-mentioned character separating it from the Sciaphilina.

THRICOLEPIS.

Thricolepis, Horn, Proc. Am. Phil. Soc. xv. p. 68 (1876).

This is a North-American genus of two species. It appears to have occurred just within the northern limits of our region and is possibly merely an intrusion from N. America. It is, therefore, unnecessary to discuss it further than to remark that its distinction from *Peritelus* appears to me to be doubtful.

1. **Thricolepis inornata.** (Tab. VII. fig. 18.)

Thricolepis inornata, Horn, Proc. Am. Phil. Soc. xv. p. 69[1].

Hab. North America, California to Utah[1].—Mexico, Northern Sonora (*Morrison*).

We figure this species as the sole representative of a group whose absence in our region is most remarkable.

Group **TRACHYPHLŒINA.**

This group is perhaps scarcely separable from the Otiorhynchina as defined by Horn, who refers three N.-American genera to it, two with the scrobes superior and one with the scrobes lateral. They have comparatively short antennæ, with the scape becoming gradually thicker to the tip and sometimes reaching the front of the prothorax, and the outer joints of the funiculus moniliform, the tarsal claws free, &c. A single species of the typical genus *Trachyphlœus* is represented in the Mexican collections before me.

TRACHYPHLŒUS.

Trachyphlœus, Germar, Ins. Spec. nov. p. 403 (1824).

1. **Trachyphlœus solitarius,** sp. n. (Tab. VII. fig. 19.)

Fuscus, dense squamosus, breviter hispidulus; prothorace brevi, lateribus valde rotundatis.
Long. $3\frac{1}{2}$ millim.

Hab. Mexico, Ventanas in Durango, Tehuacan in Puebla (*Höge*).

Funiculus of antennæ with the first and second joints somewhat slender. Rostrum rather slender, densely squamose, and furnished with three rows of setæ. Thorax broad, greatly rounded at the sides, and covered with dense squamosity, bearing also a few short, erect setæ. Elytra rather elongate, obscurely striate, densely squamose, and

armed with numerous short setæ. Under surface bearing numerous short setæ; terminal ventral plate with a large deep fovea.

We have received only one specimen from each locality: the individual from Tehuacan is covered with an incrustation of dirt, and appears to be rather more elongate in form, so that possibly it may represent a second species.

Series OTIORHYNCHINÆ ALATÆ*.

The characters for this Series of the Otiorhynchinæ are given on p. 87, *anteà*, and are much the same as those used by Horn for his Division II. of the N.-American forms. The term "Alatæ" unfortunately proves to be misleading, as we now know that the wings are sometimes rudimentary even in a series of specimens of certain species, *e.g.* in *Tanymecus confertus*, Gyll. (= *variabilis*, Fåhr.), from the same locality, and one or two other genera also include both apterous and winged forms. It is proposed here to divide the species of the present series into two sections: one without definite ocular lobes to the prothorax †, the other with the lobes large and rounded. The first section, again, is subdivided, according to the presence ‡ or absence of vibrissæ, the condition of the tarsal claws (connate or free), the position of the scrobes and eyes, the lamination or otherwise of the apex of the posterior tibiæ (closed or open corbels), &c. Horn's groups [tribes] "Tanymecini," "Exophthalmini," and "Promecopini" are practically accepted, the last-named corresponding to our Section II.; but his "Cyphini," with the much larger number of genera represented in our region, and "Phyllobiini" require different treatment.

Section I.—*Ocular lobes wanting or rudimentary.*

Group **TANYMECINA.**

This group is equivalent to Horn's Tribe "Tanymecini," and it includes two genera in addition to those belonging to the N.-American fauna. *Polydacrys* is said by him to have "very distinct vibrissæ composed of scales," but these longer scales seem to me to be part of the general vestiture and not true vibrissæ; this genus, moreover, cannot be satisfactorily placed in a different group from its close ally, *Anypotactus*, in which the vibrissiform scales are wanting. The tarsal claws are free, except in the anomalous genus *Isodrusus*, which forms a connecting-link with the Polydrosina. The essential characters of the Tanymecina, therefore, are the presence of setiform vibrissæ and the laterally placed scrobes.

* By G. C. Champion.

† In *Pachnæus* and *Diaprepes* there is sometimes an indication of a short lobe, as in *Pandeleteius* and *Hadromerus*.

‡ Apparently wanting or replaced by scales in one or two of the smaller species of *Pandeleteius* of the "Tanymecina."

TANYMECUS.

Tanymecus, Schönherr, Curc. Disp. Meth. p. 127 (1826) ; Gen. Curc. ii. p. 75 ; Lacordaire, Gen. Col. vi. p. 96 ; Horn, Proc. Am. Phil. Soc. xv. p. 83.

A genus including a large number of species, very few of which are from the New World ; one, however, is abundant in the United States and Central America. These American forms all have well-developed setiform vibrissæ.

1. **Tanymecus confertus.** (Tab. VII. figg. 20, 20 *a*, ♂ .)

Tanymecus confertus, Gyll. in Schönh. Gen. Curc. ii. p. 88 [1] ; vi. 1, p. 241 [2] ; Horn, Proc. Am. Phil. Soc. xv. p. 84 [3] ; Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 358 [4].

Tanymecus confusus, Say, Descr. N. Am. Curc. p. 9 [5] ; Complete Writings, i. p. 269 [6].

Tanymecus variabilis, Fåhr. in Schönh. Gen. Curc. vi. 1, p. 241 [7].

Polydacris tristis, in coll. Sturm [8].

Hab. North America [1 4 5 6], everywhere east of the Rocky Mountains [3].—Mexico [2 7 8] ; British Honduras ; Guatemala ; Nicaragua.

An abundant insect in Central America, apparently not extending south of Nicaragua, examples from our region not differing from others before me from Texas, &c. Specimens from Paso del Norte are larger, more densely punctate, and more closely squamose than the rest ; Dr. Horn [3], too, also notes larger individuals from the Southern United States. The wings are usually in a rudimentary condition, but occasionally become fully developed, even amongst a series examined from the same localities (Teapa and Rio Hondo). The rostral carina is rarely obsolete. The humeri are obliquely truncated. The first ventral segment is hollowed down the middle in the male, the fifth is without trace of oblique lines at the base in the female. The length varies from 5–8¾ millim. A male from Nicaragua is figured. The insect has been found on *Œnothera* in Texas [4].

2. **Tanymecus hirsutus,** sp. n. (Tab. VII. figg. 21, 21 *a*, ♂ .)

♂ . Elongate, narrow, black, the antennæ and tips of the tarsi obscure ferruginous ; somewhat thickly clothed with small cinereous scales intermixed with numerous short suberect pallid setæ, the setæ on the elytra closely placed and arranged in two or three rows along each interstice. Head and rostrum densely punctate, the rostrum transversely subquadrate, slightly emarginate at the tip, and with an abbreviated median sulcus ; eyes prominent. Prothorax about as long as broad, rounded at the sides, a little narrower at the apex than at the base, densely, uniformly punctate. Elytra elongate, wider than the prothorax, slightly hollowed at the base, the humeri obtuse ; coarsely punctate-striate, the interstices almost flat and closely punctulate. First ventral segment broadly hollowed down the middle, and the fifth obsoletely sulcate towards the apex. All the tibiæ distinctly unguiculate at the inner apical angle. Length 6¼–7⅕, breadth 2–2⅖ millim.

Hab. Mexico, Guanajuato (*Sallé*), Obrajuelo (*Flohr*).

Two males, one worn. Narrower than *T. confertus* ; the rostrum not carinate, but with a short median groove ; the elytra connate, closely set with short, semierect, brownish setæ, the scales scattered and not condensed into definite markings, the humeri not obliquely truncated.

DIAPREPES.

Diaprepes, Schönherr, Curc. Disp. Meth. p. 116 (1826); Gen. Curc. ii. p. 7, vi. 1, p. 342 (part.).

The two species from our region referred to *Diaprepes* (sunk as a synonym of *Exophthalmus* by Lacordaire) agree with Schönherr's type (*Curculio spengleri*, Linn., from the Antilles) in having conspicuous vibrissæ, and the genus also includes other W. Indian forms. The supposed new genus briefly characterized (but not named), and a type indicated (*Exophthalmus sommeri*, Rosensch.), by Horn in 1876 (Proc. Am. Phil. Soc. xv. p. 100) is synonymous with *Diaprepes*, the particular species mentioned by him having a short angular prominence on each side of the prothorax in front (representing the true ocular lobe), much as in *Pachnæus*. In *Exophthalmus* (type *Curculio quadrivittatus*, Oliv.) the vibrissæ are entirely wanting. In both genera the elytra have supplementary striæ on the outer part of the disc.

1. **Diaprepes albofasciatus,** sp. n. (*Exophthalmodes albofasciatus*, Tab. VII. figg. 22, 22 *a*, ♂; 23, 23 *a*, ♀.)

Oblong, shining, black; the prothorax with two narrow interrupted vittæ on the disc, and the elytra with three irregular fasciæ, a transverse patch at the base, and various scattered asymmetrically arranged spots, densely clothed with white or yellowish-white imbricate scales, the rest of the upper surface more sparsely set with minute, brown or whitish scales and very short decumbent setæ; the under surface and legs with small bluish or white scales. Head and rostrum closely punctate, the head foveate between the eyes, the rostrum much longer than the head, sharply carinate down the middle, and sulcate on each side in front of the eyes. Prothorax transverse, subconical, rounded at the sides anteriorly, more or less distinctly sulcate down the middle; very sparsely, irregularly, coarsely punctate, the interspaces minutely punctured. Elytra with rows of closely placed coarse punctures, which become crowded and confused on the outer part of the disc below the base, the interstices almost flat, the apices feebly acuminate, setose, and dehiscent. Tibiæ without denticles on their inner edge.

Length 15–17, breadth $5\frac{1}{4}$–$7\frac{1}{4}$ millim. (♂ ♀.)

Hab. HONDURAS (*Mus. Brit.*: ♂), Belize River (*Stanton, in U.S. Nat. Mus.*: ♀).

Two specimens, the male labelled as having been received in 1845. In the latter the prothoracic sulcus is sharply defined and the seriate punctures on the disc of the elytra are very coarse. The minute whitish scales on the upper surface are easily abraded, but when present (as in the female) they give a powdery appearance to the spaces between the markings. The deciduous portion of the mandibles is flattened and falciform (fig. 23 *a*).

2. **Diaprepes pulverulentus,** sp. n.

Oblong, black or piceous; densely clothed with cinereous or bluish-white scales (the colour more or less modified by an ochreous exudation), which are condensed into two vittæ on the disc of the prothorax and another along each flank (the intervening spaces appearing sparsely squamose), and a shorter or longer stripe at the base of the alternate elytral interstices, those on the disc sometimes wanting; the surface also set with short scattered decumbent setæ, the seriate elytral punctures each with an oblong scale. Head and rostrum densely punctate, the rostrum finely carinate, the inter-ocular fovea small or wanting. Prothorax transverse, canaliculate down the middle; impressed with scattered foveiform punctures intermixed with a fine interstitial punctuation. Elytra elongate-subtriangular in ♂, broader and widened to the middle in ♀, acuminate and mucronate at the tip, flattened on the disc anteriorly, the disc sometimes with several scattered shallow irregularly placed foveæ; with rows of rather fine

punctures which become confused on the outer part of the disc below the base, the interstices feebly convex. Tibiæ without denticles on their inner edge.

Length $13\frac{1}{4}$–18, breadth $4\frac{1}{2}$–$7\frac{1}{2}$ millim. (♂ ♀.)

Hab. NICARAGUA, Chontales (*Belt*).

Five specimens, varying greatly in size, as well as in the colour of the scales, which is disguised by an ochreous exudation. The vibrissæ are easily abraded, and are wanting in two examples. This insect is less convex than *D. albofasciatus*, the rostrum is more finely carinate, and the vestiture is much denser over the whole surface.

PACHNÆUS.

Pachnæus, Schönherr, Curc. Disp. Meth. p. 121 (1826); Gen. Curc. ii. p. 57; Lacordaire, Gen. Col. vi. p. 106; Horn, Proc. Am. Phil. Soc. xv. p. 82.

A genus including a few species from the Antilles and Florida, one of which has been recorded from Mexico, but this locality seems to require confirmation. They are all of rather large size, and densely, uniformly clothed with whitish, pale yellow, blue, or green opaque scales. The prothorax is strongly bisinuate at the base in *P. opalus* and *P. litus*, more feebly so in *P. distans*, and the anterior margin also is sinuate on each side beneath, and the vibrissæ are well developed.

1. **Pachnæus litus.** (Tab. VII. figg. 24, 24 *a*.)

Cyphus litus, Germ. Ins. Spec. nov. p. 431 [1].

Pachnæus litus, Gyll. in Schönh. Gen. Curc. ii. p. 59 [2]; vi. 1, p. 426 [3]; Lacord. Gen. Col. vi. p. 107, nota [4].

Hab. MEXICO [3 4].—CUBA [1 3].

Our figure is taken from a Cuban specimen.

HADROMERUS.

Hadromerus, Schönherr, Curc. Disp. Meth. p. 136 (1826); Gen. Curc. ii. p. 127; Lacordaire, Gen. Col. vi. p. 102; Horn, Proc. Am. Phil. Soc. xv. p. 85.

A genus containing some of the most beautiful known American winged Otiorhynchids, *H. dejeani*, *gemmifer*, *opalinus*, &c., being more or less densely clothed with glittering metallic scales. In a few forms, however, the scales vary greatly in colour and may even become uniformly whitish or cinereous in the same species. The females of all of them have the suture of the elytra set with long erect hairs towards the apex, and the males a small claw at the inner apical angle of the intermediate tibiæ. The type of *Hadromerus* is *H. nobilitatus*, Gyll. One of the Guatemalan forms has been found in numbers in the "tierra fria."

The seven Central-American forms may be tabulated thus:—

a. Surface closely squamose, the legs included, the femora (except in immature examples) at least black.

a[1]. Elytral interstices each with a distinct irregular series of small bare spots.

a^2. Elytra with the seriate punctures distinctly visible.
a^3. The scales on the upper surface large, subimbricate, green or blue, scintillate, the bare spots on the interstices small.
a^4. Rostrum rather deeply excavate; antennal club longer . . . . *scintillans,* sp. n.
b^4. Rostrum feebly excavate; antennal club shorter . . . . . *dejeani,* Boh.
b^3. The scales on the upper surface smaller.
c^4. Elytra with prominent humeri and comparatively large bare spots on the interstices; the scales on the upper surface green, scintillate, the erect pilosity sparse: species large . . . . . *micans,* sp. n.
d^4. Elytra with less prominent humeri and smaller bare spots on the interstices; the scales on the upper surface very variable in colour, rarely scintillate, the erect pilosity more abundant: species smaller . . . . . *opalinus,* Horn.
b^2. Elytra with the seriate punctures hidden by the densely placed pure white scales, the bare spots on the interstices few in number and rather large . . . . . *cretatus,* sp. n.
b^1. Elytral interstices with, at most, an indistinct series of minute bare spots, not larger than the fine punctures of the striæ; the scales on the upper surface small, densely placed, uniform in colour, not scintillate, usually golden- or bluish-green, rarely white . . . . . *fulgens,* sp. n.
b. Surface partly bare and comparatively smooth, the legs included, the latter wholly rufous; the metallic-green scales on the elytra condensed into a narrow sinuous stripe on the disc: species large . . . . . *rufipes,* sp. n.

1. **Hadromerus scintillans,** sp. n. (Tab. VII. figg. 25, ♂; 26, apex of elytra, ♀.)

Hadromerus scintillans, Jekel, in litt.

Hadromerus schönherri, Chevr. in litt.

Very like *H. dejeani*, but differing as follows:—Rostrum slightly longer, more deeply hollowed down the middle, appearing rather sharply carinate on each side above; the antennal club more elongate; the elytra relatively longer, with similarly coloured scales, the bare spots on the interstices extremely small in ♀, larger, numerous, and conspicuous in ♂, the suture set with long hairs towards the tip in ♀; the tibiæ and tarsi often ferruginous.

Length $7\frac{1}{2}$–10, breadth $2\frac{1}{2}$–4 millim. (♂ ♀.)

Hab. Mexico (*Mus. Brit.*), Orizaba (*H. H. Smith*), Playa Vicente (*Höge*); Guatemala (*Sallé, Mus. Brit.*), Quiché Mts. 7900–9000 ft. (*Champion*), Tecpan (*Conradt*); ? Costa Rica * (*coll. Pascoe*).

This insect is apparently common in the Los Altos region of Guatemala (between 6000 and 9000 feet) and it has long been known under Jekel's MS. name of *H. scintillans.* The scales are coloured and beautifully scintillate as in *H. dejeani,* from which the present species is separable by the more deeply excavate rostrum and the longer antennal club. Four specimens only have been seen from Mexico, and the

* Possibly found by Scherzer, who collected also in the Los Altos region of Guatemala.

locality "Costa Rica" is doubtful. The long series from Quiché was captured in August 1880.

2. **Hadromerus dejeani.** (Tab. VII. fig. 27, ♀.)

Hadromerus dejeanii, Boh. in Schönh. Gen. Curc. vi. 1, p. 293 [1].

Moderately elongate, black; densely clothed with rather large, subimbricate, glittering intermixed green and golden scales, with blue and cupreous reflections, and also set with fine, scattered, inconspicuous erect hairs, which become longer on the apical declivity of the elytra, the suture with longer hairs towards the apex in ♀. Head and rostrum together about as long as the prothorax, the rostrum canaliculate and broadly flattened or feebly depressed down the middle; antennal club about as long as joints 1–5 of the funiculus, the two basal joints of the latter subequal in length. Elytra rather finely seriate-punctate, the interstices each with from three to five rows of scales and with a scattered irregular series of very small, bare, smooth spots. Legs densely squamose and pilose; anterior femora subangulate before the apex within; anterior tibiæ sharply unguiculate in ♂, more feebly so in ♀, the intermediate pair also with a small claw in ♂.

Length 7–9, breadth $2\frac{1}{2}$–4 millim. (♂ ♀.)

Hab. Mexico (*Mus. Brit.*), Playa Vicente, Cordova (*Höge*), Jalapa (*U.S. Nat. Mus.*), El Camaron (*Sallé*), Vera Cruz [1].

Of this species, the type of which has been compared with the examples from El Camaron in the Sallé collection by Dr. Sharp, we have received a long series from Playa Vicente. There is very little variation in the general colour of the scales, which are so large as to be subimbricate, though they are a little smaller on the elytra in the ♂ than in the ♀. The fine setæ on the upper surface are conspicuous on the apical declivity only. Boheman also gives [1] California as a locality, probably in error.

3. **Hadromerus micans,** sp. n. (Tab. VII. figg. 28, 28 *a*, ♀.)

♀. Elongate, rather broad, black; densely clothed with small, scintillating, green and golden scales, with cupreous and bluish reflections, and also set with fine, scattered, long, erect hairs, which become still longer along the suture towards the apex. Head and rostrum together about as long as the prothorax, the rostrum canaliculate and moderately excavate; antennæ with joint 2 of the funiculus a little longer than 1, the club as long as 3–7 united. Prothorax very finely, closely punctate. Elytra long and broad, subparallel, flattened on the disc anteriorly, with prominent tumid humeri; finely seriate-punctate, the interstices flat, each with from five to seven closely packed rows of scales, and with a series of rather large, somewhat closely placed, polished, glabrous spots. Legs densely squamose and pilose; anterior tibiæ denticulate and sharply unguiculate.

Length $12\frac{1}{4}$–14, breadth $4\frac{1}{2}$–$5\frac{1}{10}$ millim.

Hab. Mexico, Puebla (*Crawford, in Mus. Brit.*); Guatemala, Purula in Vera Paz (*Champion*).

Two specimens. Larger and broader than *H. scintillans*, with a longer second joint to the funiculus, more prominent humeri, and larger polished bare spots along the elytral interstices, the scales small and closely packed.

4. **Hadromerus opalinus.** (Tab. VII. figg. 29, ♂; 30, ♀, var.)

Hadromerus opalinus, Horn, Proc. Am. Phil. Soc. xv. p. 85 [1].

Elongate, black, the antennæ and legs sometimes wholly or in part ferruginous; densely clothed with rather

small scales, which are very variable in colour—blue (type), green, cupreous, rosy, cinereous, or whitish, and sometimes scintillate with metallic golden reflections, or differently coloured along the suture and margin or disc of the elytra, or on the under surface,—and also set with long, fine, erect, pallid hairs, those on the elytra arranged in a single row down each interstice, the suture set with longer setiform hairs towards the apex in ♀. Head and rostrum together about as long as the prothorax, the rostrum canaliculate and broadly depressed down the middle; joints 1 and 2 of the funiculus subequal in length. Elytra rather finely seriate-punctate, the interstices each with from four to six rows of scales and with a scattered irregular series of very small, bare, smooth spots. Legs densely squamose and pilose; intermediate tibiæ unguiculate in the ♂.

Length 7–10, breadth $2\frac{4}{5}$–4 millim. (♂ ♀.)

Hab. North America, Arizona[1].—Mexico (*Truqui, in Mus. Brit.; Koltze, in Mus. Dresden; U.S. Nat. Mus.*), Hacienda de Bleados in San Luis Potosi (*Palmer*), Ciudad in Durango 8100 ft. (*Forrer*), Puebla, El Camaron (*Sallé*), Jalapa, Las Vigas, Cordova, Playa Vicente (*Höge*).

This variable insect is generally placed as a form of *H. dejeani* in collections, from which it differs in the smaller scales on the upper surface and the more abundant fine scattered setosity. In most of the specimens the scales are uniformly green or cupreo-cinereous; but in the short series from Chiapas nearly all the colour-varieties are to be found, including several with intermixed scintillating metallic scales or the elytra faintly maculate. I have not seen an example from Arizona. The equally variable S.-American *H. gemmifer* is very like *H. opalinus*, but it has larger bare smooth spots along the elytral interstices.

5. **Hadromerus cretatus,** sp. n. (Tab. VII. fig. 31, ♀.)

♀. Moderately elongate, black; densely clothed with glossy pure white scales, and also set with a few fine erect hairs, those along the posterior half of the suture long and setiform. Head and rostrum together about as long as the prothorax, the rostrum canaliculate and moderately excavate; antennæ with joint 2 of the funiculus slightly longer than 1, the club elongate. Prothorax closely, finely punctate. Elytra comparatively short and broad, rather convex, the fine seriate punctures almost hidden by the densely placed scales, the interstices flat, each with an irregular scattered row of from six to eight, subangular, glabrous, smooth, slightly raised spots. Legs densely squamose and sparsely pilose; anterior tibiæ strongly unguiculate and denticulate.

Length $10\frac{1}{4}$, breadth 4 millim.

Hab. Panama, Caldera in Chiriqui (*Champion*).

One example. Distinguishable by the pure white, porcelain-like scales, which are so closely placed on the elytra as to almost cover the striæ, the scattered, subangular, flattened, tuberculiform spots along the interstices, and the comparatively short, broad general shape.

6. **Hadromerus fulgens,** sp. n. (Tab. VII. figg. 32, ♂, 33, ♀, var.)

Hadromerus fulgens, Chevr. in litt.

Hadromerus splendidus, Sallé, in litt.

Moderately elongate black, the antennæ (the club excepted), tarsi, and tibiæ often more or less rufo-testaceous; densely clothed with small, uniformly coloured—green, golden-green, bluish, greenish-white,

or whitish—scales, and also set with very fine, erect, scattered hairs, which become longer and setiform along the suture towards the apex in ♀. Head and rostrum together about as long as the prothorax, the rostrum canaliculate and moderately depressed down the middle; antennæ with joints 1 and 2 of the funiculus subequal in length, the club elongate, as long as 3–7 united. Elytra finely punctate-striate, the interstices flat or very feebly convex, each with from four to seven closely-packed rows of scales and, at most, a scattered series of minute bare spots. Legs densely squamose and pilose; anterior tibiæ conspicuously denticulate, strongly unguiculate in ♂, more feebly so in ♀, the intermediate pair also with a small claw in the ♂.

Length $6\frac{1}{2}$–$8\frac{3}{4}$, breadth $2\frac{1}{3}$–$3\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico (*coll. Fry*), Puebla, Parada, Ixtepec (*Sallé*), Cuernavaca (*Wickham*), Oaxaca (*Mus. Brit.*), Amula (*H. H. Smith*).

This Mexican insect has long been known under one or the other of the above-quoted MS. names. It is more densely squamose and a little less elongate than *H. opalinus* and *H. scintillans*, and the small scales are uniformly coloured (though variable in tint) and not scintillate when viewed in different lights. Two examples only have been seen with whitish squamosity, one of them having been found at the same locality (Cuernavaca) as others with golden-green scales. The minute bare spots on the elytral interstices, when present, are not larger than the seriate punctures.

7. **Hadromerus rufipes,** sp. n. (Tab. VII. figg. 34, 34 *a*, ♀.)

♀. Elongate, shining, black, the antennæ (the club excepted) and legs ferruginous; clothed along the sides (above and beneath) with scattered, iridescent, golden-green and blue scales, the scales on the upper surface clustered into several small spots on the prothorax and a longitudinal sinuous stripe down the disc of each elytron, the two stripes becoming coalescent at the commencement of the apical declivity; the under surface and legs also with scattered pallid hairs, the suture of the elytra with several very long erect hairs towards the tip. Head and rostrum together about as long as the prothorax, the rostrum deeply emarginate at the apex, canaliculate, feebly depressed down the middle, and finely punctate; joints 1 and 2 of the funiculus equal in length. Prothorax very sparsely, finely punctate. Elytra broad, elongate, flattened on the disc; with rows of fine scattered punctures, the interstices flat, alutaceous, and sparsely, minutely punctured, the space occupied by the long sinuous stripe somewhat depressed. Legs very sparsely, finely punctured, sparsely pilose, and with a few scattered metallic scales; anterior tibiæ unguiculate and feebly denticulate.

Length $13\frac{1}{2}$, breadth 5 millim.

Hab. Costa Rica, Arcangeles 1700 metres (*Biolley*).

One example. A remarkably distinct form, distinguishable at a glance by its deeply notched rostrum, red legs, the narrow sinuous line of iridescent green scales down the disc of each elytron, and the comparatively smooth, partly bare surface, though this may be to some extent due to abrasion *.

PANDELETEIUS.

Pandeleteius, Schönherr, Gen. Curc. ii. p. 129 (1834), vi. 1, p. 296; Lacordaire, Gen. Col. vi. p. 74.
Pandeletejus, Horn, Proc. Am. Phil. Soc. xv. p. 86.
Menetypus, Kirsch, Berl. ent. Zeitschr. 1867, p. 233.

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* Denuded examples of the allied Central-American forms are not nearly so smooth.

This genus appears to have its headquarters in Mexico, whence a large number of species are now described, extending northward into the United States and southward into the Windward Is., Colombia, &c. The type is the N.-American *P. hilaris*, Herbst (=*pauperculus*, Gyll.). It is connected with *Hadromerus* by *P. erubescens*, mainly differing from that genus by the less approximate anterior coxæ. The species here referred to *Pandeleteius* have a 7-jointed funiculus, very stout anterior femora, and denticulate anterior tibiæ *. The vibrissæ are not visible in one or two of the smaller forms (as already noted by Schaeffer), but they may be abraded or represented by small scales; and the scrobes vary in length, according to the species. Those with a deep transverse inter-antennal sulcus on the rostrum, or a long second joint to the funiculus, might perhaps be eliminated, but they are connected by intermediate forms. *Menetypus* (type, *M. hadromeroides*, Kirsch, from Colombia) only differs from *Pandeleteius* in the wide sense in having rather more sharply denticulate anterior tibiæ †. The females of several species have the elytral suture set with long erect hairs or setæ towards the apex (as in *Hadromerus*), and in *P. armatus* there is also a sharp oblique tooth on its inner edge near the tip. The wings seem to be fully developed in all of them.

The numerous species may be distinguished thus :—

a. Scrobes descending to lower margin of rostrum.
  a^1. Second joint of funiculus as long as first; vibrissæ long; eyes prominent.
    a^2. Rostrum with a deep, transverse, inter-antennal groove.
      a^3. Vestiture metallic, scintillate; elytra maculate . . . . . *erubescens.*
      b^3. Vestiture not metallic, whitish; elytra immaculate. . . . . *boops.*
    b^2. Rostrum without transverse groove; vibrissæ long; anterior femora enormously developed . . . . . *femoralis.*
  b^1. Second joint of funiculus much shorter than first.
    c^2. Rostrum with a deep, transverse, inter-antennal groove and a v-shaped ridge behind the nasal plate; eyes prominent; vibrissæ not visible; vestiture opalescent, elytra with coalescent, angulate, darker markings; anterior tibiæ elongated . . . . . *hieroglyphicus.*
    d^2. Rostrum with the inter-antennal groove shallow or wanting.
      c^3. Vibrissæ setiform.
        a^4. Eyes prominent.
          a^5. Anterior tibiæ slender, moderately long; prothorax sublineate; elytra obliquely bifasciate and with a dark saddle-shaped patch . . . . . *ephippiatus.*

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* *P. rotundicollis*, Fall, has a 6-jointed funiculus, and *P. ovipennis* and *P. submetallicus*, Schaeff., differ in various ways from the genus as here understood.

† An allied unnamed Colombian genus has simple anterior tibiæ.

b^5. Anterior tibiæ short.

a^6. Surface set with short, stout, clubbed setæ; elytra immaculate; prothorax faintly vittate . . . . . *clavisetis.*

b^6. Surface thickly set with stout, curled, decumbent setæ; elytra faintly maculate; legs stout . . . . . *flexilis.*

b^4. Eyes depressed; anterior tibiæ moderately long; surface set with curled, long or short, setæ . . . *crispus, cucullatus, cuneatus, obliquus, varicolor.*

d^3. Vibrissæ squamiform; eyes depressed or slightly prominent; anterior tibiæ short; surface set with curled setæ (those towards apex of elytral suture long in *P. hispidus*, ♀) . . . . . *hispidus, brevipes.*

e^3. Vibrissæ not visible (? abraded); eyes prominent; anterior tibiæ elongate; elytra with long hairs on suture towards apex (♀) . . . *conspersus.*

b. Scrobes shorter, not descending to lower margin of rostrum, subangulate or curved; second joint of funiculus short, seldom longer than third and fourth united; vibrissæ setiform.

c^1. Anterior legs very elongate.

e^2. Anterior tibiæ slender; vestiture uniform; eyes rather prominent; elytra with long hairs on suture towards tip in ♀ . . . . . *tibialis.*

f^2. Anterior tibiæ stouter; elytra subparallel, variegate; prothorax shallowly sulcate, posteriorly dilated, constricted at base; all the tibiæ hairy in ♂ . . . . . *hirtipes.*

d^1. Anterior legs moderately elongate.

g^2. Elytra strongly rounded at the sides and produced at the apex: species large . . . . . *inflatus.*

h^2. Elytra widened towards middle or subparallel.

f^3. Head unusually broad; prothorax convex, constricted at base and towards apex; elytra maculate . . . . . *laticeps.*

g^3. Head smaller.

c^4. Eyes prominent; elytra with short, curled, minute or conspicuous, hairs.

c^5. Elytra with suture tufted and dentate near apex in ♀ . . . . *armatus.*

d^5. Elytra with suture unarmed in ♀.

c^6. Prothorax strongly constricted at base and apex . . . . . *ornatifrons.*

d^6. Prothorax feebly constricted at base and apex . . . *viridiventris, quichensis.*

d^4. Eyes less prominent or depressed.

e^5. Prothorax strongly constricted at base; elytra with short or minute curled hairs, the humeri not truncate.

e^6. Prothorax quadrinodose . . . . . *quadrinodosus.*

f^6. Prothorax even.

a^7. Elytra without longer hairs on suture towards apex.

a^8. Anterior tibiæ curved towards the apex.

a^9. Rostrum subtriangular (as seen from above); head small; prothorax feebly constricted anteriorly . . . *brevinasus.*

b^9. Rostrum subparallel-sided anteriorly (as seen from above).
a^{10}. Prothorax and elytra variegate; head small . . . *maculicollis*.
b^{10}. Prothorax vittate down middle, elytra maculate; head larger . . . . . *fasciatus, undatus, vitticollis*.
c^{10}. Prothorax and elytra albo-squamose, elytra obsoletely maculate . . . . . *amulæ*.
d^{10}. Prothorax and elytra sublineate . . . . . *sublineatus*.
b^8. Anterior tibiæ strongly sinuate; elytra maculate . . . *sinuatipes*.
b^7. Elytra with long hairs on suture near apex in ♀ . . . . *ciliatipennis*.
c^7. Elytra with stout scattered suberect setæ; head small; anterior tibiæ sinuate . . . . . *microcephalus*.
f^5. Prothorax feebly constricted laterally at base; elytra without curled hairs, densely, uniformly albo-squamose, the humeri oblique . . . . . *albisquamis*.
g^5. Prothorax oblong, feebly constricted at base.
g^6. Elytra faintly maculate, the suture nodose and abruptly declivous posteriorly, the humeri oblique . . . . . *nodifer*.
h^6. Elytra uniformly squamose, immaculate, the suture declivous posteriorly, the humeri rounded . . . . . *longicollis*.

1. **Pandeleteius erubescens,** sp. n. (Tab. VII. fig. 35, ♂.)

Elongate, piceous, the antennæ (the club excepted) and tarsi more or less ferruginous; densely clothed above with intermixed golden-green and blue scintillating scales, the head and rostrum, the margins of the prothorax narrowly, the base and apex of the elytra, and a transverse subtriangular patch on the outer half of the disc just beyond the middle, the legs, and under surface cupreous, the scales beneath whitish in one specimen; the surface also set with minute, scattered, decumbent, hair-like scales, those on the elytra uniseriately arranged down each interstice. Head and rostrum about as long as the prothorax, the rostrum deeply emarginate at the tip, canaliculate and shallowly depressed down the middle, the median groove terminating anteriorly in a transverse sulcus, the nasal plate triangular, the scrobes long and descending; eyes prominent; antennæ with joint 2 of the funiculus slightly longer than 1, the club as long as 3–7 united. Prothorax not so long as broad, rounded at the sides, constricted in front and narrowed behind; vibrissæ long. Elytra much broader than the prothorax, moderately elongate, subparallel in ♂, widening to the middle in ♀, flattened on the disc, acuminate and dehiscent at the tip, the bare, interlocking, coriaceous lower margin of the suture thus being exposed for a short distance; finely punctate-striate, the interstices flat. Anterior tibiæ unguiculate and feebly denticulate, moderately long in the two sexes.

Length $7\frac{1}{4}$–$8\frac{4}{5}$, breadth $2\frac{2}{5}$–$3\frac{2}{5}$ millim. (♂ ♀.)

Hab. Costa Rica, Savanillas de Pirris (*Underwood*: ♀); Panama, Volcan de Chiriqui 3000 feet (*Champion*: ♂).

One pair, the male somewhat immature and with conspicuous seriate punctures on the elytra. The sculpture of the surface is almost completely hidden in the female by the dense vestiture. This beautiful insect is clothed with glittering metallic scales, like *Hadromerus scintillans* and its allies, but the anterior coxæ are well separated and the species therefore cannot be included in *Hadromerus*. The transverse interantennal groove is deep.

2. **Pandeleteius boops,** sp. n. (Tab. VIII. figg. 1, 1 *a*, *b*, ♂.)

Elongate, piceous or obscure ferruginous, the tibiæ ferruginous; densely, uniformly, clothed with rather coarse pale brown or whitish scales. Head and rostrum together slightly longer than the prothorax, the rostrum short, broad, hollowed down the middle, deeply emarginate at the tip, and with a sharply-defined transverse groove between the points of insertion of the antennæ, the scrobes angulate and descending; eyes very prominent; antennæ rather long and slender, joint 2 of the funiculus scarcely shorter than 1, 3–7 decreasing in length, the club as long as 4–7 united. Prothorax transverse, subcylindrical, feebly constricted at the base and before the middle, closely, finely punctate; vibrissæ long. Elytra long, much broader than the prothorax, widening to the middle, strongly so in ♀, transversely depressed at the base, the sutural angles subacuminate and almost contiguous; punctate-striate, the interstices 3, 5, and 7 raised, except on the disc anteriorly. Legs rather slender, the anterior pair elongated; anterior femora abruptly clavate; anterior tibiæ bowed at the tip, sharply unguiculate, and armed with about 6 minute teeth.

Length $5\frac{1}{2}$–6, breadth $1\frac{7}{8}$–$2\frac{1}{3}$ millim. (♂ ♀.)

Hab. Panama, Volcan de Chiriqui 4000 feet (*Champion*).

One pair. This insect has the vestiture uniformly coloured as in *P. tibialis*, but differs from it (and from the Colombian *Menetypus hadromeroides*, Kirsch, also *) in having a transversely sulcate rostrum, prominent eyes, a long second joint to the funiculus, a subcylindrical prothorax, &c.

3. **Pandeleteius femoralis,** sp. n.

Moderately elongate, piceous, the legs in great part ferruginous; densely clothed with opaque whitish and pale brown scales, the latter condensed on the elytra into several irregular more or less confluent spots (one near the suture towards the apex and two on the fourth interstice below the base more conspicuous than the rest, the scales on the interstices 1–3 almost wholly white to far beyond the middle). Head and rostrum together a little shorter than the prothorax, the rostrum broad, widening outwards (as seen from above), canaliculate and slightly hollowed, deeply emarginate at the tip, the nasal plate triangular and margined behind, the scrobes descending to the lower margin; antennæ with joints 1 and 2 of the funiculus equal in length, the club long; eyes very prominent. Prothorax about as long as broad, produced in front, rounded at the sides, strongly constricted at the base and before the middle, coarsely punctate (as seen abraded); vibrissæ long. Elytra moderately long, a little broader than the prothorax, gradually widening to the middle, transversely depressed below the base; finely punctate-striate, the alternate interstices slightly raised posteriorly, the suture abruptly declivous on the apical declivity. Anterior femora enormously developed, very strongly clavate. Anterior tibiæ long, curved at the tip, strongly unguiculate, and armed with 6 small equidistant teeth.

Length $4\frac{4}{5}$, breadth $1\frac{4}{5}$ millim. (♀.)

Hab. Mexico (*Mus. Brit.*).

One rather abraded specimen, injured by pinning, but with the left elytron intact and the scales undisturbed. This is one of the two examples from the Jekel collection representing the Mexican *P. tibialis* in the British Museum, and the locality perhaps requires confirmation. The insect, however, may readily be known by the enormously developed, very strongly clavate anterior femora, the elongate second joint to the funiculus, the very prominent eyes, the deeply cleft apex of the rostrum, and the faintly maculate outer half of the elytra. *P. femoralis* may prove to be of Colombian origin, but it is undescribed in any case.

* We are indebted to Dr. Heller for the loan of the type of this insect.

4. **Pandeleteius hieroglyphicus,** sp. n. (Tab. VIII. figg. 2, 2 *a*, *b*, ♀.)

Moderately elongate, ferruginous; densely clothed with opalescent whitish or pale golden scales, the prothorax with a median vitta, and the elytra each with various oblong, obliquely confluent or angulate, markings, fuscous, the scales on the apical portion of the rostrum metallic, the upper surface also set with scattered minute curled hairs. Head and rostrum together as long as the prothorax, very finely, sparsely punctate, the rostrum very short, broad, flattened, deeply emarginate at the tip, grooved down the middle and with a transverse sulcus between the points of insertion of the antennæ, the nasal plate triangular and limited behind by a v-shaped ridge, the scrobes deep and descending; eyes prominent. Prothorax about as long as broad, constricted at the base and before the middle, finely, sparsely punctate; vibrissæ apparently wanting. Elytra comparatively short, much broader than the prothorax, gradually widening to the middle in ♀, subparallel in ♂; finely punctate-striate, the alternate interstices somewhat raised. Legs slender, the anterior femora strongly and abruptly clavate; anterior tibiæ elongate, curved at the apex, unguiculate, and armed with from 4–6 minute sharp teeth; intermediate tibiæ hollowed towards the apex within, the posterior pair also hollowed in ♂.

Length 3–3¾, breadth 1–1⅓ millim. (♂ ♀.)

Hab. Guatemala, Zapote (*Champion*); Costa Rica, Tucurrique (*U.S. Nat. Mus.*); Panama, Bugaba, Volcan de Chiriqui (*Champion*).

Twelve specimens—two from Costa Rica, in very fresh condition (taken as the types), three from Guatemala, smaller and paler, and seven from Chiriqui, all worn. A small, submetallic form, with peculiar elytral markings (including a common ᴧ-shaped patch towards the apex), a transversely sulcate rostrum, descending scrobes, prominent eyes, strongly clavate anterior femora. &c. The vibrissæ are apparently wanting, perhaps owing to the dense clothing of scales. The tarsal claws are free. The v-shaped ridge bordering the nasal plate is similar to that of *Polydacrys depressifrons.*

5. **Pandeleteius ephippiatus,** sp. n. (Tab. VIII. fig. 3.)

Moderately elongate, widened posteriorly, ferruginous or obscure ferruginous, more or less maculate with black, the dark markings on the elytra assuming the form of a very large, more or less distinct, common, externally narrowed, saddle-shaped patch, which usually extends forwards along the suture to the base, the tibiæ and antennæ wholly ferruginous; thickly clothed with rather large, brown and whitish scales, the latter condensed into a stripe along the sides of the head, one or two sinuous lines on each side of the prothorax, and an oblique fascia before and another beyond the dark space on the elytra; the upper surface also set with short, curled, adpressed hairs. Head and rostrum together as long as the prothorax, the rostrum short, broad, emarginate at the tip, slightly hollowed, and with a transverse groove between the points of insertion of the antennæ, the nasal plate triangular, short, the scrobes deep and descending to the lower margin; eyes prominent; joint 2 of the funiculus very short, small, 3–7 moniliform. Prothorax subcylindrical, about as long as broad, feebly constricted at the base and before the middle, closely punctate; vibrissæ long. Elytra much broader than the prothorax, widening to the middle, somewhat pointed at the tip, transversely depressed below the base; rather coarsely punctate-striate, the interstices moderately convex. Anterior femora clavate. Anterior tibiæ elongated, bowed at the apex, sharply unguiculate, and armed with from 3–5 minute scattered denticles.

Length 4⅕–5⅕, breadth 1¾–2 millim. (♀ ?)

Hab. Panama, Volcan de Chiriqui 8000 feet (*Champion*).

Eight specimens. Distinguished by the broad, deeply emarginate, transversely grooved rostrum, the descending scrobes, the prominent eyes, the subcylindrical prothorax, and the posteriorly widened, subacuminate elytra, which have a large, dark, saddle-shaped post-median patch preceded and followed by an oblique whitish or paler fascia.

6. **Pandeleteius clavisetis,** sp. n. (Tab. VIII. figg. 4, 4 *a*.)

Oblong, ferruginous or obscure ferruginous; thickly clothed with large pale brown or whitish scales, those on the rostrum and under surface opalescent, the prothorax with a faint infuscate median vitta; the upper surface and legs also rather closely set with stout, suberect, blunt setæ, which are very conspicuous on the head and alternate elytral interstices. Head and rostrum together shorter than the prothorax, the rostrum very short, flattened, and angularly emarginate at the tip, the scrobes descending, deep; joint 2 of the funiculus very little longer than 3; eyes moderately prominent. Prothorax about as long as broad, somewhat produced and subtubulate in front, constricted anteriorly and at the base, finely punctate; vibrissæ represented by 2 or 3 fine hairs. Elytra much broader than the prothorax, comparatively short, gradually widened to the middle, finely punctate-striate, the interstices almost flat. Anterior femora stout, clavate. Anterior tibiæ very slightly elongated, finely unguiculate, and armed with about 5 small teeth. Tarsal claws long.

Length $3\frac{2}{5}$–4, breadth $1\frac{1}{3}$–$1\frac{2}{3}$ millim.

Hab. MEXICO, Omilteme and Chilpancingo in Guerrero (*H. H. Smith*).

Two specimens, probably male and female. This small species has the anterior legs shorter than usual in *Pandeleteius*; the scales uniformly coloured above; the setæ stout, blunt, and suberect, and especially conspicuous on the front of the head; the scrobes descending to the lower surface of the rostrum; and the vibrissæ reduced to two or three fine hairs.

7. **Pandeleteius flexilis,** sp. n. (Tab. VIII. figg. 5, 5 *a*.)

Moderately elongate, rather narrow, robust, nigro-piceous; variegated with a dense clothing of dark brown and blackish scales, the elytra in some specimens with a transverse or oblique spot on the outer part of the disc just before the middle, and a common, narrow, undulate, subapical fascia, whitish or pale brown; the upper surface and legs also thickly set with short, stout, curled, decumbent, setiform hairs, those on the elytra uniseriately arranged down each interstice. Head and rostrum together much shorter than the prothorax, the rostrum very short, with a transverse triangular nasal plate, the scrobes descending; eyes rather small, moderately prominent. Prothorax a little longer than broad, produced in front, constricted anteriorly and at the base, coarsely punctate; vibrissæ long. Elytra wider than the prothorax, moderately long, subparallel (♂), or slightly widened to the middle (♀); coarsely punctate-striate, the interstices feebly convex. Anterior femora clavate. Anterior tibiæ comparatively short, unguiculate, and armed with 4 or 5 small teeth.

Length $4\frac{1}{5}$–$4\frac{4}{5}$, breadth $1\frac{1}{2}$–$1\frac{2}{3}$ millim. (♂ ♀.)

Hab. MEXICO, Ventanas in Durango (*Höge*); GUATEMALA, near the city (*Champion*).

Nine specimens, all but one from Guatemala. A narrow, robust, obscurely variegate form, very like a *Sitones*, thickly set with short, curled, decumbent, dark, setiform hairs, which are equally distributed along each elytral interstice, and with the legs stout and the anterior tibiæ comparatively short.

8. **Pandeleteius crispus,** sp. n. (Tab. VIII. figg. 6, 6 *a*, ♂.)

Elongate, robust, subcuneiform, piceous, the antennæ and tips of the tarsi ferruginous; densely clothed with brown scales, the prothorax with an indistinct darker median vitta and the elytra with two oblique fuscous or blackish fasciæ, the second of which is followed by a more or less distinct, common, curved, pale band; the upper surface also somewhat thickly set (the legs included) with stout, curled, decumbent setæ, the setæ on the elytra much longer, suberect, and confined to the alternate interstices, those along the third clustered into a small tuft at the commencement of the apical declivity, the suture also with

long erect setæ down the apical third; the under surface sparsely pilose. Head and rostrum together shorter than the prothorax, sparsely punctate, the rostrum flattened, transverse, very shallowly emarginate at the tip, the scrobes descending; eyes depressed; joint 2 of the funiculus small, shorter than 3 and 4 united. Prothorax longer than broad, produced at the apex, feebly constricted anteriorly and at the base, subulate in front, conspicuously punctate; vibrissæ long. Elytra long, broader than the prothorax, gradually widening to the middle, the humeri rather prominent; punctate-striate, the alternate interstices raised. Anterior femora feebly clavate. Anterior tibiæ moderately long, stout, curved at the tip, strongly unguiculate, and armed with 6 or 7 short teeth. Intermediate tibiæ excavate, and (in the Amula examples) distinctly denticulate, towards the apex within, and with a small claw at the tip. Length $5\frac{1}{2}$–7, breadth 2–$2\frac{4}{5}$ millim. (♂.)

Hab. Mexico, Amula in Guerrero (*H. H. Smith*), Parada in Oaxaca (*Sallé*).

Four specimens, probably all males, the one from Parada smaller than the others. This insect may be known by its elongate, somewhat cuneiform shape, the long, stout, curled setæ on the alternate elytral interstices, the descending scrobes, and the subtruncate anterior margin of the rostrum.

9. **Pandeleteius cucullatus,** sp. n.

Moderately elongate, subcuneiform, obscure ferruginous or ferruginous; densely clothed with pale brownish scales, the prothorax with a faint median vitta and the elytra with two indistinct, oblique, darker brown fasciæ separated by a paler patch, the surface also set with very short, curled, decumbent setæ, which become longer and more numerous on the suture of the elytra towards the apex; the scales along the middle of the under surface white and opalescent. Head and rostrum together much shorter than the prothorax, the rostrum extremely short, flattened, feebly emarginate at the tip, the scrobes descending; eyes depressed. Prothorax a little longer than broad, produced in front, feebly constricted and narrowed at the base, rather coarsely punctate; vibrissæ long. Elytra broader than the prothorax, widened to the middle, and somewhat inflated posteriorly, punctate-striate, the alternate interstices raised. Anterior femora feebly clavate. Anterior tibiæ stout, moderately long, sharply unguiculate, and armed with small scattered teeth. Intermediate tibiæ hollowed near the apex within, and with a small claw at the tip. Length $4\frac{1}{2}$–$5\frac{2}{5}$, breadth 2–$2\frac{1}{10}$ millim. (♂.)

Hab. Mexico (*Mus. Brit.; Höge, in coll. Solari*), Cuernavaca (*Flohr*).

Four specimens, the one found by Höge partly abraded and showing the coarse puncturing of the head, prothorax, and elytra. Very near *P. cuneatus*, but with the rostrum still shorter, and feebly emarginate at the tip, the markings on the upper surface very faint (the general colour of the vestiture being almost uniform), the intermediate tibiæ (♂) distinctly unguiculate. The basal constriction of the prothorax does not extend across the disc in either of these two species.

10. **Pandeleteius cuneatus,** sp. n. (Tab. VIII. figg. 7, 7 *a*, ♀.)

Elongate, robust, subcuneiform, piceous, the antennæ and the tips of the tarsi ferruginous; densely clothed with brown scales, the prothorax trivittate, and the elytra obliquely bifasciate and irregularly maculate, with darker brown or blackish, the elytral fasciæ each followed by a pale brown or whitish patch, the subapical one usually extending down the disc to the tip; the surface also set with very short, inconspicuous, curled, decumbent setæ, those on the elytra a little more closely placed on the raised alternate interstices than on the others; the under surface with large, pallid, opalescent scales and scattered hairs. Head and rostrum together shorter than the prothorax, sparsely, finely punctate, the rostrum transverse, flattened, angularly emarginate at the tip, the scrobes descending; eyes depressed. Prothorax

longer than broad, produced at the apex, constricted anteriorly and at the base, sparsely, finely punctate; vibrissæ long. Elytra much broader than the prothorax, widening to the middle, punctate-striate, the alternate interstices raised, the others also more or less convex. Anterior femora feebly clavate. Anterior tibiæ stout, moderately long, unguiculate, and armed with 5 or 6 sharp teeth. Intermediate tibiæ hollowed near the apex within in ♂.

Length 5–7$\frac{2}{5}$, breadth 2–2$\frac{9}{10}$ millim. (♂ ♀.)

Hab. GUATEMALA (*Mus. Brit.*), near the city (*Salvin, Champion*), San Gerónimo (*Champion*).

Eight examples, five of which are from Baja Vera Paz. Very like the Mexican *P. crispus*, but with the elytral setæ extremely short and inconspicuous (as in *P. varicolor*), the rostrum more deeply emarginate at the tip, the prothorax faintly trivittate. The less clavate anterior femora, the relatively longer prothorax, and the differently marked elytra separate *P. cuneatus* from *P. varicolor*. The specimens with conspicuously hollowed intermediate tibiæ are assumed to be males.

11. **Pandeleteius obliquus,** sp. n. (Tab. VIII. figg. 8, 8 *a*, *b*.)

Elongate, obscure ferruginous, the elytra fuscous, obliquely fulvo-bifasciate, the subapical fascia extending down the middle of the disc to the tip; the reddish portions of the upper surface clothed with very small cupreous, and the rest with darker, scales, and also set with short, curled, decumbent, inconspicuous setæ, the under surface with larger, opalescent, pallid scales. Head and rostrum together much shorter than the prothorax, the rostrum extremely short, feebly canaliculate down the middle, and subcarinate along the sides, the nasal plate transverse, triangular, the scrobes long, sinuous, and deep; eyes large, depressed; joint 2 of the funiculus a little longer than 3. Prothorax about as long as broad, produced in front, feebly constricted anteriorly and narrowed at the base, closely, rather coarsely punctate; vibrissæ rather short. Elytra elongate, subparallel at the base and gradually widened thence to the middle, the humeri rather prominent; punctate-striate, the alternate interstices raised, the third somewhat tumid at the commencement of the apical declivity. Anterior femora very stout and strongly clavate. Anterior tibiæ stout, slightly sinuate, comparatively short, feebly unguiculate at the tip, and with an interrupted series (4 . 3) of 7 long sharp teeth (fig. 8 *b*). Intermediate tibiæ hollowed near the apex within.

Length 7$\frac{1}{2}$, breadth 2$\frac{1}{2}$ millim. (♂?)

Hab. MEXICO, Xautipa in Guerrero (*H. H. Smith*).

One specimen, somewhat immature and with the larger scales on the upper surface partially abraded. Near *P. crispus* and *P. cuneatus*, but with the rostrum deeply, triangularly emarginate at the tip, the prothorax less constricted in front, the anterior femora strongly clavate, the anterior tibiæ interruptedly denticulate, the humeri more prominent. The elytral setæ are short, curled, and inconspicuous, as in *P. cuneatus* and *P. varicolor*.

12. **Pandeleteius varicolor,** sp. n. (Tab. VIII. fig. 9, ♂.)

Elongate, rather convex, dull, piceous, the antennæ and the tips of the tarsi ferruginous; densely clothed with rather large, pale brown, whitish, and fuscous scales, the darker scales on the prothorax clustered into an irregular median vitta, which extends narrowly on to the head, the white scales on the elytra condensed into an angulate subapical fascia and various scattered spots, and the pale brown ones into a long streak on the third interstice, the upper surface also set with very short, scattered, curled, decumbent setæ, the scales on the under surface opalescent, the legs annulate. Head and rostrum finely punctate,

the rostrum short, transverse, canaliculate, the nasal plate transverse, triangular, the scrobes descending; eyes not prominent. Prothorax slightly broader than long, feebly constricted at the base, narrowed and subtubulate in front, conspicuously punctate; vibrissæ long. Elytra long, subparallel in their basal half, wider than the prothorax; punctate-striate, the alternate interstices raised, more distinctly setose and wider than the rest, the others feebly convex. Anterior femora strongly clavate. Anterior tibiæ comparatively short and stout, feebly unguiculate, and set with five sharp teeth. Intermediate tibiæ excavate towards the apex within.

Length $6\frac{1}{2}$, breadth $2\frac{1}{2}$ millim. (♂.)

Hab. GUATEMALA, Coban in Alta Vera Paz (*Conradt*).

One specimen, assumed to be a male. An elongate form, with parallel-sided, sharply maculate elytra (the dark streak on the second interstice, however, is probably in part due to abrasion), a subtubulate, variegate prothorax, comparatively short anterior tibiæ, &c. The elytra are shaped as in *P. hirtipes*; the short, rather stout setæ are a little longer and more numerous on the alternate interstices than on the others.

13. **Pandeleteius hispidus,** sp. n. (Tab. VIII. figg. 10, 10 *a*.)

Moderately elongate, widened posteriorly, ferruginous; variegated with a dense clothing of pale brown, blackish-brown, and whitish scales, the dark scales on the prothorax condensed into a narrow median vitta, and those on the elytra into a narrow undulate subapical fascia and a few small scattered spots, the whitish scales on the prothorax mainly placed along the sides, and those on the elytra condensed into a narrow streak at the base of the fifth interstice, a transverse mark on the disc before the middle, and a common, angulate, sharply-defined fascia before the apex; the upper surface also somewhat thickly set with short, curled, stout, decumbent setæ, which are uniseriately arranged on the alternate elytral interstices, the suture with longer setæ towards the apex; the under surface albo-squamose. Head and rostrum together a little shorter than the prothorax, the rostrum very short, shallowly emarginate at the tip, the scrobes deep, sinuous, and descending; eyes depressed. Prothorax a little longer than broad, produced in front, constricted at the base and before the middle, sparsely punctate; vibrissæ represented by a densely squamose dentiform prominence. Elytra much broader than the prothorax, widening to the middle, finely punctate-striate, the alternate interstices somewhat raised. Legs rather stout, setose; anterior femora moderately clavate; anterior tibiæ curved, stout, slightly elongated, unguiculate, and armed with 4 small teeth.

Length $3\frac{2}{3}$–$4\frac{1}{4}$, breadth $1\frac{1}{2}$–$1\frac{4}{5}$ millim.

Hab. MEXICO, Omilteme in Guerrero 8000 feet (*H. H. Smith*).

Three specimens. A small, comparatively short, posteriorly widened form, with stout, curled, decumbent setæ (conspicuous on the frons and alternate elytral interstices), a fusco-vittate prothorax, apically albo-fasciate elytra, deep descending scrobes, rather short, setose legs, and the vibrissæ represented by an angular densely squamose prominence. Its nearest ally is *P. brevipes*.

14. **Pandeleteius brevipes,** sp. n. (Tab. VIII. fig. 11.)

Oblong, piceous or obscure ferruginous; variegated with a dense clothing of rather coarse brown, blackish-brown, and whitish scales, the whitish scales mainly condensed into a narrow sinuous stripe on each side of the prothorax, an oblique spot or patch on the outer part of the disc of the elytra just before the middle and a common sinuate subapical fascia, and the dark scales sometimes into a transverse scutellar patch and a narrow angulate fascia in front of the whitish one, the upper surface also set with short,

curled, decumbent hairs, the legs annulate. Head and rostrum together much shorter than the prothorax, the rostrum very short, strongly transverse, flattened, feebly emarginate at the tip, the scrobes descending; eyes somewhat prominent. Prothorax rather longer than broad, produced in front, feebly constricted at the base and before the middle, sparsely punctate; vibrissæ reduced to a few scales. Elytra comparatively short, much broader than the prothorax and widened posteriorly (♀), or narrower and subparallel (♂); coarsely punctate-striate, the alternate interstices more or less raised. Anterior femora clavate. Anterior tibiæ scarcely elongated, stout, bowed at the tip, feebly unguiculate, closely, very finely denticulate.

Length $2\frac{9}{10}$–$4\frac{2}{5}$, breadth 1–$1\frac{1}{3}$ millim. (♂ ♀.)

Hab. Mexico, Amula, Xucumanatlan, and Omilteme in Guerrero (*H. H. Smith*), Mexico city, Yautepec (*Höge*).

Nine specimens, five of which are from Amula, the narrow examples assumed to be males. This species resembles *P. ornatifrons*, but it is smaller; the rostrum is still shorter; the head is without the angular white patch; the eyes are not so prominent; the prothorax is less constricted at the sides; the vibrissæ are reduced to a few scales; and the elytra are more coarsely punctate-striate.

15. **Pandeleteius conspersus,** sp. n. (Tab. VIII. figg. 12, 12 *a*.)

Moderately elongate, widened posteriorly, ferruginous; clothed with intermixed, rather coarse, brown and whitish scales, the latter condensed into small scattered spots or patches, the prothorax in one specimen (taken as the type) with the sides albo-squamose, like the under surface; the upper surface also set with exceedingly minute, short, curled, scattered hairs, the suture of the elytra with several long erect hairs towards the tip. Head and rostrum together shorter than the prothorax, the head small, the rostrum extremely short, feebly emarginate, and with a short median groove, the scrobes descending; eyes prominent, small. Prothorax a little longer than broad, rounded at the sides, feebly constricted at the base and before the middle, closely punctate; vibrissæ not visible (? abraded). Elytra much broader than the prothorax, widened to beyond the middle, transversely depressed below the base; coarsely punctate-striate, the interstices convex. Anterior femora strongly clavate. Anterior tibiæ elongated, curved, unguiculate, and armed with 6 very small teeth.

Length $3\frac{2}{5}$–4, breadth $1\frac{2}{5}$–$1\frac{1}{2}$ millim. (♀.)

Hab. Mexico, Chilpancingo in Guerrero (*H. H. Smith*).

Two specimens, one in good condition, the other somewhat worn, doubtless females, to judge from the long erect hairs on the elytral suture towards the apex. The extremely short rostrum, with deep descending scrobes, the prominent eyes, the intermixed arrangement of the brown and white scales (the white scales in one specimen being confined to the sides of the prothorax, and to small scattered irregular patches along the sides and apical half of the elytra), and the long, finely denticulate anterior tibiæ are the chief characters of *P. conspersus*. *P. quichensis* is a somewhat similar form, with less rounded sides to the prothorax, non-descending scrobes, sinuous, less closely denticulate anterior tibiæ, and fewer intermixed white scales.

16. **Pandeleteius tibialis.** (Tab. VIII. figg. 13, 13 *a*, ♂.)

Pandeleteius tibialis, Boh. in Schönh. Gen. Curc. vi. 1, p. 297 [1].

Elongate, rather depressed, varying in colour from nigro-piceous to ferruginous, the legs and antennæ (the

club excepted) ferruginous; above uniformly clothed with brownish-white or cinereous scales, which become opalescent or golden on the femora and under surface. Head and rostrum together as long as the prothorax, the rostrum deeply emarginate at the apex, flattened, and finely canaliculate down the middle, the nasal plate triangular, the scrobes narrow and rather long; antennæ with joint 2 of the funiculus much shorter than 1, the club nearly as long as 3–7 united; eyes somewhat prominent. Prothorax about as long as broad, rounded at the sides, constricted at the base and towards the apex, closely punctate: vibrissæ long. Elytra much wider than the prothorax, conjointly produced at the apex, subparallel in ♂, widened towards the middle in ♀; finely punctate-striate, the interstices flat on the disc, convex towards the sides and apex, the suture set with long, fine, scattered hairs towards the apex in ♀. Anterior coxæ subcontiguous in ♂, more distant in ♀. Anterior femora very stout, clavate. Anterior tibiæ very long and slender, curved at the tip, sharply unguiculate, ciliate, and armed with numerous small teeth. Anterior tarsi elongate. Intermediate and posterior legs slender. Tarsal claws long.

Length $5\frac{1}{3}$–$7\frac{1}{3}$, breadth $1\frac{2}{3}$–$2\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico (*coll. Sommer*[1]; *Mus. Brit.*), Ventanas in Durango (*Höge*), San Andres Tuxtla, Yolos, Capulalpam, Parada (*Sallé*), Oaxaca (*Mus. Brit.*, *Höge*).

The types of this species from the Sommer collection have been lent us by Mr. Janson. It is easily recognized by the greatly elongated anterior legs, the uniform brownish-white vestiture, the basally and apically constricted prothorax, the deeply emarginate rostrum, and the long claws. The anterior coxæ of the male are almost as approximate as in *Hadromerus*. The abraded specimens before me have the body piceous and the legs red.

17. **Pandeleteius hirtipes,** sp. n. (Tab. VIII. figg. 14, 14 *a*, ♂.)

♂. Elongate, rather convex, robust, dull, piceous, mottled and streaked with ferruginous; variegated with a dense clothing of small, pale brown and whitish scales, which have a cupreous tinge in certain lights, and also set with very short, scattered, adpressed hairs, the anterior coxæ, the underside of the rostrum, and the prosternum clothed with very long pallid hairs, the rest of the under surface also thickly pilose. Head and rostrum sparsely punctate, the rostrum very short, flattened, feebly emarginate, strongly canaliculate, the scrobes short; eyes not prominent. Prothorax transversely convex, much broader than long, widening posteriorly, and abruptly constricted at the base, narrow and feebly constricted in front; rather sparsely punctate, the convex portion sharply canaliculate; vibrissæ long. Elytra long, subparallel, not wider than the prothorax, transversely depressed below the base, abruptly declivous behind; punctate-striate, the interstices more or less convex, the alternate ones a little more raised than the others, the third tumid at the base. Anterior femora very stout, clavate. Anterior tibiæ long, bowed inwards towards the apex, closely ciliate, unguiculate, and armed with numerous small teeth; intermediate and posterior tibiæ feebly denticulate and closely fringed with long hairs in their apical half, the intermediate pair with a small claw. Tarsi hairy, the anterior pair elongated.

Length $6\frac{1}{2}$, breadth $2\frac{2}{5}$ millim.

Hab. Mexico, Ciudad in Durango 8100 feet (*Champion*).

One specimen. An elongate robust form, with hairy prosternum and legs, long anterior tarsi, basally widened, sulcate prothorax, parallel-sided elytra, short scrobes, &c. *P. hirtipes* is much more elongate than the variable *P. maculicollis*, an insect also occurring at Ciudad.

18. **Pandeleteius inflatus,** sp. n. (Tab. VIII. figg. 15, 15 *a*.)

Geniostomus inflatus, Jekel, in litt.

Oblong-piriform, robust, piceous, the tips of the tarsi and the antennæ ferruginous; variegate with small pale brown, fuscous, and whitish scales, which have a cupreous lustre in certain lights, the brown scales condensed into a small triangular patch at the base of the head and two faint sinuous stripes on the disc of the prothorax; the whitish scales on the elytra sometimes condensed into a conspicuous subquadrate patch on the disc before the middle and various oblong, subquadrate, confluent patches on the apical declivity, and the intervening spaces on the disc fusco-maculate; the ventral surface pilose and clothed with rather large iridescent scales. Head and rostrum sparsely punctate, the rostrum very short, transverse, flattened, and canaliculate, feebly emarginate and fringed with long bristly hairs in front; eyes not prominent. Prothorax about as long as broad, feebly constricted at the base and towards the apex, moderately rounded at the sides, somewhat produced in front; closely punctate; vibrissæ long. Elytra subparallel at the base, and there a little wider than the prothorax, rapidly, arcuately dilated thence to the middle, and with the apices rather broadly conjointly produced; punctate-striate, the interstices feebly convex throughout. Anterior tibiæ moderately long, unguiculate, and armed with numerous small teeth.

Length $7\frac{2}{5}$–8, breadth $3\frac{1}{8}$–$3\frac{1}{5}$ millim. (♀ ?)

Hab. MEXICO (*Mus. Brit.; Solari, ex coll. Jekel*), Omilteme in Guerrero (*H. H. Smith*).

Three specimens, the one from Omilteme wanting the conspicuous subquadrate whitish patch on each elytron. A species easily identified by its broadly dilated, moderately convex elytra, the transverse, shallowly emarginate rostrum, and the feebly constricted, subtubulate prothorax.

19. **Pandeleteius laticeps,** sp. n. (Tab. VIII. figg. 16, 16 *a*, ♂.)

Moderately elongate, robust, piceous, the legs and antennæ in part ferruginous; variegated with a dense clothing of brown, fuscous, and cinereous scales, the cinereous scales condensed into a faint transverse fascia on the outer part of the disc just before the middle and showing a tendency to form a large apical patch, the brown scales with a brassy or cupreous tint, the under surface with scattered hairs between the scales. Head large, broad, together with the rostrum nearly as long as the prothorax, the rostrum transverse, flattened, narrowly sulcate, emarginate at the tip, the nasal plate short, triangular, the scrobes narrow, short, and deep; eyes not prominent, somewhat oval. Prothorax a little broader than long, convex, rounded at the sides, abruptly constricted at the base and also constricted anteriorly, closely punctate; vibrissæ long. Elytra much broader than the prothorax, subparallel at the base, gradually widened to the middle, transversely depressed anteriorly, abruptly declivous at the apex in ♀; punctate-striate, the alternate interstices somewhat convex, 3 tumid at the base. Anterior femora clavate. Anterior tibiæ moderately long, curved at the tip, unguiculate and armed with about 7 small teeth.

Length $5\frac{3}{4}$–$6\frac{4}{5}$, breadth $2\frac{1}{3}$–$2\frac{1}{2}$ millim. (♂ ♀.)

Hab. MEXICO, Orizaba (*Fenyes, ex coll. Bovie*), Cerro de Palmas (*Höge*), Sierra de Ajusco (*Hay, in U.S. Nat. Mus.*).

Four specimens, two of which are in bad condition. Very like some of the varieties of *P. maculicollis,* but easily separable therefrom by the larger and broader head, and the more convex prothorax.

20. **Pandeleteius armatus,** sp. n. (Tab. VIII. figg. 17, 17 *a*, *b*, ♀.)

Moderately elongate, flattened above, opaque; fuscous, variegated with testaceous, the antennæ, tarsi, and apex of the elytra almost wholly of that colour, the deciduous mandibles rufescent; mottled with a dense clothing of whitish, pale brown, and fuscous scales, the dark scales on the prothorax condensed into a broad median vitta, which is bordered on each side by a whitish stripe, the elytra with an oblong whitish spot on the fifth interstice at about the basal third and another on the sixth a little nearer the base; the upper surface also set with short, scattered, curled, adpressed, inconspicuous hairs, the suture of the elytra in ♀ with a cluster of very long, erect, pallid hairs at the commencement of the apical declivity and another at the tip. Head and rostrum together about as long as the prothorax, finely punctate, the rostrum triangularly emarginate at the tip, depressed at the base, and canaliculate down the middle; eyes prominent. Prothorax strongly transverse, rounded at the sides, abruptly and deeply constricted anteriorly, narrow at the base; finely punctate, obsoletely canaliculate, the disc transversely depressed before and behind the middle; vibrissæ long. Elytra much broader than the prothorax, transversely depressed below the base, widening to beyond the middle, the humeri prominent; finely punctate-striate, the interstices becoming convex posteriorly; the apices narrowly and obtusely produced in ♂, and armed on the inner edge with a sharp, inwardly-directed, spiniform prominence in ♀ (fig. 17 *b*). Anterior femora strongly clavate. Anterior tibiæ moderately long, feebly curved, unguiculate, and armed with from 6–8 small teeth.

Length $5\frac{3}{4}$–$6\frac{1}{10}$, breadth $2\frac{1}{5}$–$2\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico (*Truqui, in coll. Fry; Mus. Oxon.*).

Two females and two males, the latter immature, all more or less injured by pinning. The armature of the sutural margin of the elytra of the female (no doubt for effectually locking them in repose) is suggestive of the male structures found in various Melyrids. *P. armatus* superficially resembles *P. ciliatipennis*.

21. **Pandeleteius ornatifrons,** sp. n. (Tab. VIII. figg. 18, 18 *a*.)

Oblong, piceous, the legs and antennæ in part ferruginous; variegated with a dense clothing of pale brown, blackish-brown, and cinereous or whitish scales, the whitish scales condensed into a sharply-defined triangular or ∧-shaped mark on the vertex of the head (sometimes extending forward on to the rostrum) and two transverse fasciæ on the elytra (one just before the middle, not reaching the suture, the other subapical and oblique), and the dark scales clustered into one or three vittæ on the prothorax, a common transverse mark at the base of the elytra and a very large saddle-shaped patch between the pale fasciæ, the pale brown scales with a cupreous tinge; the upper surface and legs also sparsely set with short, curled, decumbent hairs, the legs annulate. Head comparatively small, together with the rostrum shorter than the prothorax, the rostrum short, hollowed and canaliculate, shallowly, triangularly emarginate; eyes prominent. Prothorax nearly as long as broad, rounded at the sides, strongly constricted at the base and before the middle, sparsely punctate; vibrissæ reduced to a few long hairs. Elytra much broader than the prothorax, widening to the middle, and more or less inflated posteriorly (♀ ?), transversely depressed below the base; finely punctate-striate, the interstices feebly convex. Anterior femora clavate. Anterior tibiæ moderately long, curved, unguiculate, and armed with 4 or 5 small teeth.

Length $4\frac{1}{2}$–6, breadth 2–$2\frac{1}{2}$ millim.

Hab. Mexico, Chilpancingo and Omilteme in Guerrero (*H. H. Smith*).

Ten specimens. Recognizable by the prominent eyes; the comparatively small, albo-maculate head; the small, bi-constricted prothorax; and the sharply albo-fasciate elytra, with a common transverse dark patch at the base, which is connected along the suture with the saddle-shaped post-median band. The less hairy prosternum, the

more prominent eyes, &c., separate *P. ornatifrons* from *P. maculicollis*. A narrower and smaller example from Chilpancingo seems to be a male of the same species.

22. **Pandeleteius viridiventris,** sp. n. (Tab. VIII. fig. 19.)

Moderately elongate, rather narrow, opaque, fusco-testaceous or ferruginous, faintly maculate with black: above clothed with small coppery-brown and larger cinereous scales, the latter clustered into sinuous interrupted lines on each side of the prothorax and various small irregular spots along the sutural and apical regions of the elytra, and in one specimen condensed into a large apical patch; the upper surface also set with minute, curled, adpressed hairs; the lower surface (the abdomen excepted), and the anterior femora beneath, clothed with opalescent pale greenish scales. Head and rostrum together shorter than the prothorax, finely punctate, the rostrum very short, flattened and finely canaliculate, emarginate at the tip; eyes rather prominent, small, rounded. Prothorax about as long as broad, produced in front, constricted at the base and (more feebly so) towards the apex, sparsely punctate; vibrissæ represented by two or three hair-like scales. Elytra wider than the prothorax, subparallel, transversely depressed below the base; finely punctate-striate, the alternate interstices somewhat raised towards the apex. Anterior femora clavate. Anterior tibiæ slightly elongated, sinuous within, curved at the tip, unguiculate, and armed with 6 small denticles.

Length $3\frac{1}{4}$–4, breadth $1\frac{1}{8}$–$1\frac{1}{2}$ millim.

Hab. MEXICO, Tres Marias in Morelos (*Wickham*).

Three specimens, one abraded, recently received from their captor. A small, narrow, somewhat depressed form not unlike *P. brevipes*, with shorter scrobes, finely punctured elytral striæ, much finer curled hairs on the upper surface, &c. The prothorax is less constricted, and the anterior tibiæ more feebly sinuate within, than in *P. sinuatipes*.

23. **Pandeleteius quichensis,** sp. n.

Elongate, narrow, dull, ferruginous, obsoletely maculate with black; clothed with small coppery-brown and larger widely scattered cinereous scales, the latter condensed into interrupted sinuous lines on each side of the prothorax and various minute irregularly distributed spots on the elytra. Head, rostrum, eyes, and prothorax as in *P. viridiventris*. Elytra much wider than the prothorax, subparallel, transversely depressed below the base; coarsely punctate-striate, the alternate interstices slightly raised posteriorly. Anterior tibiæ sinuous within, armed with 4 or 5 minute denticles.

Length $3\frac{4}{5}$–$4\frac{1}{5}$, breadth $1\frac{1}{3}$–$1\frac{1}{2}$ millim.

Hab. GUATEMALA, Quiché Mts. (*Champion*).

Two specimens, somewhat worn. Relatively longer than *P. brevipes*, the elytra subparallel, the cinereous scales on the elytra clustered into minute scattered spots. From *P. viridiventris* the present species may be distinguished by the more coarsely punctate-striate elytra.

24. **Pandeleteius quadrinodosus,** sp. n.

Moderately elongate, piceous or fusco-ferruginous; variegated with a dense clothing of pale brown, blackish-brown, and cinereous or whitish scales, the dark scales condensed into two sinuous lines on the disc of the prothorax and two or three oblique interrupted fasciæ on the outer part of the disc of each elytron, the spaces between the fasciæ sometimes with a few whitish scales; the surface also set with minute, curled, scattered, adpressed hairs, the legs annulate. Head small, together with the rostrum scarcely so long as the prothorax, the rostrum transverse, subparallel above, canaliculate and hollowed down the

middle, shallowly triangularly emarginate at the apex; eyes not prominent. Prothorax nearly as long as broad, rounded at the sides, constricted at the base and towards the apex, closely punctate, the transverse convex portion slightly depressed across and down the middle, and more or less distinctly 4-nodose; vibrissæ moderately long. Elytra much broader than the prothorax, widening to the middle, transversely depressed at the base; punctate-striate, the alternate interstices interruptedly raised, 3 tumid at the base. Anterior femora strongly clavate. Anterior tibiæ moderately long, curved at the tip, unguiculate, and armed with 4 small teeth.

Length $4\frac{1}{3}$–$5\frac{1}{3}$, breadth $1\frac{3}{4}$–$2\frac{1}{10}$ millim.

Hab. GUATEMALA (*Mus. Brit.*), near the city, Purula (*Champion*), Volcan de Fuego (*Salvin*).

Six specimens. This species is nearly related to *P. maculicollis*, from which it may be distinguished by the quadrinodose prothorax and the subparallel upper portion of the rostrum. The head is small as in that insect, and the prosternum is sparsely pilose.

25. **Pandeleteius brevinasus,** sp. n. (Tab. VIII. figg. 20, 20 *a*.)

Very like *P. maculicollis*, but differing as follows:—Rostrum subtriangular (as seen from above), rapidly, obliquely narrowing before the eyes, and with the apical portion still shorter and less dilated at the tip, the scrobes curved, deep, and extending a little further downward; the prothorax less constricted at the sides anteriorly, shallowly sulcate; the elytral interstices somewhat convex, 1 and 5 sometimes a little raised, 3 tumid at the base.

Length 5–$6\frac{1}{2}$, breadth $2\frac{1}{10}$–$2\frac{1}{2}$ millim.

Hab. MEXICO (*Mus. Dresden*), Puebla (*Sallé*), Omilteme and Chilpancingo in Guerrero (*H. H. Smith*), Cerro de Palmas, Yautepec, Jalapa (*Höge*); GUATEMALA (*Mus. Brit.*), Calderas 7000 feet (*Champion*).

Fourteen specimens, all but two from Mexico. Apparently distinct from the variable *P. maculicollis*, the subtriangular, extremely shorter rostrum giving *P. brevinasus* a peculiar facies when the insect is viewed from in front. The markings of the elytra are very similar in the two species. An example from Omilteme is figured.

26. **Pandeleteius maculicollis,** sp. n. (Tab. VIII. figg. 21, 21 *a*, *b*, ♀.)

Pandeleteius maculicollis, Jekel, in litt.

Moderately elongate, piceous or fusco-ferruginous; variegated with a dense clothing of brown, blackish, and cinereous scales, the dark scales on the elytra often condensed into one broad or two narrower, incomplete, transverse fasciæ, and the cinereous scales into a large irregular or interrupted apical patch and a transverse space on the disc between the fasciæ, the brown scales usually cupreous in certain lights; the upper surface also set with minute, scattered, short, adpressed hairs, the prosternum and anterior coxæ with numerous long white hairs arising from between the scales, the rest of the under surface more sparsely pilose. Head comparatively small, together with the rostrum shorter than the prothorax, the rostrum transverse, obliquely narrowed before the eyes and widened again at the apex, feebly canaliculate, shallowly emarginate at the tip, the scrobes subangulate, short; eyes depressed, oval. Prothorax broader than long, transversely convex, rounded at the sides, constricted anteriorly and at the base, usually obsoletely sulcate down the middle posteriorly, closely punctate; vibrissæ long. Elytra broader than the prothorax, widening to beyond the middle, transversely depressed below the base, and more or less inflated posteriorly; punctate-striate, the interstices 1 (suture), 3, and 5 usually raised or

cariniform from about the basal third, 3 always more or less tumid at the base. Anterior femora strongly clavate. Anterior tibiæ moderately elongated, curved, sinuate towards the apex, unguiculate, and feebly denticulate.

Length $4\frac{1}{8}$–$6\frac{1}{2}$, breadth 2–$2\frac{1}{2}$ millim. (♂ ♀.)

Hab. MEXICO (*Mus. Brit.; U.S. Nat. Mus.*), Ciudad in Durango (*Forrer*), Omilteme, Chilpancingo (*H. H. Smith*), Ixtapan, Parada (*Sallé*).

A widely distributed, variable Mexican insect, with a hairy prosternum, as in *P. hirtipes*. Some specimens have the alternate elytral interstices strongly raised and the suture abruptly declivous posteriorly. The five from Ciudad (taken as the types, fig. 21) have a large cinereous apical patch and the alternate interstices scarcely prominent. The cinereous scales sometimes predominate. One of the examples in the British Museum is much narrower than the rest and has subparallel elytra.

27. **Pandeleteius fasciatus,** sp. n. (Tab. VIII. figg. 22, 22 *a*.)

Pandeleteius fasciatus, Jekel, in litt.

Moderately elongate, robust, ferruginous or obscure ferruginous; variegated with a dense clothing of brownish-white and brown scales, the darker scales condensed into a median stripe or three vittæ on the prothorax and numerous, transverse or oblique, partly confluent markings on the elytra (these sometimes extending over half the surface and almost surrounding two oblique, sharply defined, pallid fasciæ); the surface also set with scattered, minute, curled, decumbent hairs. Head and rostrum together about as long as the prothorax, the rostrum transverse, flattened, and triangularly emarginate, the scrobes not extending beyond the eyes, the latter depressed. Prothorax about as long as broad, rounded at the sides, constricted towards the apex and at the base, sparsely punctate; vibrissæ long. Elytra broader than the prothorax, widened to the middle, somewhat inflated posteriorly; finely punctate-striate, the interstices becoming convex towards the sides and apex. Anterior femora strongly clavate. Anterior tibiæ long, feebly curved, unguiculate, and armed with about six scattered teeth.

Length $4\frac{1}{5}$–$6\frac{2}{5}$, breadth $1\frac{3}{5}$–$2\frac{1}{3}$ millim. (♂ ♀.)

Hab. MEXICO (*Mus. Brit.*), Jalapa, Cerro de Palmas, Oaxaca (*Höge*); GUATEMALA (*Mus. Brit.*), San Gerónimo (*Champion*), Chinautla (*Sallé*).

Numerous examples, few of which, however, are in good condition. The elytra vary greatly in colour, according to the predominance of the light or dark scales, the darker specimens only having conspicuous oblique pallid fasciæ. The complete basal constriction of the prothorax and the shorter scrobes readily separate *P. fasciatus* from *P. cucullatus* and *P. cuneatus*, both of which, moreover, have strongly setose legs, less clavate femora, a more produced prothorax, and raised alternate elytral interstices.

28. **Pandeleteius undatus,** sp. n. (Tab. VIII. fig. 23, ♀.)

Moderately elongate, obscure ferruginous; densely clothed with brown scales, the prothorax broadly paler at the sides (leaving a distinct darker median vitta), the elytra with a transverse or oblique patch on the outer part of the disc at about the middle, and a common, undulate, sharply-defined, subapical fascia, whitish or pale brown; the surface also set with a few very minute, adpressed, curled hairs. Head and rostrum together about as long as the prothorax, the rostrum triangularly emarginate; eyes depressed. Prothorax about as long as broad, constricted at the base and towards the apex; vibrissæ long. Elytra widened to the middle and somewhat inflated posteriorly, especially in ♀, punctate-striate, the interstices

convex, flatter towards the base. Anterior femora strongly clavate. Anterior tibiæ curved, moderately long, unguiculate, and armed with 5 or 6 small scattered teeth. Intermediate tibiæ hollowed near the apex within in ♂.

Length $5\frac{1}{2}$, breadth $2\frac{1}{8}$–$2\frac{1}{2}$ millim. (♂ ♀.)

Hab. GUATEMALA, San Gerónimo [♀], Capetillo [♂] (*Champion*).

Three specimens, assumed to be sexes of the same species, the female (taken as the type, fig. 23) being much broader than the Capetillo examples (males ?) and in very fresh condition. They all have a common, sharply-defined, undulate, whitish, subapical fascia, but the transverse patch on the disc varies in size, though very conspicuous in the female. The Capetillo specimens have slightly larger scales than the San Gerónimo insect. The curled hairs on the upper surface are smaller, shorter, and much less conspicuous than in *P. fasciatus* when the two forms are viewed in profile. The elytral markings, too, in *P. fasciatus* show no tendency to coalesce into a common, well-defined, pallid, subapical fascia.

29. **Pandeleteius vitticollis,** sp. n. (Tab. VIII. fig. 24.)

Moderately elongate, piceous or obscure ferruginous, the legs and antennæ partly or entirely rufo-testaceous; variegated with a dense clothing of opaque whitish, pale brown, and fuscous (or blackish) scales, some of which have a faint cupreous lustre in certain lights, the dark scales on the prothorax almost wholly condensed into a broad median vitta, and those on the elytra into a narrow, oblique or angulate, subapical fascia (followed by a broader whitish one) and various irregular scattered spots or streaks; the upper surface also set with scattered, very minute, short, curled hairs, which are uniseriately arranged down each elytral interstice. Head and rostrum together about as long as the prothorax, finely punctate, the rostrum subquadrate, triangularly notched at the tip, slightly hollowed and feebly canaliculate down the middle, and with a very shallow transverse inter-antennal groove, the scrobes curved, narrow, and not descending to the lower surface; eyes somewhat prominent; joint 2 of the funiculus not longer than 3 and 4 united. Prothorax transverse, rounded at the sides, strongly constricted towards the apex, and constricted and much narrowed behind; sparsely punctate, the disc transversely depressed before and behind the middle; vibrissæ long. Elytra at the base considerably wider than the base of the prothorax, widening to the middle and inflated posteriorly, strongly so in ♀, transversely flattened on the disc anteriorly; finely punctate-striate, the interstices becoming convex towards the apical declivity. Anterior tibiæ long, slender, feebly curved, unguiculate, armed with about 8 small teeth. Intermediate and posterior legs slender.

Length $3\frac{1}{2}$–6, breadth $1\frac{2}{5}$–$2\frac{1}{3}$ millim. (♂ ♀.)

Hab. MEXICO (*Mus. Brit.*), Refugio in Durango, Cordova (*Höge*), Amula (*H. H. Smith*); GUATEMALA, near the city (*Salvin, Champion*), Capetillo, San Gerónimo, San Joaquin (*Champion*); NICARAGUA, Managua (*Solari*); PANAMA, Volcan de Chiriqui (*Champion*).

Numerous examples, including a long series from San Gerónimo. This species may be known by the arcuately dilated, basally and apically constricted, fusco-vittate prothorax; the posteriorly widened, obliquely unifasciate, fusco-maculate, finely punctate-striate elytra; the long, slender, feebly curved anterior tibiæ; and the slender intermediate and hind legs. The single example from Panama is much smaller than the others. *P. vitticollis* may prove to be inseparable from *P. robustus*, Schaeff., from

Arizona (a single specimen of which is before me), but the latter has the elytra less inflated posteriorly and not so sharply fasciate, and the scrobes broader and less curved.

30. **Pandeleteius amulæ,** sp. n.

Moderately elongate, depressed, obscure ferruginous; thickly clothed with opalescent whitish scales, the elytra with several faint, scattered, transverse, almost bare spots, which tend to form an interrupted oblique subapical fascia. Head and rostrum together about as long as the prothorax, finely punctate, the rostrum flattened, obsoletely canaliculate, and very slightly hollowed, deeply triangularly emarginate at the tip; eyes not prominent, rather large. Prothorax a little broader than long, rounded at the sides, constricted at the base and towards the apex, finely punctate; vibrissæ long. Elytra flattened, a little broader than the prothorax, gradually widening to the middle, subtruncate at the base; conspicuously punctate-striate, the interstices feebly convex. Anterior femora strongly clavate. Anterior tibiæ elongated, moderately curved, unguiculate, and armed with 7 small teeth.

Length 5, breadth $1\frac{3}{4}$ millim. (♂ ?)

Hab. MEXICO, Amula in Guerrero 6000 feet (*H. H. Smith*).

One specimen, somewhat immature, and with the deciduous falcate portion of the mandibles still attached. This species is clothed with opalescent whitish scales only, much as in *P. albisquamis* (the darker partly bare spaces on the elytra may be accidental), from which it differs in its depressed form, larger eyes, biconstricted prothorax, the truncated base of the elytra, &c. From *P. robustus* the present species may be known by its immaculate, less uneven prothorax, the flatter, narrower, obsoletely maculate, non-setulose elytra, and the opalescent scales; and from *P. tibialis* by the less prominent eyes, &c.

31. **Pandeleteius sublineatus,** sp. n. (Tab. VIII. figg. 25, 25 *a*, ♀.)

Moderately elongate, widening posteriorly, varying in colour from piceous with the antennæ (the club excepted) and tibiæ ferruginous to wholly ferruginous; densely clothed with rather coarse brown and whitish scales, the brown scales on the prothorax condensed into a broad median vitta and an interrupted submarginal streak, and those on the elytra into a common, elongate, scutellar patch and various faint interrupted lines, the line of whitish scales on each side of the disc of the prothorax usually more or less distinctly continued along the third elytral interstice and sometimes condensed into a large oblique apical patch; the upper surface also sparsely set with extremely minute, curled, adpressed hairs, the apex of the rostrum and the under surface with opalescent whitish scales. Head and rostrum together nearly as long as the prothorax, the rostrum longer than broad, hollowed and faintly canaliculate, emarginate at the tip, the nasal plate triangular; eyes somewhat prominent. Prothorax as long as broad, narrowed and constricted at the base and also constricted anteriorly, finely punctate; vibrissæ long. Elytra much broader than the prothorax, widening to the middle in both sexes; abruptly declivous behind, finely punctate-striate, the interstices feebly convex. Legs slender, the anterior femora very stout and strongly clavate; anterior tibiæ long, curved, unguiculate, and armed with about 6 minute teeth.

Length 3–4, breadth 1–$1\frac{1}{2}$ millim. (♂ ♀.)

Hab. COSTA RICA, Limoncito (*Biolley*); PANAMA, Volcan de Chiriqui 4000 feet, Bóquete, Peña Blanca (*Champion*).—ANTILLES, Grenada and St. Vincent.

Numerous examples, few of which are in good condition. A small form, very like a small *Sitones*, with slender legs (the strongly clavate anterior femora excepted), the

rostrum longer than broad, the brown median vitta of the prothorax extending on to the base of the elytra, and the whitish line on each side of it continued down the third interstice, the anterior tibiæ long, curved, and ferruginous. Three specimens found by Mr. H. H. Smith in the Windward Is. seem to belong to this species.

32. **Pandeleteius sinuatipes,** sp. n. (Tab. VIII. figg. 26 ; 26 *a*, anterior tibia.)

Moderately elongate, narrow, ferruginous, faintly maculate with black, the under surface darker, the legs testaceous; clothed with small coppery-brown and larger cinereous scales, the latter mainly placed along the sides and base of the prothorax, and those on the elytra clustered into definite dark-edged spots—three across the disc before the middle and several forming an irregular oblique fascia near the apex; the upper surface also sparsely set with minute curled decumbent hairs, the under surface with whitish scales. Head and rostrum together shorter than the prothorax, the rostrum very short, hollowed and canaliculate, shallowly, triangularly emarginate at the tip; eyes rather large, oval, not prominent. Prothorax about as long as broad, produced in front, rounded at the sides, constricted at the base and towards the apex, sparsely punctate; vibrissæ very fine. Elytra much broader than the prothorax, slightly widened towards the middle, transversely depressed below the base; finely punctate-striate, the interstices feebly convex, 3 tumid at the base. Anterior femora clavate. Anterior tibiæ moderately elongate, strongly sinuate, unguiculate, and armed with 4 very small scattered teeth.

Length $4\frac{2}{5}$, breadth $1\frac{4}{5}$ millim.

Hab. Mexico, Chilpancingo in Guerrero (*H. H. Smith*).

One specimen, slightly immature. The chief characters of this insect are, the comparatively large, oval eyes; the biconstricted prothorax; the moderately long, strongly sinuate, sparsely denticulate anterior tibiæ; and the tumid base of the third elytral interstice. The dark-edged cinereous spots on the elytra partly enclose a large, common, immaculate, cupreo-squamose space.

33. **Pandeleteius ciliatipennis,** sp. n. (Tab. VIII. figg. 27, 27 *a*, ♀.)

Moderately elongate, flattened above, dull; piceous, or obscure ferruginous with darker markings, the antennæ (the club excepted) and tarsi more or less ferruginous; mottled with a dense clothing of pale brown, whitish, and fuscous scales, the dark scales condensed into a broad median vitta (or two lines) on the prothorax, a triangular mark at the base of the head, and two narrow, strongly oblique, streaks or fasciæ on the elytra (one a little before, and the other far beyond, the middle), the subapical fascia usually followed by a broader whitish one; the upper surface also sparsely set with minute, curled, adpressed hairs, the suture in the ♀ with long semierect hairs on the apical declivity, the under surface pilose. Head and rostrum together about as long as the prothorax, finely punctate, the rostrum canaliculate and slightly hollowed down the middle, the nasal plate short, triangular; eyes not prominent. Prothorax broader than long, rounded at the sides, strongly constricted towards the apex and also at the base, the anterior portion appearing tubulate; sparsely punctate, the disc transversely undulate; vibrissæ few in number. Elytra much broader than the prothorax, widening to the middle, transversely depressed below the base, the humeri rather prominent; finely punctate-striate, the interstices flat on the disc; sutural angle deflexed and sharply rectangular in ♀, more obtuse in ♂. Anterior tibiæ feebly curved, moderately long, unguiculate, and armed with 7 or 8 small teeth.

Length 4–$5\frac{1}{2}$, breadth $1\frac{1}{2}$–2 millim. (♂ ♀.)

Hab. Mexico (*Truqui, in coll. Fry, Mus. Brit.*), Chapultepec (*Mus. Oxon.*), Mexico city, Cerro de Palmas, Oaxaca (*Höge*), Salazar (*Wickham*).

Numerous examples, apparently all females, but the one belonging to the pair

from Salazar. A rather depressed form, with a mesially vittate, undulate, subtubulate prothorax; narrowly and obliquely bifasciate elytra, the suture of which is set with long hairs on the apical declivity in the female; the under surface pilose; and somewhat closely denticulate anterior tibiæ.

34. **Pandeleteius microcephalus,** sp. n.

Moderately elongate, narrow, nigro-piceous, the antennæ and the tips of the tarsi ferruginous; thickly clothed with small brown scales, with a few whitish scales intermixed, these latter condensed into faint oblong spots on the third and fifth elytral interstices before and beyond the middle, the prothorax with an indistinct darker median vitta, the suture and alternate interstices of the elytra also set with rather stout, blunt, rigid setæ, which become erect and conspicuous on the apical declivity; the scales on the under surface in great part whitish. Head and rostrum together shorter than the prothorax, the head rather small, the rostrum transverse, moderately emarginate at the tip, hollowed, and canaliculate; eyes not prominent. Prothorax about as long as broad, strongly constricted at the base, narrowed and feebly constricted in front, rounded at the sides, and somewhat produced at the apex, sparsely punctate; vibrissæ moderately long. Elytra a little wider than the prothorax, subparallel in their basal half, flattened on the disc anteriorly, abruptly declivous behind; coarsely punctate-striate, the interstices rather narrow, 1 (suture), 3, and 5 raised posteriorly. Anterior tibiæ moderately long, bowed at the apex, unguiculate, and armed with about 7 small teeth. Intermediate and posterior tibiæ hollowed on the inner side near the tip.

Length 4, breadth $1\frac{1}{2}$ millim. (♂.)

Hab. MEXICO, "Sierra de Durango" (*Höge, ex Solari*).

One specimen. A small narrow form, with comparatively small head, a very short rostrum, and narrow, subparallel elytra, with erect, rigid, blunt setæ on the alternate interstices. The head is much smaller than in *P. ciliatipennis*.

35. **Pandeleteius albisquamis,** sp. n. (Tab. VIII. figg. 28, 28 *a*, ♂.)

Moderately elongate, piceous, the prothorax usually with a darker median vitta, the legs (the anterior femora and claws excepted) and antennæ (the club excepted) more or less ferruginous; densely, uniformly clothed with shining chalky-white scales, those on the under surface with a faint cupreous tinge. Head and rostrum together not longer than the prothorax, somewhat sparsely punctate, the rostrum flattened, emarginate at the tip, obsoletely canaliculate, the nasal plate triangular; eyes depressed. Prothorax broader than long, rather convex, feebly constricted at the sides before the apex, closely punctate; vibrissæ long, few in number. Elytra very little wider than the prothorax, subparallel in ♂, widened to beyond middle in ♀ and with the suture subangulate towards the apex (seen in profile) in this sex, the base slightly hollowed, the humeri obliquely truncate; finely, conspicuously punctate-striate, the interstices almost flat. Anterior tibiæ moderately long, curved, denticulate, pilose, and sharply unguiculate, the intermediate pair also with a minute claw in ♂.

Length $4\frac{1}{2}$–6, breadth $1\frac{2}{5}$–2 millim. (♂ ♀.)

Hab. MEXICO, San Andres Tuxtla (*Sallé*), Oaxaca (*Höge*); GUATEMALA, Dueñas (*Salvin, Champion*), San Gerónimo (*Champion*).

Found in abundance at Dueñas. Easily recognizable by the uniform dense white squamosity, which, however, does not hide the larger punctures on the upper surface, these being very conspicuous along the striæ of the elytra. There are no short curled hairs amongst the scales. The humeri are oblique, as in *P. nodifer*.

36. **Pandeleteius nodifer,** sp. n. (Tab. VIII. figg. 29, 29 *a*, *b*, ♀.)

Moderately elongate, narrow, piceous or ferruginous; variegated with a dense clothing of small whitish and brown scales, the latter condensed into a broad faint median vitta on the prothorax and a strongly oblique, irregular, subapical fascia and various faint scattered spots on the elytra. Head and rostrum together a little shorter than the prothorax, finely punctate, the rostrum emarginate at the tip, canaliculate, and slightly hollowed above, the nasal plate triangular; eyes not prominent. Prothorax as long as broad, somewhat oval, feebly constricted just before the apex and gradually narrowed towards the base; finely punctate; vibrissæ reduced to a few hairs. Elytra much broader than the prothorax, widening to beyond the middle, conjointly hollowed at the base (the base appearing obliquely truncate on each side as seen from above), flattened on the disc anteriorly, the suture with a compressed prominence at the commencement of the apical declivity and subvertical thence to the tip; finely punctate-striate. Anterior tibiæ moderately long, feebly curved, unguiculate, and armed with 5 or 6 very small teeth.

Length 4–4½, breadth 1¼–1⅗ millim.

Hab. Nicaragua, Lago de Managua (*Solari*).—Colombia (*Mus. Brit.*).

The above description is mainly taken from a fresh example kindly given us by Signor Solari, apparently a female. The Colombian specimen (♂ ?) is narrower, discoloured, and broken, but it no doubt belongs to the same species, which may be known by the compressed prominence on the suture of the elytra towards the tip, and the long, oval, almost unimpressed prothorax. *P. nodifer* superficially resembles *Menetypus hadromeroides,* Kirsch.

37. **Pandeleteius longicollis,** sp. n. (Tab. VIII. figg. 30, 30 *a*.)

Elongate, rather narrow, ferruginous, the antennal club and anterior femora piceous; thickly and uniformly clothed with whitish scales, the prothorax with a faint darker median line. Head and rostrum together a little shorter than the prothorax, the rostrum excised at the tip and canaliculate down the middle, the nasal plate triangular; antennal club large, acuminate-ovate; eyes depressed. Prothorax slightly longer than broad, gradually narrowed towards the base and apex, the basal constriction extending across the disc, the apical margin truncate; finely punctate; vibrissæ long. Elytra wider than, and about two and one-half times the length of, the prothorax, subparallel in their basal half, finely punctate-striate, the interstices almost flat, the suture tumid towards the apex. Anterior femora very stout, clavate. Anterior tibiæ curved, moderately elongate, unguiculate, and armed with from 6–8 small teeth. Intermediate tibiæ hollowed near the apex within. Tarsi with the bilobed third joint stout.

Length 4⅓–4⅞, breadth 1⅖–1½ millim. (♂ ?)

Hab. Mexico, Cerro de Palmas, Oaxaca (*Höge*).

Two specimens. This insect has the vestiture uniformly whitish (as in *P. tibialis* and *P. albisquamis*); the prothorax unusually long and feebly constricted (much as in *P. nodifer*), the elytra thus appearing relatively short; and the third tarsal joint broadly lobed.

PANDELETEINUS, gen. nov.

Head very large, broad, convex; mentum small, not covering the maxillæ; rostrum strongly transverse, deeply, triangularly emarginate at the sides and apex, the scrobes rather short, angulate, distant from the eyes, the latter small and rounded; antennal scape reaching to the middle of the eyes, the funiculus 7-jointed,

joints 2–7 short; vibrissæ well-developed; anterior coxæ contiguous; anterior femora feebly clavate, not longer than the others; anterior tibiæ unguiculate at the apex, not or obsoletely denticulate; tarsal claws free; body robust, winged, densely clothed with scales.

Type, *Pandeletejus submetallicus*, Schaeffer.

The type of this genus was provisionally referred to *Pandeleteius* by Schaeffer, but it must certainly be removed therefrom, differing as it does in numerous points of structure. The head is greatly developed, recalling that of *Elissa* and various other genera of the "Series Apteræ"; the prothorax is somewhat cup-shaped; and the elytra are broader than the prothorax, comparatively short and subparallel, and finely punctate-striate. The insect is found on juniper, according to Mr. Wickham.

1. **Pandeleteinus submetallicus.** (Tab. VIII. figg. 31, 31 *a*.)

Pandeletejus submetallicus, Schaeff. Journ. N. York Ent. Soc. xvi. pp. 216, 217 (1908) [1]; Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 360 [2].

Length $3\frac{1}{4}$–4, breadth $1\frac{1}{8}$–$1\frac{1}{2}$ millim.

Hab. North America, Beaver Co., Utah [1], Los Angeles, California [2], Bright Angel, &c., Arizona [2], Texas.—Mexico, Tepehuanes in Durango (*Wickham*).

Mr. Wickham has recently sent us examples of this peculiar little insect from Utah and Northern Mexico, agreeing with others from California and Arizona forwarded by Mr. Schwarz, of the U.S. National Museum. The scales in some of the specimens are uniformly coloured, greenish or golden, in others cinereous and faintly mottled with brown above and metallic beneath.

The following description was drawn up many years ago by Dr. Sharp and requires no alteration:—

ISODRUSUS, gen. nov. [Sharp].

Rostrum brevissimum, deflexum; coxæ anteriores modice distantes.

Rostrum not so long as broad, strongly inflexed, narrower towards the tip; scrobes deep, slender, abruptly angulate, descending. Thorax elongate; front coxæ distinctly separated, placed very near the front margin, at a considerable distance from the hind margin; vibrissæ represented by two or three setæ. Metasternum not elongate, as long as the first ventral plate. First and second ventral plates equal in length, third and fourth equal, short. Legs stout; tarsal claws small, connate.

This genus resembles *Polydacrys* and *Pandeleteius* in many respects, and still more *Isodacrys* in the apterous series, but all these three genera have free claws. *Isodrusus* is altogether a most anomalous little insect; the rostrum could scarcely be shorter, and I do not see any trace of a nasal plate at its apex. The wings (Tab. VIII. fig. 32 *b*) are folded transversely, but have remarkably few veins. A similar rudimentary condition of the vibrissæ occurs in *Pseudelissa* and in *Isodacrys*.

1. **Isodrusus debilis,** sp. n. [Sharp]. (Tab. VIII. figg. 32, 32 *a*; 32 *b*, wing.)

Subdepressus, ferrugineus, squamosus, setis recurvatis adspersus; prothorace elongato; elytris basi thorace latiore, seriatim punctatis.

Long. $2\frac{1}{2}$–3 millim.

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

Antennæ very short, joints 3–7 of the funiculus quite small, club moderate. Rostrum strongly deflexed, even a little inflexed; front of the head armed with numerous curved bristles. Thorax elongate and slender, a little dilated in the middle, squamose, and armed with curved setæ. Scutellum very small, but distinct. Elytra rather slender and flat, much broader at the base than the thorax, densely squamose, the scales presenting an imperfect maculated appearance of pale grey and fuscous; with series of punctures much obscured by the squamosity, and bearing fine, recurved, recumbent setæ. Legs short, strongly setose. Under surface red, but nearly covered with large pallid scales.

Four specimens were obtained of this species, one of which has been sacrificed to make certain the condition of the wings. The insect bears a great resemblance to the species of *Isodacrys*, but the form of the elytra distinguishes it at a glance.

Group **POLYDROSINA.**

Under this group—the first of those with both ocular lobes and vibrissæ wanting—are placed *Polydrusus*, Germ. (= *Cyphomimus*, Horn), which proves to be well represented within our region, and an allied genus, with basally connate tarsal claws, a slender, apically thickened antennal scape, and the articular surface of the posterior tibiæ terminal. Horn included *Cyphomimus* in his heterogeneous Tribe Phyllobiini, with *Phyllobius* (which has differently placed, short, subterminal scrobes), *Mitostylus* (which is apterous and belongs to the Sciaphilina of Sharp, *anteà*, p. 167), and *Scythropus*, the last-mentioned genus being nearly allied to *Polydrosus*. *Mitostylus* extends to Lower California, and probably into our region also; *Scythropus* is holarctic.

POLYDROSUS.

Polydrusus, Germar, Ins. Spec. nov. p. 451 (1824).

Polydrosus, Schönherr, Curc. Disp. Meth. p. 138 (1826); Gen. Curc. ii. p. 134; Lacordaire, Gen. Col. vi. p. 78; Bedel, Faune Col. Bass. Seine, v. p. 50; Horn, Proc. Calif. Acad. Sci. (2) iv. p. 446 (1894).

Cyphomimus, Horn, Proc. Am. Phil. Soc. xv. pp. 104, 105.

No true winged *Polydrosus* seems to have been described from Tropical America, and but two from the United States (*P. americanus*, Gyll., the type of *Cyphomimus*,

and *P. ochreus*, Fall); two species, however, are known from Lower California. The eleven forms now added from within our limits are closely related to some of those inhabiting the Palæarctic region, *P. longicornis*, indeed, being a near ally of *P. pterygomalis*, Boh. The basally connate claws is perhaps the best character by which to distinguish *Polydrosus* from most of the allied genera, and the sharply defined, narrow scrobes separate it from *Phyllobius*. The antennæ are extremely slender in most of the forms here described; the femora are unarmed; and the scrobes vary in length according to the species, sometimes extending to the lower surface of the rostrum. These insects attack *Quercus*, *Salix*, *Alnus*, *Corylus*, &c., and many more species will doubtless be found to occur in the New World *. The Central-American forms may be tabulated thus:—

a. Antennæ long, the outer joints of the funiculus oblong or obconic, the scape nearly or quite reaching the front of the prothorax.
  *a*¹. Scrobes shorter; antennæ slender; prothorax cylindrical or subcylindrical.
    *a*². Elytra with moderately prominent humeri; head shorter.
      *a*³. Upper surface without green scales.
        *a*⁴. Elytra sharply fusco-fasciate . . . . . *fuscofasciatus*.
        *b*⁴. Elytra faintly flavo-maculate . . . . . *flavonotatus*.
      *b*³. Upper surface with green or pale cupreous scales, the elytra at least maculate; under surface with fine hairs only down the middle.
        *c*⁴. Scales shining golden-green; elytra with small dark patches; eyes moderately large . . . . . *longicornis*.
        *d*⁴. Scales green or pale cupreous; prothorax vittate and elytra maculate; eyes larger . . . . . *mutabilis*.
      *c*³. Upper surface with green and brown scales; elytra obliquely fasciate . *partitus*.
      *d*³. Upper surface uniformly clothed with green scales . . . . . *immaculatus*.
    *b*². Elytra with more prominent humeri; head longer; upper surface with green or greyish scales . . . . . *macrocephalus*.
  *b*¹. Scrobes longer, descending to lower surface of rostrum; antennæ stouter; elytra longer.
    *c*². Prothorax subconical; upper and under surfaces uniformly clothed with green scales . . . . . *amplipennis*.
    *d*². Prothorax cylindrical; upper surface with coppery-brown and under surface with green scales . . . . . *chlorogaster*.
b. Antennæ shorter, the outer joints of the funiculus moniliform, joint 2 small; scrobes descending; prothorax short; elytra somewhat acuminate; upper surface uniformly clothed with green or metallic scales.
  *c*¹. Prothorax obliquely narrowed anteriorly; elytra with very fine short hairs . *acuminatus*.
  *d*¹. Prothorax strongly transverse, slightly narrowed anteriorly; elytra strongly setose . . . . . *pallidisetis*.

* Two or three others are represented in our collection by worn examples only.

1. **Polydrosus fuscofasciatus,** sp. n. (Tab. IX. figg. 1, 1 *a*.)

Oblong, piceous or ferruginous, the antennæ (the club excepted) and legs ferruginous, the femora sometimes infuscate; variegated with a dense clothing of small cinereous (or brownish-white) and dark brown scales, the latter condensed into a narrow median vitta and one or three spots on each side of the disc of the prothorax, and three undulate fasciæ on the elytra (the median fascia broad, the basal one sometimes reduced to a transverse patch on each elytron, and the subapical one formed by numerous coalescent spots), the scales on the under surface whitish and opalescent. Rostrum constricted behind the points of insertion of the antennæ, emarginate at the tip, the nasal plate short, the scrobes short, deep, somewhat distant from the dilated lower margin, and visible from above. Eyes large. Antennæ extremely slender, long, the scape reaching to the front of the prothorax, joint 2 of the funiculus elongate, as long as 1, 3–7 obconic and gradually decreasing in length. Prothorax subcylindrical, transverse. Elytra broad, comparatively short, gradually widening to the middle, inflated from near the base; finely punctate-striate, the interstices feebly convex. Tibiæ and tarsi slender.

Length $3\frac{3}{4}$–$4\frac{1}{2}$, breadth $1\frac{1}{2}$–$1\frac{9}{10}$ millim. (♀.)

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

Ten specimens, probably all females. Not unlike the European *P. undatus*, F. (*tereticollis*, De G.), but less elongate, with extremely slender antennæ, comparatively short, broad, inflated elytra, &c. The markings vary according to the predominance of the light or dark scales, but the elytra always have a common dark undulate median fascia, followed and preceded by a suturally interrupted light one. The deciduous portion of the mandibles is short, curved, and acute. *P. americanus*, Gyll., has somewhat similarly marked elytra, but it is a more elongate insect, with longer scrobes, shorter and stouter antennæ, the rostrum less constricted above, &c.

2. **Polydrosus flavonotatus,** sp. n. (Tab. IX. figg. 2, 2 *a*.)

Oblong, ferruginous, the antennæ (the darker club excepted) and legs testaceous; thickly clothed with small pale brown scales, the elytra with various paler spots, which are clustered into two interrupted fasciæ—one, oblique, at about the middle of the disc, the other undulate and subapical, the lower surface with opalescent scales. Rostrum constricted behind the points of insertion of the antennæ, the nasal plate very short, angular, the scrobes deep, descending to about as far as the lower level of the eyes, the latter large and prominent. Antennæ slender, moderately long, joint 2 of the funiculus much shorter than 1, 3–7 slightly decreasing in length. Prothorax transverse, subcylindrical, a little broader behind than the head with the eyes, feebly constricted anteriorly. Elytra gradually widening to the middle, and there about twice as wide as the prothorax, finely punctate-striate, the interstices somewhat convex. Legs slender.

Length 3, breadth $1\frac{1}{5}$ millim. (♀ ?)

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

One specimen, immature, with the vestiture undisturbed. Near the Mexican *P. partitus*, but with a relatively narrower head and rostrum, the pale markings on the elytra edged with darker scales, the lower surface only with pale greenish scales, the legs more slender.

3. **Polydrosus longicornis,** sp. n. (Tab. IX. figg. 3, 3 *a*, ♂.)

Oblong, nigro-piceous, the antennæ, legs, and tip of the abdomen testaceous; densely clothed with metallic golden-green scales, the elytra each with a more or less distinct, curved, transverse streak or fascia at

the middle of the disc, and various other, scattered, asymmetrical, transverse or oblique spots, sparsely clothed with minute fuscous scales, the prothorax sometimes with two dark lines on the disc anteriorly, the upper surface also set with very short, curled, decumbent hairs, the metasternum and abdomen with a broad space down the middle free from scales and sparsely clothed with extremely fine hairs. Rostrum constricted behind the points of insertion of the antennæ, the nasal plate arcuate, short, the scrobes short and deep. Antennæ extremely slender, reaching at least to the middle of the elytra; joint 1 of the funiculus elongate, 2 a little shorter, 3–7 gradually decreasing in length, the club long. Eyes moderately large. Prothorax short, subcylindrical, as wide as the head with the eyes. Elytra much broader than the prothorax, moderately long, subparallel in ♂, inflated posteriorly in ♀; finely punctate-striate, the interstices almost flat, obsoletely uniseriate-punctate. Legs long and slender; intermediate tibiæ feebly unguiculate at apex in ♂.

Length $3\frac{1}{10}$–$3\frac{3}{4}$, breadth $1\frac{1}{8}$–$1\frac{2}{5}$ millim. (♂ ♀.)

Hab. Guatemala, Dueñas (*Champion*).

Seven specimens, varying a little in the development of the scattered, asymmetrical, partly denuded spots on the elytra. A small, graceful form, with golden-green scales, and long, slender, pallid antennæ and legs. It approaches the European *P. ptery-gonalis*, Boh., and belongs to the section *Eustolus*, Thomson.

4. **Polydrosus mutabilis**, sp. n. (Tab. IX. figg. 4, ♂; 5, ♀, var.)

Very like *P. longicornis*, but with the green scales less shining and sometimes largely (as in two of the three specimens from Panama) replaced by others of a pale cupreous tint (leaving only a streak along the inner margin of the eyes and one or two spots on each elytron green), or with cupreous scales intermixed, the prothorax with two or three lines or streaks, and the elytra with various scattered irregular spots, fuscous in the examples with green scales; the metasternum and abdomen with a very broad space down the middle free from scales. Eyes very large. Prothorax narrower than the head with the eyes, cylindrical. Elytra slightly widening to the middle in ♂, very broad and inflated in ♀. Intermediate tibiæ without visible uncus in ♂.

Length $3\frac{1}{10}$–$4\frac{1}{10}$, breadth $1\frac{1}{4}$–$1\frac{3}{4}$ millim. (♂ ♀.)

Hab. Costa Rica, Piedras Negras, Tucurrique (*U.S. Nat. Mus.*: ♀); Panama, Caldera in Chiriqui, San Lorenzo (*Champion*: ♂ ♀).

Six examples—four with green scales predominating, the others (including the male selected as type) with the green scales clustered into one or two small patches on each elytron. The still larger eyes (especially in the male) and the broader and more inflated elytra sufficiently distinguish *P. mutabilis* from the more northern *P. longi-cornis*, apart from any difference in the colour of the scales. The very broad non-squamose space beneath is clothed with extremely fine scattered hairs.

5. **Polydrosus partitus**, sp. n. (Tab. IX. fig. 6, ♀.)

Oblong, obscure ferruginous, the antennæ and legs testaceous; thickly clothed with small golden-green and pale brown scales, the former condensed into two vittæ on the disc of the prothorax and three more or less distinct oblique fasciæ on each elytron; the under surface with pale green scales, almost bare down the middle. Rostrum constricted behind the points of insertion of the antennæ, the nasal plate very short, arcuate, the scrobes short, angular, and deep. Antennæ very slender, moderately long, the scape about reaching the front of the prothorax; joint 2 of the funiculus a little shorter than 1, 3–7 slightly decreasing in length. Prothorax transverse, subcylindrical, about as wide as the head with the eyes.

Elytra very much wider than the prothorax, subparallel in ♂, somewhat inflated posteriorly in ♀; finely punctate-striate, the interstices flat, obsoletely uniseriate-punctate. Legs long and slender.
Length $3\frac{1}{2}$–4, breadth $1\frac{2}{5}$–$1\frac{1}{2}$ millim. (♂ ♀.)

Hab. MEXICO, Oaxaca (*Höge*).

Five specimens, two only in good condition. Near *P. longicornis* and *P. mutabilis*, but with more or less distinct alternate green and brown oblique fasciæ on the elytra; the antennæ not quite so slender, distinctly shorter, and with a rather less elongate, stouter club; the eyes not larger than in *P. longicornis*; the under surface with a few scattered metallic scales down the middle.

6. **Polydrosus immaculatus,** sp. n. (Tab. IX. figg. 7, 7 *a*, ♀.)

Oblong, ferruginous; thickly clothed with subopaque golden- or pale green scales, the metasternum and abdomen sparsely squamose down the middle, the femora with a few green scales. Rostrum constricted behind the points of insertion of the antennæ, the nasal plate very short, angular behind, the scrobes narrow, descending to a little beneath the eyes, the latter large and prominent; antennæ long and slender, joint 1 of the funiculus elongate, 2 much shorter than 1, 3–7 slightly decreasing in length. Prothorax subcylindrical, constricted anteriorly, transverse, about as wide behind as the head with the eyes. Elytra subparallel in their basal half in ♂, broader and widened to the middle in ♀; finely punctate-striate, the interstices feebly convex. Legs slender; anterior and intermediate tibiæ distinctly unguiculate at the apex. Penis-sheath of the ♂ narrow, parallel-sided, rounded at the tip.
Length $3\frac{1}{2}$–4, breadth $1\frac{1}{3}$–$1\frac{3}{5}$ millim.

Hab. GUATEMALA, near the city (*Salvin*), San Gerónimo (*Champion*).

Six examples, one only in fresh condition. Near *P. longicornis*, but with the vestiture less shining, the scrobes narrower and longer, the antennæ and legs less elongate, the elytra uniformly clothed with golden-green scales. *P. delicatulus*, Horn, from Lower California, is a somewhat similar form, with smaller eyes, descending scrobes, a more transverse prothorax, shorter limbs, &c.

7. **Polydrosus macrocephalus,** sp. n. (Tab. IX. figg. 8, 8 *a*, ♂.)

Elongate, narrow (♂), broader (♀), black, the antennæ ferruginous, with the apex of the scape and the club black; thickly clothed, the legs included, with metallic green scales. Rostrum feebly constricted behind the points of insertion of the antennæ, the nasal plate triangular, excised in front, and with a v-shaped ridge behind, the scrobes short and deep, the head slightly longer than the prothorax; eyes large and prominent; antennæ long and slender, joint 2 of the funiculus a little shorter than 1, 3–7 slightly decreasing in length. Prothorax cylindrical, broader than long. Elytra much wider than the prothorax, subparallel in their basal half in ♂, broader in ♀, the humeri tumid and rather prominent; finely punctate-striate, the interstices rather convex. Legs elongate.
Length $4\frac{1}{5}$–5, breadth $1\frac{1}{3}$–$1\frac{9}{10}$ millim. (♂ ♀.)

Hab. MEXICO (*Mus. Brit.*), Iguala in Guerrero (*Höge*).

One male and two females, one of the latter with most of the scales on the upper surface discoloured and of an obscure cinereous tint. Differs from all the other forms here described in its long head and prominent humeri. The elongate legs and antennæ separate *P. macrocephalus* from *P. acuminatus*. The single example (♀) in the

British Museum was received in 1863; it is labelled "*Phyllobius grypsatus*, Schönh., var.," but has nothing to do with that species.

8. **Polydrosus amplipennis,** sp. n. (Tab. IX. figg. 9, 9 *a*, ♀.)

♀. Elongate-piriform, piceous, the elytra brown, the legs testaceous or obscure testaceous; densely clothed with subopaque golden-green scales, the legs also with a few green scales amongst the fine hairs. Rostrum sinuate on each side behind the points of insertion of the antennæ, finely longitudinally sulcate towards the v-shaped ridge bordering the nasal plate, the scrobes deep and descending to the lower surface. Eyes moderately large, prominent, distant from the front of the prothorax. Antennæ comparatively stout, long, the scape nearly reaching the prothorax, joint 2 of the funiculus shorter than 1, 3–7 decreasing in length. Prothorax transverse, subconical, at the base broader than the head with the eyes. Elytra long, inflated, rapidly widening to the middle (and there more than twice as wide as the prothorax) and obliquely narrowed thence to the conjointly produced rather narrow apices; finely punctate-striate, the interstices somewhat convex. Legs elongate.

Length $5\frac{4}{5}$–6, breadth $2\frac{1}{3}$–$2\frac{2}{5}$ millim.

Hab. MEXICO, "Sierra de Durango" (*Höge, ex Solari*).

Two specimens, one abraded. Larger than any of the other species of the genus here described, the elytra long, inflated, and acuminate, the prothorax small and subconical, the antennæ comparatively stout, the scrobes descending, the body elongate-piriform in shape, perhaps narrower in the male?

9. **Polydrosus chlorogaster,** sp. n. (Tab. IX. figg. 10, 10 *a*, ♀.)

♀. Elongate, piceous, the antennæ (the black club excepted) and legs ferruginous; the sides of the head, prothorax, and elytra, and the under surface densely clothed with metallic green scales, the upper surface with coppery-brown scales to near the apex, the dark space on the elytra sharply defined laterally, angularly excised behind, enclosing a common v-shaped pale cupreous patch, at about the middle of the suture, and followed by a subapical similarly coloured fascia, the legs sparsely pilose. Rostrum constricted behind the points of insertion of the antennæ, the nasal plate short, arcuate, the scrobes deep, sinuate, extending beneath the eyes, and partly visible from above. Antennæ long, the scape reaching to the front of the prothorax; joint 2 of the funiculus as long as 1, 3–7 slightly decreasing in length. Eyes large. Prothorax transverse, subcylindrical, feebly constricted anteriorly, finely, densely punctate. Elytra much wider than the prothorax, long, gradually widened to the middle. produced at the apex; finely punctate-striate, the interstices feebly convex. Legs elongate.

Length $5\frac{1}{3}$, breadth $1\frac{5}{6}$ millim.

Hab. GUATEMALA, Quiche Mts. 7000–9000 feet (*Champion*).

One specimen. A peculiar form, approaching the Palæarctic *P. fuscoroseus*, Desbr., with the scales on the upper and under surfaces very differently coloured, the coppery-brown space above extending from the tip of the rostrum to near the apex and angularly excised posteriorly.

10. **Polydrosus acuminatus,** sp. n. (Tab. IX. figg. 11, 11 *a*, ♂.)

Oblong, piceous, the antennæ ferruginous or testaceous at the base; densely clothed, the legs included, with metallic green scales, the upper surface also set with very short, fine, suberect, pallid hairs, those on the elytra uniseriately arranged down each interstice. Head rather small; rostrum constricted behind the points of insertion of the antennæ, with the nasal plate narrow, triangular, and the scrobes deep, angulate, descending beneath the eyes, and partly visible from above; antennæ comparatively short, the scape

barely reaching the front of the prothorax, joint 2 of the funiculus much shorter than 1, 3–7 short and moniliform; eyes prominent. Prothorax strongly transverse, wider than the head, obliquely narrowing from the middle forwards, densely, finely punctate. Elytra much wider than the prothorax, narrowing from about the middle, and somewhat pointed behind; finely punctate-striate, the interstices almost flat, obsoletely uniseriate-punctate. Legs rather short; anterior and intermediate tibiæ unguiculate at the apex in the ♂.

Length 4–4$\frac{1}{10}$, breadth 1$\frac{2}{5}$–1$\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico, Chilpancingo in Guerrero 4000 feet (*H. H. Smith*).

Two males and one female, in very fresh condition. A small form, with the legs and body uniformly clothed with metallic green scales, the antennæ rather short, the head small, the prothorax short and subconical, the elytra somewhat pointed behind. The deciduous portion of the mandibles is short, curved, and acute.

11. **Polydrosus pallidisetis,** sp. n. (Tab. IX. figg. 12, 12 *a*.)

Oblong, rather robust, black, the antennæ and legs rufo-testaceous; thickly clothed with golden-green scales and also set with long, fine, erect, pallid setæ, which are uniseriately arranged down each elytral interstice; the legs albo-setose and with a few scattered green scales. Head and rostrum densely punctate, the rostrum parallel-sided behind the points of insertion of the antennæ, the nasal plate short, with a v-shaped ridge behind, the scrobes deep, angulate, descending beneath the eyes, the latter rather small. Antennæ comparatively short, the scape not quite reaching the front of the prothorax; joint 2 of the funiculus a little longer than 3, 3–7 short and moniliform. Prothorax strongly transverse, wider than the head with the eyes. Elytra gradually widening to the middle, much broader than the prothorax, becoming subacuminate posteriorly; finely punctate-striate, the interstices flat and faintly uniseriate punctate. Legs rather short.

Length 3$\frac{1}{2}$, breadth 1$\frac{2}{5}$ millim. (♀?)

Hab. Mexico, Amula in Guerrero (*H. H. Smith*).

One specimen. This insect looks more like a *Phyllobius* than a *Polydrosus,* but it has the scrobes lateral, angular, and deep. The legs and antennæ are comparatively short, the prothorax broad and strongly transverse, and the pallid erect setæ very conspicuous.

POLYDROSODES, gen. nov.

Head subconical, the exposed portion as long as the rostrum, the latter dilated anteriorly and slightly longer than broad, the scrobes lateral, short, and deep; eyes large, oval, distant from the prothorax; antennæ very slender, long; mentum rather large, covering the maxillæ; prothorax conical, deeply bisinuate at the base; scutellum minute; elytra long, widening posteriorly, separately rounded at the base, and with rather prominent humeri, the tenth stria reduced to a row of scattered punctures, the lower margin feebly sinuate; legs long, slender; femora moderately clavate, unarmed; tibiæ unarmed at the apex, articular surface of posterior pair terminal, glabrous; tarsal claws connate at the base; body conico-elongate, squamose, winged.

Type, *P. conicus.*

This genus includes a single remarkable form from Mexico nearly related to *Polydrosus,* with the prothorax and elytra deeply sinuate at the base, the scutellum very small, and the body conico-elongate in shape.

1. **Polydrosodes conicus,** sp. n. (Tab. IX. figg. 13, 13 *a*.)

Black, the antennæ in part ferruginous; uniformly clothed above and beneath, the legs included, with small greyish-green scales, and also set with minute short hairs. Rostrum parallel-sided above to near the apex, the nasal plate short, with a v-shaped ridge behind. Joint 1 of the funiculus elongate, about one-half longer than 2, 3–7 gradually decreasing in length. Prothorax rather convex, the obliquely converging sides in a line with those of the head. Elytra elongate, widening to beyond the middle, finely punctate-striate, the interstices faintly, irregularly, uni- or biseriate-punctate.

Length $5\frac{1}{2}$, breadth 2 millim.

Hab. Mexico (*ex coll. Jekel*).

One specimen, kindly presented to us by Signor A. Solari. It must have been captured many years ago, but there is no reason to doubt the Mexican habitat, similarly labelled examples of other species having been found in various collections from Mexico.

Group **ANYPOTACTINA.**

This group includes a few Tropical-American forms related to the Polydrosina, but with the tarsal claws free. They have the articular surface of the posterior tibiæ terminal or slightly ascending; the anterior tibiæ serrulate or unarmed on their inner edge; the femora clavate, toothed in *Anypotactus*, unarmed in the other genera; the prothorax without definite setiform vibrissæ; the mandibles with a conspicuous truncated process in front in *Polydacrys*, wanting in the other genera; the mentum moderately broad or small, incompletely covering the maxillæ; the rostrum with a sharply-defined triangular nasal plate, except in *Prepodellus*, where it is very short and inconspicuous; and the wings fully developed.

ANYPOTACTUS.

Anypotactus, Schönherr, Gen. Curc. vi. 1, p. 299 (1840); Lacordaire, Gen. Col. vi. p. 71.

The type of this genus is *A. exilis*, Boh., and a second species was subsequently added by Faust. *Anypotactus* is closely related to *Polydacrys*, but differs from it in having the femora sharply toothed, the rostrum concave at the sides above (leaving the descending scrobes partly exposed in the dorsal aspect), and the scape of the antennæ reaching to the front of the prothorax. The mandibles are without a definite truncated process in front.

1. **Anypotactus bicaudatus,** sp. n. (Tab. IX. figg. 14, 14 *a*, ♀; 15, ♂.)

Moderately elongate, piceous or obscure ferruginous; densely clothed with brown scales, the elytra with a common, paler or cinereous, subapical fascia preceded by a narrow curved black band, and some blackish and cinereous markings on the rest of their surface; the upper surface also set with numerous blunt, stiff, suberect setæ, which are uniseriately arranged down each elytral interstice, the legs setulose. Head and rostrum together a little longer than the prothorax, finely punctate, the rostrum constricted and shallowly grooved between the antennæ and with a curved, transverse groove at the base, the nasal plate transversely triangular; eyes prominent, large; antennæ long, joints 1 and 2 of the funiculus

subequal in length, the scape reaching beyond the front of the prothorax. Prothorax subcylindrical, narrow, about as long as broad, finely punctate. Elytra much broader than the prothorax, gradually widening to the middle in ♀, transversely depressed at the base; punctate-striate, the interstices somewhat convex. Anterior femora with a rather long slender tooth, the other femora feebly dentate. Anterior tibiæ long, curved, sharply unguiculate.

♂. Fifth ventral segment excavate in the middle at the apex, and with a long, stout, blunt, tooth-like process on each side of the emargination.

Length $4\frac{1}{5}$–$4\frac{1}{2}$, breadth $1\frac{1}{2}$–2 millim. (♂ ♀.)

Hab. Costa Rica, Turrialba (*U.S. Nat. Mus.*: ♀); Panama, Volcan de Chiriqui, Peña Blanca 3000 feet (*Champion*: ♂ ♀).

Three males and three females, varying in the colour of the scales, one of the specimens being almost uniformly brown. Extremely like the Venezuelan *A. sulcicollis*, Faust (for a female of which we are indebted to Dr. Heller); but differing from it in the basally constricted upper portion of the rostrum, the non-sulcate prothorax, and the strongly bicaudate fifth ventral segment of the male *.

2. **Anypotactus exilis.** (Tab. IX. fig. 16.)

Anypotactus exilis, Boh. in Schönh. Gen. Curc. vi. 1, p. 300[1]; Faust, Stett. ent. Zeit. 1892, p. 20[2].

Hab. Guatemala, La Tinta, Tamahu, and San Gerónimo in Vera Paz (*Champion*), Trece Aguas (*U.S. Nat. Mus.*); Nicaragua, Chontales (*Janson*); Costa Rica, Piedras Negras (*U.S. Nat. Mus.*), San José (*Biolley*).—Colombia [1]; Venezuela, Caracas [2].

Smaller (length 3–$3\frac{4}{5}$ mm.) and less elongate than *A. bicaudatus* and *A. sulcicollis*; the setæ on the upper surface very short and inconspicuous; the antennæ shorter; the rostrum constricted at the base as in *A. bicaudatus* (as seen in profile); the prothorax transverse; the elytra each with a large, transverse or triangular, dark patch on the outer part of the disc just beyond the middle, followed by a broad whitish fascia and sometimes preceded by a small pallid spot; the femora not so stout, each with a small tooth. I am unable to distinguish the male from the female in the long series before me, including the Colombian type.

POLYDACRYS.

Polydacrys, Schönherr, Gen. Curc. ii. p. 130 (1834); vi. 1, p. 298; Lacordaire, Gen. Col. vi. p. 75.

Eumerus, Jekel, in Mus. Brit.

The species of this genus, the type of which is *P. modestus*, Gyll., from Cuba, may be known by the following characters:—

Mandibles with a truncated process in front (bearing the deciduous piece), usually extending beyond the apex of the rostrum; rostrum with a sharply-defined triangular nasal plate limited behind by a v-shaped

* There is an allied Colombian insect in the British Museum, too imperfect to describe, with the subapical transverse portion of the rostrum larger and more raised, and the antennæ comparatively short.

ridge or groove, which is produced into a short carina or groove posteriorly, the scrobes descending to the lower surface; funiculus 7-jointed; scape not reaching beyond the eyes, the latter large; mentum rather large, almost covering the maxillæ; vibrissæ wanting or indistinguishable from the general vestiture*; anterior coxæ very narrowly separated; femora abruptly clavate, unarmed, the anterior pair stouter than the others; tibiæ setose, the anterior pair unguiculate and serrulate, the articular surface of the posterior pair open and slightly ascending; body oblong, squamose and setose, fully winged.

Polydacrys and *Anypotactus* seem to me to be more nearly related to *Polydrosus* than to *Pandeleteius*; one species, however, here referred to the latter (*P. hieroglyphicus*) has a similar nasal plate to the rostrum, but in that insect (as usual in *Pandeleteius*) the intermediate and posterior femora are comparatively slender and not clavate. The five Central-American species of *Polydacrys*, one of which is an abundant insect down to as far south as Costa Rica, may be tabulated thus:—

a. Second joint of funiculus shorter or not longer than first; elytra with stiff suberect setæ.
  *a*¹. Eyes more or less prominent; elytral markings variable.
    *a*². Elytra not granulate; setæ moderately long or short.
      *a*³. Eyes prominent: species smaller . . . . . *depressifrons*.
      *b*³. Eyes less prominent: species larger and broader . . . . . [*modestus*.]
    *b*². Elytra granulate; setæ long.
      *c*³. Head and prothorax broader; elytra strongly granulate; eyes less prominent laterally . . . . . *seriegranosus*.
      *d*³. Head and prothorax narrower; elytra more feebly granulate; eyes more prominent laterally . . . . . *mucronatus*.
  *b*¹. Eyes more depressed; setæ very numerous, short; elytra nigro-fasciate or nigro-maculate . . . . . *nigrofasciatus*.
b. Second joint of funiculus much longer than first; elytra with very short, decumbent, curled, hair-like scales intermixed with the larger ones, nigro-fasciate; eyes very prominent; prothorax strongly transverse . . . . . *brevicollis*.

1. **Polydacrys depressifrons.** (Tab. IX. figg. 17, 17 *a*, ♀.)

Polydacrys depressifrons, Boh. in Schönh. Gen. Curc. vi. 1, p. 298[1].

Eugnathus depressifrons, Lacord. Gen. Col. vi. p. 383, note 2 (1863)[2]; Gemm. & Har. Cat. Col. viii. p. 2373[3].

Pandeleteius nubilosus, Boh. loc. cit. p. 296[4].

Pandeleteius cavirostris, Schaeff. Journ. N. York Ent. Soc. xvi. pp. 214, 216 (1908)[5]; Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 359[6].

Length $3\frac{4}{5}$–6, breadth $1\frac{1}{2}$–$2\frac{1}{3}$ millim.

Hab. NORTH AMERICA, Brownsville, Texas[5 6].—MEXICO[3 4] (*ex coll. Sturm*), Toxpam, San Andres Tuxtla, Playa Vicente, Juquila (*Sallé*), Santa Lucrecia, Cordova (*U.S. Nat. Mus.*), Atoyac, Cerro de Palmas, Oaxaca, San Juan Bautista, Tapachula (*Höge*), Teapa

* In a fresh example of *P. modestus*? captured by Mr. H. H. Smith in St. Vincent, they are represented by a single very long seta only, which is wanting in the worn type of Gyllenhal.

(*Sallé*, *Höge*, *H. H. Smith*), Vera Cruz [1]; British Honduras, Rio Hondo (*Blancaneaux*); Guatemala, Livingston, Trece Aguas (*U.S. Nat. Mus.*), Cubilguitz, Cahabon, Chiacam, Panzos, La Tinta, Tamahu, Senahu, San Juan, Sabo, San Gerónimo, Cerro Zunil, Zapote (*Champion*), Coban (*Conradt*); Salvador, Sonsonate (*U.S. Nat. Mus.*); Nicaragua (*Sallé*), Chontales (*Janson*); Costa Rica, San José (*Biolley*), Piedras Negras (*U.S. Nat. Mus.*).—Antilles, Grenada and St. Vincent.

A common Central-American insect replaced southward by allied forms. It is very variable in size, and in the colour of the vestiture, according to the predominance of the light (cinereous or pale brown) or dark (blackish) scales. *P. nubilosus* * was based upon a pallid, faintly maculate, feebly setose example, and *P. depressifrons* (the type of which I have seen) upon a darker, sharply marked, strongly setose insect. In the latter the elytra have a black post-median fascia followed by an oblique white band, both of which are sometimes reduced to an oblong streak on each elytron. In the three specimens from Zapote the dark scales predominate, leaving scattered oblong cinereous spots on the elytra, somewhat as in the Antillean *P. modestus*. The setæ are suberect and arranged in a single scattered series down each elytral interstice; in some specimens they are quite short. The two basal joints of the funiculus are subequal in length.

2. **Polydacrys seriegranosus,** sp. n. (Tab. IX. fig. 18, ♀.)

Polydacrys seriegranosus, Jekel, in litt.

Moderately elongate, piceous or nigro-piceous, the antennæ partly or entirely ferruginous; clothed with small brown and whitish or cinereous scales, the latter condensed on the elytra into an oblique, more or less distinct, subapical fascia and one or two spots on the middle of the disc, the prothorax sometimes with a faint pallid line on each side; the upper surface also set with numerous stiff, suberect, blunt, light and dark setæ, which are uniseriately arranged down each elytral interstice, the legs strongly setose. Head and rostrum densely punctate, together a little longer than the prothorax, the head with a short sulcus between the eyes, the nasal plate almost smooth and limited behind by a very prominent v-shaded ridge, which is produced posteriorly into a short carina; eyes convex; joint 2 of the funiculus slightly shorter than 1. Prothorax nearly as long as broad, somewhat widened at the middle; closely, finely punctate and granulate. Elytra gradually widened to the middle and there nearly twice as wide as the prothorax, the apices conjointly produced into a compressed, blunt, dentiform prominence at the sutural angle (? wanting in ♂); coarsely punctate-striate, the punctures transverse, the interstices feebly convex and each with a series of smooth, scattered, prominent granules. Anterior tibiæ bowed at the apex, sharply unguiculate and serrulate.

Length $5\frac{1}{2}$–7, breadth 2–$2\frac{1}{2}$ millim. (♀.)

Hab. Panama, Volcan de Chiriqui (*Champion*).—Colombia (*Mus. Brit., coll. Solari*).

Three specimens of this species have been found in Chiriqui, and others from Colombia are contained in various collections. The tubercles on the elytral interstices vary in size and number, these being wholly absent in the variable *P. depressifrons*, the latter also wanting the compressed prominence at the sutural angle. The mandibles have a stout, conspicuous, truncated process in front in both species.

* Type probably lost.

3. **Polydacrys mucronatus,** sp. n. (Tab. IX. figg. 19, 19 *a*, ♀.)

Oblong-obovate, piceous, the antennæ (the club excepted) ferruginous; sparsely clothed with very small brown scales, the prothorax with a line of paler scales along each side of the disc, extending on to the base of the third elytral interstice; the upper surface also set with numerous stiff, blunt, suberect, light and dark setæ, which are uniseriately arranged down each elytral interstice, the legs strongly setose. Head and rostrum comparatively narrow, densely punctate, together about as long as the prothorax, the head feebly canaliculate, the groove extending forward to the v-shaped ridge on the rostrum, the nasal plate smooth; eyes convex, laterally prominent; joint 2 of the funiculus shorter than 1. Prothorax nearly as long as broad, somewhat rounded at the sides, closely punctate and subgranulate. Elytra in the ♀ inflated and at the middle nearly twice as wide as the prothorax, narrower and more oblong in the ♂, with rows of closely placed, coarse, transverse punctures, separated by rather convex interstices, the interstices each with a few smooth scattered granules, the suture mucronate at the tip in the ♀.

Length $4\frac{4}{5}$–5, breadth $1\frac{3}{4}$–2 millim. (♂ ♀.)

Hab. Panama, Bugaba (*Champion*).

One pair. Closely related to *P. seriegranosus*, but with a relatively narrower head and rostrum; a smaller prothorax, with the sides more rounded; the elytra mucronate at the tip in the female, and with small scattered granules on the interstices; the mandibles with a shorter and smaller truncated process in front.

4. **Polydacrys nigrofasciatus,** sp. n. (Tab. IX. fig. 20.)

Oblong, black or piceous, the antennæ in great part ferruginous; thickly clothed with cinereous and blackish scales, the latter condensed into a median vitta (of variable width) on the prothorax (sometimes wholly wanting) and three, oblique or curved, transverse patches on each elytron, these markings sometimes confluent, or united into three common fasciæ, or partly obsolete; the upper surface also closely set with short, stout, erect, blunt, pallid setæ, which are uniseriately arranged down each elytral interstice, the legs albo-setose. Head and rostrum densely punctate, together a little longer than the prothorax, the rostrum finely canaliculate down the middle to the v-shaped ridge; eyes large, moderately prominent; joint 2 of the funiculus much shorter than 1. Prothorax broader than long, subcylindrical, slightly constricted at the base, densely, finely punctate. Elytra much wider than the prothorax, somewhat inflated posteriorly in the ♀; with rows of closely placed, rather coarse punctures separated by feebly convex, rugulose, faintly uniseriate-punctate interstices.

Length $3\frac{1}{2}$–$4\frac{2}{5}$, breadth $1\frac{1}{4}$–$1\frac{4}{5}$ millim. (♂ ♀.)

Hab. Mexico, Salina Cruz and Tehuantepec in Oaxaca (*Knab, in U.S. Nat. Mus.*); Salvador, Sonsonate (*Knab, in U.S. Nat. Mus.*).

Numerous examples, mostly from Tehuantepec. Smaller than any of the varieties of *P. depressifrons*, the eyes less prominent, the elytra closely set with short stiff setæ. The markings are very variable, according to the predominance of the cinereous or blackish scales, the median vitta on the prothorax and the post-basal and subapical patches on the elytra being obsolete in light-coloured examples (leaving only a transverse curved mark just beyond the middle of each elytron), the darker individuals having the elytral fasciæ longitudinally coalescent (leaving a few scattered cinereous spots only) or transversely confluent. The present species bears a superficial resemblance to the apterous *Mitostylus gracilis*, Horn.

5. **Polydacrys brevicollis,** sp. n.

Moderately elongate, nigro-piceous, the antennæ ferruginous at the base; thickly clothed with cinereous scales, the elytra each with a broad transverse fascia a little beyond the middle (nearly reaching the suture and outer margin) and a small spot on the disc towards the apex blackish-brown; the upper surface also set with numerous minute, curled, adpressed, hair-like scales. Head and rostrum together a little longer than the prothorax, the rostrum with a narrow median groove extending forward to the v-shaped, smooth ridge, the nasal plate sparsely squamose; eyes prominent; antennæ with joint 2 of the funiculus elongate, much longer than 1, the club long and stout. Prothorax cylindrical, much broader than long, closely punctate. Elytra much wider than the prothorax, coarsely punctate-striate, the interstices feebly convex. Anterior femora abruptly clavate. Anterior tibiæ bowed at the apex, sharply unguiculate, and obsoletely serrulate.

Length $7\frac{1}{4}$, breadth $3\frac{1}{5}$ millim. (♀?)

Hab. GUATEMALA, Panzos in the Polochic Valley (*Conradt*).

One specimen. Larger and broader than *P. depressifrons*, the prothorax strongly transverse, the elytra without trace of white markings beyond the broad blackish-brown post-median fascia, the setæ of the upper surface replaced by minute, curled, hair-like scales, the second joint of the funiculus elongate. The wings are fully twice the length of the elytra.

PREPODELLUS.

Prepodellus, Kirsch, Berl. ent. Zeitschr. 1867, p. 239.

This genus was based upon two small species from Colombia and a third is now added from Central America. They have the head and rostrum narrow, the rostrum subcylindrical, with an extremely short, inconspicuous nasal plate, and the scrobes lateral, deep, and obliquely descending; the eyes rather large, oval, and not prominent; the mentum small, not covering the maxillæ; the mandibular scar small; the antennæ inserted near the apex of the rostrum, the scape reaching the front margin of the prothorax; the anterior coxæ contiguous; the femora clavate and unarmed; the tarsal claws free; the body winged, densely squamose and strongly setose. In general facies these insects resemble small *Polydrosi.*

1. **Prepodellus viridisquamis,** sp. n. (Tab. IX. figg. 21, 21 *a*, ♀; 22, ♂.)

Oblong, piceous or ferruginous, the antennæ (the black club excepted) in part or wholly, and the legs entirely, ferruginous; densely clothed with small golden-green or pale greenish scales and also thickly set with erect, stout, blunt, pallid setæ, which are uniseriately arranged down each elytral interstice, the legs albo-setose. Head and rostrum densely, very finely punctate, the rostrum about as long as the exposed portion of the head and slightly widened at the tip, the scrobes deep, strongly sinuate, and partly visible from above (appearing subangulate); eyes large, oval. Prothorax subcylindrical, not so long as broad, feebly constricted at the base and towards the apex, densely punctate. Elytra much wider than the prothorax, moderately long, subparallel in ♂, slightly widened to the middle in ♀; finely punctate-striate, the interstices flat, densely, minutely punctate. Penis-sheath of ♂ (fig. 22) strongly acuminate at the tip.

Length $2\frac{2}{5}$–3, breadth $\frac{4}{5}$–$1\frac{1}{10}$ millim. (♂ ♀.)

Hab. NICARAGUA, Managua (*Solari*); COSTA RICA, San José (*Biolley*); PANAMA, Peña Blanca 3000 feet (*Champion*).

Found in numbers at Peña Blanca, these specimens (somewhat immature) having the antennæ ferruginous, the club excepted. Very like *P. nigriclava*, Kirsch (the type of which, as well as that of *P. ruficornis*, has been communicated by Dr. Heller for comparison), but with the antennæ inserted a little nearer the tip of the rostrum, the scrobes more sinuate and partly visible from above, the elytral setæ much shorter. *P. ruficornis* has a longer rostrum, the prothorax rounded at the sides, and the elytra maculate.

Group **CYPHINA.**

Under this group are placed the various genera with a broad, subquadrate or oblong-subquadrate, flattened, narrowly sulcate rostrum; the scrobes lateral, sinuate, and descending; the eyes convex and strictly lateral (thus being always separated above by the full width of the rostrum); the scutellum minute or depressed; the humeri prominent; the tarsal claws free; and the body winged. The eyes are often so prominent that they might almost be described as subpedunculate. The rostral groove terminates at the base of the subapical plate (never extending across it, as in *Artipus*, &c.), and the apical emargination is sometimes so deep that no definite bare nasal plate is visible. The outer striæ of the elytra are coalescent or approximate posteriorly in *Cyphus*, &c., and free in other genera, and the posterior tibiæ may have open or closed corbels, according to the development of the apical portion of the tibia. The Cyphina, as defined above, include *Cyphus*, Germar, *Hadropus*, *Mimographus*, *Naupactus* (the winged forms only), *Plectrophorus*, *Apotomoderes*, and *Megalostylus*, Schönherr, *Hoplopactus*, Chevrolat (= *Diaphorus*, Faust), various new genera described below, &c.; it is therefore not based on the characters used by Lacordaire or Horn*. *Pseudocyphus* and *Compsus* approach *Cyphus*, but neither of these genera has the eyes strictly lateral.

The Central-American genera of Cyphina may be tabulated thus :—

a. Antennal scape gradually or moderately clavate at the apex.
  *a*¹. Legs (the femora excepted) slender.
    *a*². Prothorax narrowly margined and feebly sinuate or truncate at the base, short, subcylindrical, sometimes conical in ♀.
      *a*³. Antennæ long and slender, joint 2 of the funiculus much longer than 1 (shorter in *S. cinereoguttatus*); elytra without long erect bristly hairs.
        *a*⁴. Humeri less prominent; outer striæ free . . . . . STEIRARRHINUS.
        *b*⁴. Humeri more prominent; outer striæ coalescent . . . . . MIMOGRAPHOPSIS.
      *b*³. Antennæ shorter and stouter, joint 2 of the funiculus not much longer than 1; elytra setose . . . . . MIMOGRAPHUS.

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* *Cyphopsis*, Roelofs, from Brazil, must be related to *Exophthalmus*.

b^2. Prothorax broadly margined (as seen from behind) and strongly bisinuate at the base, transverse, rounded at the sides; second joint of funiculus long.

c^3. Antennæ and legs long; prothorax not much narrower than the elytra in ♂ . . . . . NAUPACTUS.

d^3. Antennæ and legs shorter; prothorax very much narrower than the elytra in both sexes . . . . . GERMARIELLA.

b^1. Antennæ and legs (in the N.-American, Mexican, and other forms belonging to Schönherr's Stirps 2) stouter—the scape reaching the middle of the eye, and the tarsi broad, at least in ♂ . . . . . CYPHUS.

b. Antennal scape flattened and dilated, or strongly clavate.

c^1. Elytra with the outer striæ coalescent at basal third; prothorax short, cylindrical; elytra broad, oblong-subquadrate, and tuberculate; anterior tibiæ dilated and strongly sinuate within . . . . . TETRAGONOMUS.

d^1. Elytra with the outer striæ entire; prothorax broader, subconical; elytra not tuberculate; anterior tibiæ not dilated.

c^2. Anterior tibiæ toothed at outer apical angle; all the femora simply clavate . . . . . MEGALOSTYLUS.

d^2. Anterior tibiæ unarmed at outer apical angle; posterior femora dentate; head small; body densely setose . . . . . MEGALOSTYLODES.

STEIRARRHINUS, gen. nov.

Steirarhinus, Jekel, in litt.

Rostrum broad, subquadrate, sulcate, flattened, with the secondary nasal plate limited behind by a V-shaped ridge or groove between the points of insertion of the antennæ, the bare nasal plate extremely short and notched in front, the scrobes deep, lateral, sinuous, and extending as far downwards as the lower margin of the eyes, the latter convex, rounded, prominent, strictly lateral, and well separated from the prothorax; antennæ long and slender, the scape clavate at the tip and sometimes reaching beyond the anterior margin of the prothorax, the second joint of the funiculus about twice as long as 1; mentum transverse, covering the maxillæ; prothorax short, subcylindrical, conical in *S. conicollis* ♀, narrowly margined at the base; scutellum very small; elytra subparallel in ♂, broader and widened posteriorly in ♀, the humeri moderately prominent, the outer striæ entire, becoming divergent anteriorly; femora unarmed, clavate, the anterior pair stout; anterior tibiæ usually more or less distinctly denticulate or serrulate; posterior tibiæ with the articular surface ascending, densely ciliate externally, the apex not or narrowly laminate, the second row of setæ wanting in the forms with more slender legs; tarsal claws long, free; body elongate or oblong, winged, squamose; sexes dissimilar in form.

Type, *S. conicollis*.

The numerous forms referred to this genus (which will include *Mimographus rufipes*, *suturalis*, and *griseus*, Kirsch) may be briefly described as *Hoplopacti* * (represented by such species as the Brazilian *H. lateralis*, Arrow) with unarmed anterior femora, long, slender antennæ, and an elongate second joint to the funiculus. The females of some of the species, as in *Mimographus*, *Hoplopactus*, and *Cyphus*, have a more or less

* *Hoplopactus*, Chevrolat, Bull. Soc. Ent. Fr. 1879, p. lxxxiv, = *Diaphorus*, Faust (renamed *Diapherontus* by Berg in 1898), Stett. ent. Zeit. 1892, p. 7.

distinct, short, impressed, oblique line on each side of the fifth ventral segment in front. *S. conicus* approaches *Cyphus*; *S. tenuicornis* has the facies of a *Polydrosus*.

a. Posterior tibiæ without a definite enclosed space along the apical margin, at least in ♂.
  *a*¹. Prothorax with or without a narrow inconspicuous median groove.
    *a*². Anterior tibiæ serrulate, feebly or sharply unguiculate, antennæ moderately elongate.
      *a*³. Elytra immaculate, cinereous.
        *a*⁴. Prothorax subcylindrical in ♂, conical in ♀ . . . . . *conicollis.*
        *b*⁴. Prothorax similarly shaped in ♂ and ♀ . . . . . *infucatus.*
      *b*³. Elytra maculate, sometimes metallic . . . . . *nebulosus.*
    *b*². Anterior tibiæ sinuous, sharply denticulate, unguiculate; elytra cinereo-maculate . . . . . *serripes.*
    *c*². Anterior tibiæ closely serrulate, unguiculate; antennæ very elongate; body uniformly clothed with green scales . . . . . *guatemaltecus.*
    *d*². Anterior tibiæ unarmed; antennæ very elongate, body clothed with green scales, except along the median line above . . . . . *tenuicornis.*
  *b*¹. Prothorax with a conspicuous smooth bare median groove; anterior tibiæ unarmed; body clothed with uniformly coloured scales.
    *e*². Femora shining, sparsely pilose; antennæ (♂) very elongate . . . . *cupreotinctus.*
    *f*². Femora squamose; antennæ (♀) much shorter . . . . . *lineatocollis.*
b. Posterior tibiæ with a narrow, definite, squamose, enclosed space along the apical margin.
  *c*¹. Anterior tibiæ serrulate and unguiculate; third tarsal joint broad; elytra obliquely cinereo-fasciate . . . . . *bicinctus.*
  *d*¹. Anterior tibiæ obsoletely serrulate, unguiculate; second joint of funiculus comparatively short; elytra cinereo-guttate . . . . . *cinereoguttatus.*
  *e*¹. Anterior tibiæ simply unguiculate; elytra fusco-fasciate . . . . . *cinctipennis.*

1. **Steirarrhinus conicollis,** sp. n. (Tab. IX. figg. 23, 23 *a*, *b*, ♂; 24, ♀.)

Steirarhinus conicollis (♂ ♀), *amplipennis* (♀), and *naupactoides* (♂), Jekel, in litt.

Moderately elongate, narrow (♂), much broader (♀), nigro-piceous or obscure ferruginous; above and beneath densely clothed with whitish or cinereous scales, with minute decumbent, hair-like scales intermixed. Rostrum widened towards the base, with a narrow sulcus extending down the middle from the v-shaped inter-antennal ridge to the base of the head, and finely carinate towards the sides. Antennæ slender, moderately long, joint 2 of the funiculus nearly twice as long as 1, 3–7 becoming stouter outwards, the club acuminate-ovate. Prothorax transverse, broad and conical in ♀, narrower and with the sides subparallel at the base in ♂; obsoletely canaliculate and finely punctate. Scutellum very small in ♂, larger in ♀. Elytra very gradually narrowing from the rather prominent humeri in ♂, much broader and widening to the middle in ♀, feebly bisinuate at the base; regularly punctate-striate, the interstices feebly convex. Tibiæ and tarsi rather slender, the anterior tibiæ feebly unguiculate and closely serrulate. Penis-sheath of ♂ sinuate (as seen in profile), acuminate and reflexed at the tip (fig. 23 *b*).

Length $5\frac{2}{3}$–$8\frac{1}{2}$, breadth 2–$3\frac{1}{2}$ millim. (♂ ♀.)

Hab. MEXICO, Yucatan (*Mus. Brit.*), Temax in N. Yucatan (*Gaumer*); ? GUATEMALA (*Solari, ex coll. Jekel*).

This insect has long been known in collections under one or the other of Jekel's MS. names. The numerous examples sent us by Gaumer are mostly in bad condition, and but few of them are of the male sex. The female is not unlike a *Megalostylus*.

2. **Steirarrhinus infucatus,** sp. n. (Tab. IX. fig. 25, ♀.)

Moderately elongate, narrow (♂), broader (♀), nigro-piceous, the base of the antennæ sometimes ferruginous; above and beneath densely clothed with cinereous scales, with minute, decumbent, hair-like scales intermixed. Head and rostrum narrowly sulcate down the middle, the rostrum finely carinate on each side towards the outer margin; antennæ slender, joint 2 of the funiculus nearly twice as long as 1, 3–7 becoming stouter outwards, the club acuminate-ovate in ♀, more elongate in ♂. Prothorax similarly shaped in the two sexes, transverse, the sides gradually converging forwards and slightly rounded towards the base; finely punctate, the disc sometimes obsoletely canaliculate. Scutellum very small. Elytra parallel in their basal half in ♂, widened to the middle in ♀, feebly bisinuate at the base; regularly punctate-striate, the interstices feebly convex. Fifth ventral segment with a short, oblique, impressed line on each side at the base in ♀. Anterior tibiæ unguiculate and closely serrulate.

Length 6–9, breadth 2–3½ millim. (♂ ♀.)

Hab. BRITISH HONDURAS, Rio Hondo (*Blancaneaux*).

Six females and three males. Closely related to *S. conicollis*, but with the prothorax subcylindrical and similarly shaped in the two sexes, the elytra relatively narrower in the female, the antennal club more elongate in the male. The very narrow median groove on the prothorax is evanescent. The elytra of the male are relatively much shorter than in the same sex of *S. tenuicornis* and *S. guatemaltecus*.

3. **Steirarrhinus nebulosus,** sp. n. (Tab. IX. figg. 26, ♂; 27, 28, ♀, 29, ♂, vars.)

Naupactus nebulosus, Jekel, in litt.

Mimographus suavis, Faust, in litt.

Elongate, narrow (♂), much broader (♀), piceous or obscure ferruginous; variegated with a dense clothing of cinereous and dark brown scales, with minute, decumbent, hair-like scales intermixed, the dark scales on the elytra condensed into a transverse post-median fascia, a spot near the apex, and various spots or streaks below the base (these markings often longitudinally confluent or partly obsolete), the prothorax sometimes with one or three darker vittæ on the disc; the vestiture of the under surface uniformly cinereous. Rostrum sulcate down the middle from the arcuate inter-antennal ridge, the groove extending backward to near the base of the head. Antennæ slender, long, shorter in ♀, joint 2 of the funiculus nearly twice as long as 1, 3–7 subequal in length, but becoming gradually stouter, the club long, stout, and acuminate. Prothorax transverse, narrowed from the middle, rugosely punctate, in some specimens obsoletely canaliculate. Scutellum small, triangular. Elytra subparallel in their basal half in ♂, widening to the middle in ♀, feebly sinuate at the base, and with rather prominent humeri; the punctures of the striæ frequently geminate (especially in ♀) or arranged in sinuous lines, the interstices more or less convex. Fifth ventral segment with a short, impressed, oblique line on each side in front in ♀. Legs elongate; anterior tibiæ in both sexes sinuate, sharply unguiculate, and serrulate.

Var. *α*. The cinereous scales, above and beneath, in part or entirely replaced by others of a metallic-green colour; the post-median fascia of the elytra divided into spots, the prothorax with a dark median vitta (fig. 27, ♀).—Panama (Bugaba).

Var. *β*. Black or piceous, the cinereous scales replaced by others of a metallic-green colour, the elytral fascia and spots very sharply defined, the head and prothorax with a dark median vitta.—Costa Rica (Pozo Azul).

Var. *γ*. The scales in great part green, those on the head, legs, or sides of the body beneath more or less cupreous, the elytra without definite markings, the head and prothorax with a narrow dark median line or vitta [♀] (fig. 28).—Costa Rica; Panama.

Var. *δ*. The cinereous scales predominating above, the submedian darker fascia of the elytra reduced to one or two small spots and the other markings to small streaks or dots, there being often four small spots on each elytron [4-*punctatus*, Chevr., in litt.] (fig. 29, ♂).—Costa Rica (San José, &c.).

Length $5\frac{1}{4}$–$8\frac{1}{5}$, breadth $1\frac{3}{4}$–$3\frac{1}{4}$ millim. (♂ ♀.)

Hab. Costa Rica (*Van Patten*), Pozo Azul (*Underwood*: vars. *β* and *γ*), Puerto Limon (*Lankester, in U.S. Nat. Mus.*: var. *γ*), Piedas Negras, Atenas (*U.S. Nat. Mus.*), Volcan de Irazu (*Rogers*), San José (*Biolley*); Panama, Bugaba, Volcan de Chiriqui (*Champion*), Chiriqui (*Trötsch*), Bocas del Toro (*Robinson, in U.S. Nat. Mus.*: var. *γ*).

A common insect in Costa Rica and Panama*, the varieties with metallic-green scales being apparently confined to the "tierra caliente." The form from the Volcan de Chiriqui is taken as the type; the specimens from the vicinity of the capital of Costa Rica are paler and have the dark markings less extended, often reduced to three or four small spots on each elytron or even entirely absent. The var. *γ* superficially resembles *Mimographus viridanus*, Kirsch, from Bogota, but the latter wants the inter-antennal ridge and has long erect dark setæ on the elytra, &c.

4. **Steirarrhinus serripes,** sp. n. (Tab. IX. fig. 30, ♀.)

♀. Moderately elongate, nigro-piceous or piceous, the antennæ sometimes ferruginous at the base; thickly clothed with rust-brown, pale brown, or brownish-cinereous scales, inermixed with minute, decumbent, hair-like scales, the elytra with numerous, rather large, scattered, whitish spots (three of which tend to form an oblique row across the disc of each elytron before the middle and four or five others a transverse subapical fascia); the abdomen with a space down the middle clothed with fine hairs only. Head and rostrum broad, narrowly sulcate to the v-shaped inter-antennal ridge, the rostrum widened towards the base; antennæ moderately elongate, very slender, joint 2 of the funiculus fully twice as long as, and 3–7 each about the length of, 1, 3–7 thickened at the tip, the club oblong-ovate, acuminate. Prothorax transverse, narrowed anteriorly, finely punctate, obsoletely canaliculate down the middle, and with a transverse sinuous groove towards the base. Scutellum small, triangular. Elytra broad, widened to the middle, sinuate at the base; rather coarsely punctate-striate, the interstices feebly convex. Fifth ventral segment with a short, impressed, oblique line on each side at base in ♀. Anterior tibiæ rather stout, strongly sinuate, sharply unguiculate, and set with numerous sharp teeth on the inner edge.

Length $7\frac{4}{5}$–$9\frac{1}{2}$, breadth $3\frac{1}{10}$–$3\frac{9}{10}$ millim.

Hab. Panama, Bugaba, Volcan de Chiriqui (*Champion*).

Four specimens, varying in the colour of the scales, the whitish spots on the elytra less sharply defined and partly coalescent in the two individuals from the Volcan de

* There are specimens of the var. *δ* in the British Museum labelled "Guat.," but this is almost certainly due to a mistake in labelling.

Chiriqui. The anterior tibiæ are stouter, more sinuate, and more sharply denticulate than in any of the other allied forms, and the head and rostrum are relatively broader.

5. **Steirarrhinus guatemaltecus,** sp. n.

Elongate, narrow (♂), broader (♀), piceous or ferruginous; uniformly clothed above and beneath with small green scales, and also thickly set with minute decumbent yellowish hairs. Head and rostrum as in *S. tenuicornis*; antennæ not so slender, the outer joints of the funiculus relatively shorter and less abruptly clavate at the tip. Prothorax a little more rounded at the sides posteriorly, obsoletely canaliculate. Scutellum small, triangular. Elytra more elongate, subparallel to beyond the middle in ♂; deeply punctate-striate, the interstices convex. Legs a little stouter; anterior tibiæ closely denticulate, but without definite uncus at the tip.

Length $6\frac{1}{2}$–$8\frac{1}{4}$, breadth 2–3 millim. (♂ ♀.)

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

Two males and one female, all somewhat worn, the female especially. Easily separable from the southern *S. tenuicornis* by the closely denticulate anterior tibiæ, the less slender antennæ, the more elongate elytra, and the uniformly squamose surface.

6. **Steirarrhinus tenuicornis,** sp. n. (Tab. IX. fig. 31, ♂.)

Elongate, narrow (♂), broader (♀), piceous or obscure ferruginous; clothed above (a space down the middle of the head and prothorax, and the scutellum and suture, excepted) and beneath (a finely pilose space down the middle of the metasternum and abdomen excepted) with small golden- or bluish-green scales, the upper surface also thickly set with minute decumbent hairs. Rostrum transverse, subquadrate, finely punctate, narrowly sulcate down the middle from the arcuate inter-antennal ridge, the groove extending backward to near the base of the head. Antennæ extremely slender, reaching the middle of the elytra, the joints of the funiculus thickened at the apex, 2 nearly two and a half times as long as 1, 1 and 3 equal in length, 4–7 very little shorter than 3, the club elongate. Prothorax much broader than long, subcylindrical, transversely grooved on the outer part of the disc towards the base; finely punctate, smoother along the median line. Scutellum very small. Elytra long, subparallel in their basal half in ♂, widening to the middle in ♀; the striæ with closely placed rather coarse punctures, the interstices moderately convex. Legs long and slender; anterior femora strongly clavate; anterior tibiæ unarmed and without definite uncus at the tip.

Length $5\frac{1}{2}$–$7\frac{1}{3}$, breadth $1\frac{3}{5}$–$2\frac{3}{4}$ millim. (♂ ♀.)

Hab. PANAMA, Volcan de Chiriqui 2000–4000 feet (*Champion*).

A long series. This insect has the appearance of an elongate *Polydrosus* and in life it is covered with a dense yellow mealy exudation. There is an almost bare narrow space down the middle of the body above and a very finely pubescent, broader, non-squamose space beneath. The antennæ are long and extremely slender, the scape reaching beyond the anterior margin of the prothorax.

7. **Steirarrhinus cupreotinctus,** sp. n. (Tab. IX. fig. 32, ♂.)

♂. Elongate, narrow, piceous, the elytra fusco-ferruginous, the antennæ and legs ferruginous; thickly clothed with coppery-white scales, intermixed with minute, decumbent, hair-like scales; the legs pilose, the hairs on the femora very fine and scattered. Head and rostrum narrowly sulcate, the rostrum

slightly hollowed down the middle to the v-shaped inter-antennal ridge; antennæ very long and slender, reaching to about the middle of the elytra, joint 2 of the funiculus nearly two and one-half times the length of, and 3–7 each as long as, 1, 3–7 becoming slightly thicker outwards, the club elongate. Prothorax short, narrowed anteriorly, finely punctate, transversely plicate, and with a conspicuous, smooth, median groove. Scutellum depressed, minute. Elytra elongate, parallel in their basal half, regularly punctate-striate, the interstices feebly convex. Ventral segments 1 and 5 sulcate down the middle, the latter nearly as long as 2–4 united. Legs elongate, the femora shining, the tibiæ slender, the anterior pair unarmed, sinuous within, and without definite uncus, the first joint of the intermediate and posterior tarsi rather stout.

Length 7, breadth $2\frac{1}{8}$ millim.

Hab. Costa Rica? (*Mus. Brit.*).

One specimen, labelled "Guat." in the British Museum, but almost certainly from Costa Rica, like various other insects with similar tickets obtained from the Bowring collection. A peculiar form, with very long, slender, ferruginous antennæ, shining, sparsely pilose, red femora, a sharply sulcate prothorax, and uniform coppery-white scales. It is allied to *S. tenuicornis*.

8. **Steirarrhinus lineatocollis,** sp. n.

♀. Moderately elongate, piceous or fusco-ferruginous, thickly clothed (the femora included) with small olivaceous or cinereous scales, intermixed with minute, decumbent, hair-like scales. Head and rostrum narrowly sulcate from the v-shaped inter-antennal ridge, the rostrum widened towards the base; antennæ very slender, reaching to about the basal third of the elytra, joint 2 of the funiculus more than twice the length of, and 3–7 each as long as, 1, the club long and acuminate. Prothorax short, subconical, slightly narrowed at the base, finely punctate, shallowly transversely plicate on each side, and with a smooth, bare, narrow median sulcus. Scutellum depressed, very small. Elytra broad, widened to the middle, feebly sinuate at the base; regularly punctate-striate, the interstices rather convex. Tibiæ and tarsi slender, the anterior tibiæ unarmed.

Length $7\frac{2}{5}$–$7\frac{1}{2}$, breadth $2\frac{9}{10}$–3 millim.

Hab. Costa Rica, Cachi (*Rogers*); Panama, Volcan de Chiriqui 4000 feet (*Champion*).

Two females, the Costa Rican example imperfect. Separable from all the varieties of *S. nebulosus* by the longer and more slender antennæ, with narrower club, the conspicuous smooth median channel on the prothorax, the more slender legs, and the simple anterior tibiæ. *S. cupreotinctus* (the male only of which is known) has a similar groove on the prothorax; but in that insect the femora are smoother, the basal joint of the tarsi is stouter, the antennal club is unusually elongate, &c.

9. **Steirarrhinus bicinctus,** sp. n. (Tab. IX. fig. 33, ♀.)

♀. Moderately elongate, piceous, variegated with a rather dense clothing of brownish-cinereous and brown scales, intermixed with minute, decumbent, scattered, hair-like scales, the light scales condensed into a broad stripe on each side of the prothorax (a space down the middle being almost bare) and two oblique angulate fasciæ and a humeral patch on the elytra. Head and rostrum sharply sulcate down the middle; antennæ slender, moderately long, the scape reaching the posterior margin of the eyes, joint 2 of the funiculus twice as long as 1, 3–7 becoming stouter outwards, the club stout and acuminate. Prothorax strongly transverse, bisinuate at the base, subcylindrical, slightly narrowed anteriorly. Scutellum small,

triangular. Elytra broad, widened to the middle, sinuate at the base, with regular rows of rather coarse scattered punctures, the interstices almost flat. Anterior tibiæ serrulate and sharply unguiculate. Tarsi rather broad, the third joint large.

Length $8\frac{2}{5}$, breadth $3\frac{1}{3}$ millim.

Hab. Panama, Bugaba (*Champion*).

One specimen. This species has broader tarsi and a stouter antennal club than the allied forms, characters separating it from the female of the variable *S. nebulosus*. The almost bare space along the middle of the prothorax may be due to abrasion. The two pallid fasciæ on the elytra are oblique, and the anterior one is connected externally with the humeral patch. This species has the tarsi as broad as in the Colombian *Mimographus amandus*, Kirsch, but the antennæ are slender, the head is sulcate to the base, the long erect setæ are wanting, &c.

10. **Steirarrhinus cinereoguttatus,** sp. n. (Tab. IX. fig. 34, ♀.)

♀. Moderately elongate, piceous, the antennæ ferruginous at the base; densely clothed (the legs included) with cinereous and pale brown scales, intermixed with minute, scattered, hair-like scales, the cinereous scales condensed into two sinuous vittæ on the disc of the prothorax and various more or less coalescent oblique spots and oblong streaks on the elytra; the scales on the lower surface uniformly cinereous. Head and rostrum rather narrow, finely sulcate from the v-shaped inter-antennal groove, the angular anterior portion of the rostrum comparatively large. Antennæ moderately long, slender, the scape reaching beyond the eyes, joint 2 of the funiculus a little longer than 1, 3–7 becoming gradually wider outwards, the club acuminate-ovate. Prothorax transverse, subcylindrical, narrowed anteriorly. Scutellum small, triangular. Elytra broad, widening to the middle, bisinuate at the base, regularly punctate-striate, the interstices feebly convex. Legs comparatively stout; anterior tibiæ sharply unguiculate and obsoletely serrulate; posterior tibiæ with a narrow, enclosed, sparsely squamose space along the apical margin.

Length $8\frac{1}{2}$, breadth $3\frac{1}{3}$ millim.

Hab. Central America (*Solari, ex coll. Jekel*).

One specimen in very good condition *, kindly given to us by Signor A. Solari. This species has a relatively shorter second joint to the funiculus and the angular anterior portion of the rostrum longer than in the allied forms. The legs are so densely squamose and setulose as to appear rather stouter than usual. The cinereous spots on the median portion of the disc of the elytra are condensed into two short oblique fasciæ. *S. cinereoguttatus* has the elytra more sinuate at the base than in *S. nebulosus*, and the head and rostrum narrower than in *S. serripes* and *S. bicinctus*.

11. **Steirarrhinus cinctipennis,** sp. n. (Tab. IX. fig. 35, ♀.)

Moderately elongate, piceous, the antennæ ferruginous at the base; clothed above and beneath with rather coarse brownish-cinereous scales, with minute, depressed, narrow, hair-like scales intermixed, the elytra with an undulate fascia just beyond the middle and a spot on the outer part of the disc towards the apex blackish-brown. Head and rostrum rugulosely punctate, feebly canaliculate to the sharply-defined v-shaped inter-antennal groove, the nasal plate depressed, short, and triangular; antennæ moderately long, slender, the scape not reaching beyond the eyes, joint 2 of the funiculus more than

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* Antennæ injured while under examination.

twice as long as 1, 3–7 obconic, subequal in length, becoming stouter outwards, the club stout and acuminate. Prothorax small, transverse, rounded at the sides, obliquely narrowing anteriorly, broader than the head with the eyes, rugulosely punctate. Scutellum small, triangular. Elytra broad, moderately long, widening to the middle in ♀; rather coarsely punctate-striate, the punctures somewhat transverse, the interstices feebly convex. Anterior tibiæ, and the intermediate tibiæ also in ♂, unguiculate, the anterior pair without denticles. Third tarsal joint large.

Length $6\frac{3}{4}$–$7\frac{1}{3}$, breadth $2\frac{1}{2}$–$2\frac{5}{6}$ millim. (♂ ♀.)

Hab. GUATEMALA, Senahu in Alta Vera Paz (*Champion*).

One pair. This species has rather short, broad, fusco-fasciate elytra, a small prothorax, stout antennal club, &c.

MIMOGRAPHOPSIS, gen. nov.

Rostrum oblong-subquadrate, sulcate, flattened, emarginate at the apex, with a small, triangular or v-shaped, bare nasal plate followed by a broad, arcuate, concave area, the scrobes deep, lateral, sinuous, extending as far downwards as the lower limit of the eyes, the latter large, convex, strictly lateral; antennæ moderately slender, the scape clavate at the tip and reaching as far as or beyond the posterior margin of the eyes, the joints of the funiculus obconic, 2 elongate, the club oblong, acuminate; mentum covering the maxillæ; mandibles with a conspicuous prominence bearing the deciduous piece; prothorax transverse; scutellum minute or small, triangular; elytra 10-striate, much wider than the prothorax, sinuate at the base, the humeri prominent, the outer striæ becoming confluent towards the middle; legs rather slender; femora clavate, unarmed; anterior tibiæ denticulate and unguiculate, bowed at the apex; posterior tibiæ feebly or narrowly laminate at the apex, the glabrous articular surface ascending and densely ciliate externally; body oblong, rather slender, more or less squamose, winged.

Type, *M. viridicans*.

The two species referred to this genus are intermediate, as it were, between *Steirarrhinus* and the insects here placed under *Cyphus*, differing from the former in the confluent outer striæ of the elytra and the more prominent humeri, and from the latter in their relatively narrower head and prothorax and more slender build. The laterally placed, convex eyes, shorter rostrum, smaller scutellum, &c., distinguish *Mimographopsis* from *Exophthalmus* and its allies. *M. viridicans* is remarkable in having the elytra nodose in the female. There are no visible impressed lines at the base of the fifth ventral segment in this sex in either of the two species. The scales are rounded, rather large, and imbricate in *M. viridicans*, and clustered into small spots in *M. pustulatus*.

1. **Mimographopsis viridicans,** sp. n. (Tab. X. figg. 1, 1 *a*, ♂; 2, 2 *a*, ♀.)

Oblong, narrow (♂), broader (♀), black; densely clothed (the legs included) with rather large, rounded, imbricate, greenish, greenish-white, or cinereous scales, those around the eyes white, and also set with extremely short, minute, scattered hairs, the whitish scales on the prothorax sometimes condensed into two faint vittæ on the disc, the widely separated seriate punctures on the elytra bare; the antennæ (the club excepted) finely pubescent and also with long bristly hairs, the club blackish-brown. Head and rostrum finely punctate, narrowly sulcate to the u-shaped raised subapical plate, the scales on the latter small; antennal scape not extending beyond the eyes, joint 2 of the funiculus nearly twice as long as 1. Prothorax much broader than long, slightly narrowed and constricted in front, transversely wrinkled towards the base, rugulosely punctate, the disc sometimes depressed or feebly sulcate down the middle. Scutellum minute or scarcely visible. Elytra flattened on the disc anteriorly, with rows of widely

scattered, irregularly distributed, rather coarse, bare punctures; the interstices densely punctate, 3 with an oblong tuberculiform prominence at about one-third from the apex, and 5 sometimes slightly raised at its point of termination, in ♀, these prominences not or barely indicated in ♂. Ventral segments 3–5 with a line of erect pale brownish hairs down the middle, 5 broadly foveate at the apex, and 1 hollowed down the centre, in ♂. Legs rather slender; anterior tibiæ very finely and sparsely denticulate, sharply unguiculate in ♂, more feebly so in ♀.

Var. The elytra with an elongate streak at the middle of the 5th interstice, and a shorter one on the 3rd nearer the apex, black (fig. 2).

Length 8–10$\frac{4}{5}$, breadth 2$\frac{2}{3}$–4 millim. (♂ ♀.)

Hab. Costa Rica, between Mata de Leña and Rodeo, Pacific slope (*Pittier*: ♀), Tuis (*Lankester, in U.S. Nat. Mus.*: ♂), Azahar de Cartago (*Underwood*: ♀, var.); Panama, Volcan de Chiriqui (*Champion*: ♂ ♀).

Twelve specimens, three only of which are from Costa Rica, two of these latter with the scales green and metallic, the others with the scales opaque and whiter. The seriate punctures on the elytra vary in size. The penis-sheath of the male is acuminate at the tip.

2. **Mimographopsis pustulatus,** sp. n. (Tab. X. figg. 3, ♂, 4, ♀; 5, ♀, var.)

Oblong, shining, black; above sparsely clothed with small, whitish, cinereous, or green scales intermixed with minute pallid hair-like scales, the larger scales clustered into various scattered dense spots on the elytra and two faint vittæ on the prothorax; beneath somewhat densely squamose along the sides and sparsely clothed with short, fine, adpressed hairs down the middle; the scales on the legs uniformly cinereous or green with those on the knees blue. Head and rostrum finely punctate, sulcate down the middle, the rostrum finely carinate on each side; antennal scape reaching beyond the eyes, joint 2 of the funiculus much longer than 1. Prothorax transverse, narrowed in front, broadly depressed down the middle, rugulosely punctate. Scutellum very small, subtriangular, vertical, squamose. Elytra moderately long, subparallel in their basal half in ♂, broader and gradually widened to the middle in ♀, produced and conjointly rounded at the apex, with a common transverse excavation immediately below the base (the basal margin to the 3rd row of punctures thus appearing raised); coarsely, closely seriate-punctate, the interstices punctate and feebly convex, the spaces occupied by the patches of larger scales appearing somewhat depressed. First ventral segment hollowed down the middle in ♂. Anterior tibiæ unguiculate and feebly denticulate.

Var. The scales green, those on the head and prothorax condensed into two sharply defined vittæ, and those on the elytra into oblong subconfluent patches on the alternate interstices and an oval subapical spot; the rostrum depressed in the middle, with a shorter median sulcus and the lateral carina wanting; the prothorax granulate; the elytra transversely rugose at the base (♀).

Length 7–11, breadth 2$\frac{1}{5}$–4$\frac{1}{10}$ millim. (♂ ♀.)

Hab. Costa Rica, Santa Clara (*Biolley*), Monte Retondo (*Underwood*), Turrialba, Tucurrique (*U.S. Nat. Mus.*); Panama, Volcan de Chiriqui (*Champion*).

Eighteen specimens, all but four from Costa Rica, the latter including both green and cinereous forms, the variety (fig. 5) being from Tucurrique. This species bears an extraordinary resemblance to the Costa Rican and Panama insect described by Pascoe under the name of *Eustales stellaris* *; but may be distinguished from it at a glance by the more slender antennæ, the prominent, strictly lateral eyes, the sulcate (not carinate) rostrum, the non-mucronate apices of the elytra, &c. From *M. viridicans* it may be

* = *Præpodes jekelianus*, White (♀).

separated by the more sparsely squamose upper surface—the scales on the elytra clustered into spots or streaks (which sometimes tend to form oblique or curved series across the disc) and the seriate punctures more numerous,—the non-tuberculate elytra of the female, and the less acuminate apex of the penis-sheath in the male.

MIMOGRAPHUS.

Mimographus, Schönherr, Mant. sec. Curc. p. 34 (1847); Kirsch, Berl. ent. Zeitschr. 1867, p. 224 (part.).

This genus, as adopted here, includes the S.-American species referred to it by Kirsch (the types of fifteen of which I have seen) with the elytra setose and their outer striæ coalescent or very narrowly separated from about the basal third; and the antennæ comparatively short, with the second joint of the funiculus at most a little longer than the first, and the club acuminate-ovate. *M. amandus*, Kirsch, is taken as the type; *M. dentipes* belongs to *Hoplopactus*, Chevr.; and three others are provisionally referred to *Steirarrhinus* *. The single representative known to me from within our limits is so closely related to the Colombian *M. jekeli* that the Mexican habitat seems doubtful.

1. **Mimographus mexicanus,** sp. n. (Tab. X. figg. 6, 6 *a*, ♀.)

Mimographus mexicanus, Jekel, in litt.

♀. Oblong, shining, piceous; thickly clothed (the legs included) with small greenish-white scales, which are condensed into a faint vitta on each side of the prothorax; the elytra with a series of minute scattered bare spots along each interstice, and a common, transverse, sparsely squamose patch on the disc below the base and a larger one beyond the middle, the latter limited behind by a sinuous, oblique, sharply defined, bare space; the upper surface also set with long, scattered, erect, stiff, pallid setæ, and the under surface, legs, and antennæ with long hairs. Head and rostrum narrowly sulcate, densely punctate; antennæ rather short, extending very little beyond the base of the prothorax, joint 2 of the funiculus not much longer than 1, 3–7 short and moniliform, the club acuminate-ovate. Prothorax transverse, slightly constricted before the apex, feebly bisinuate at the base; densely, rugulosely punctate, obsoletely sulcate posteriorly. Scutellum depressed, very small. Elytra gradually widening to the middle, sinuate at the base, with rows of closely placed rather coarse punctures, the tenth and eleventh striæ complete, the interstices somewhat convex on the disc, the position of the setæ indicated by the minute bare spots. Fifth ventral segment with a faint oblique groove on each side at the base. Anterior tibiæ finely denticulate, unguiculate at the inner apical angle.

Length $11\frac{1}{2}$, breadth $4\frac{1}{5}$ millim.

Hab. Mexico (*Mus. Brit., ex coll. Jekel*).

One specimen, in very good condition, acquired in 1863. Closely allied to the Colombian *M. jekeli*, Kirsch (the unique type, ♀, of which I have seen), but with the antennæ stouter and more closely setose, and the outer joints of the funiculus transverse; the scales greenish-white throughout; the oblique bare space on each elytron placed a little beyond (instead of at) the middle, and the setæ less numerous.

* *Cf.* anteà, p. 222.

NAUPACTUS.

Leptocerus, Germar, Ins. Spec. nov. p. 417 (1824) ; Schönherr, Curc. Disp. Meth. p. 104 (nomen præocc.).

Naupactus, Schönherr, Gen. Curc. i. p. 567 (1833), vi. 1, p. 1 ; Lacordaire, Gen. Col. vi. p. 66 (part.).

The genus *Naupactus* is here restricted to the winged forms only (type *Curculio rivulosus*, F.), Dr. Sharp having already (*anteà*, p. 152) transferred the apterous ones to *Pantomorus* (=*Aramigus* and *Phacepholis*, Horn). Schönherr included 140 species in it, the winged representatives belonging to the Stirps IV. of his later work. The essential characters of the three Central-American forms known to me are as follows:—

Rostrum broad, subquadrate, flattened, notched at the tip, the bare nasal plate extremely short, the scrobes lateral, sinuous, and descending to beneath the eyes, the latter strictly lateral, convex, and very prominent, the head narrowly extended behind them ; mentum small, transverse, almost filling the buccal cavity, arising from a short peduncle ; mandibles with a large scar in front ; antennæ long and slender, joint 2 of the funiculus about twice as long as 1, the scape nearly or quite reaching the front of the prothorax ; prothorax deeply sinuate and broadly margined (as seen from behind) at the base ; scutellum small ; elytra much wider than the prothorax, sinuate at the base, with rather prominent humeri, 10-striate, the outer striæ approximate from basal third ; femora clavate, unarmed, the anterior pair stout ; anterior tibiæ denticulate ; posterior tibiæ with the apex laminate and squamose, the glabrous articular surface cavernous and ascending ; tarsi with the basal joint rather long, the claws free ; body winged, squamose, in life clothed with a powdery exudation.

N. cinerascens, Perroud, from Guatemala, is unknown to me, but it is apparently winged and may be congeneric with the species from which the above characters are taken. Two of these latter have a corresponding apterous *Pantomorus* in Mexico. *N. sulfuratus* was, in fact, sent us with *Pantomorus stupidus* from the same locality, and both insects in life are similarly lineate with a sulphur-yellow powdery exudation. This suggests a possibility that certain *Pantomori* may prove to be dimorphic, the presence of wings being correlated with well-developed humeri, the sinuation of the base of the prothorax and elytra, and a larger scutellum : if this proves to be the case, *N. sulfuratus* would be the winged form of *Pantomorus stupidus* and *N. virescens* the winged form of *Pantomorus uniformis*.

1. **Naupactus sulfuratus,** sp. n. (Tab. X. figg. 7, ♂ ; 8, ♀ , var.)

Moderately elongate, narrow (♂), broad (♀), nigro-piceous or black ; the head on each side between the eyes, the prothorax with two curved vittæ on the disc and another on each flank, and the elytra with a sinuous interrupted stripe on the disc (commencing and ending on the third interstice, and occupying more than half the length of the fourth), a broader stripe on the flanks, and sometimes one or two lines on the disc, densely clothed with small cinereous, and the rest of the upper surface more sparsely set with darker, scales, the head, prothorax, and elytra also with a short, rough, decumbent setosity ; the under surface (except along the middle of the abdomen) and legs cinereo-squamose and sparsely pilose. Head and rostrum closely, finely punctate and sharply sulcate ; joint 2 of the funiculus twice the length of 1. Prothorax transverse, rounded at the sides, bisinuate at the base ; densely, finely punctate and obsoletely canaliculate. Elytra much wider than the prothorax, sinuate at the base, the humeri somewhat tumid ; rather coarsely punctate-striate, the interstices feebly convex and densely punctulate.

First ventral segment slightly hollowed down the middle in ♂. Anterior tibiæ with a row of scattered denticles, the intermediate pair also sometimes similarly denticulate in ♂, the anterior pair sharply, and the others feebly, unguiculate in that sex.

Var. The vestiture of the upper surface dense and uniformly cinereous throughout (♀) (fig. 6).

Length $10\frac{1}{2}$–14, breadth $3\frac{2}{5}$–6 millim. (♂ ♀.)

Hab. MEXICO, Acapulco (*Höge*, *H. H. Smith*), Salina Cruz, Tehuantepec (*Knab*, *in U.S. Nat. Mus.*), Chiapas (*Sallé*), Gamboa in Oaxaca (*Crawford*, *in Mus. Brit.*).

Ten examples, those found by Mr. F. Knab in very fresh condition, and with the prothorax and elytra beautifully lineate with a powdery sulphur-yellow exudation. The three uniformly cinereous females are from the same localities, Acapulco and Salina Cruz. The prothorax is more rounded at the sides than in the following species. Perhaps a winged form of *Pantomorus stupidus*, Boh., an insect occurring at the same places in Oaxaca. The two specimens figured are from the same locality, Acapulco.

2. **Naupactus virescens,** sp. n. (Tab. X. figg. 9, ♂; 10, ♀, var.)

Moderately elongate, narrow (♂), broad (♀), nigro-piceous; (♂) thickly clothed with green or bluish-green scales, sometimes with cinereous scales intermixed, the prothorax with two narrowly separated vittæ on the disc and another on each side, and the elytra with the suture, a line down the interstices 5 and 7, and a streak on 3 below the base, infuscate or more sparsely squamose, the surface also set with a short rough, decumbent setosity; (♀) uniformly clothed above and beneath with pale green scales. Head and rostrum densely punctate and narrowly sulcate; joint 2 of the funiculus twice as long as 1. Prothorax transverse, bisinuate at the base, somewhat conical in ♀, the sides parallel behind in ♂; densely, finely punctate, obsoletely canaliculate at the base. Elytra a little wider than the prothorax, feebly sinuate at the base; punctate-striate, the interstices almost flat and densely punctulate. First ventral segment hollowed down the middle in ♂. Anterior tibiæ sparsely denticulate and feebly unguiculate in both sexes.

Length $8\frac{1}{2}$–$10\frac{1}{2}$, breadth $2\frac{4}{5}$–$4\frac{1}{10}$ millim. (♂ ♀.)

Hab. MEXICO (*coll. Pascoe*), Tehuantepec (*Sallé*).

Three males and one female, the former with more or less distinct dark stripes on the prothorax and elytra, the latter uniformly clothed with green scales. The female corresponds with *Pantomorus uniformis*, of which the present species may prove to be a winged form. The male has the sides of the prothorax less rounded, and the female the elytra less sinuate at the base and relatively shorter, than in *N. sulfuratus*.

3. **Naupactus laticeps,** sp. n. (Tab. X. fig. 11, ♀.)

Oblong, narrow (♂), broader (♀), black or piceous, the elytra sometimes brown; the head and rostrum, the prothorax with two curved vittæ on the disc and another on each flank, the elytra with an interrupted stripe on the disc (formed by three confluent streaks—the first oblong, the second triangular and oblique, the third elongate), the fifth interstice in part, and a strongly sinuate band on the flank, the legs, and under surface, thickly clothed with small cinereous or whitish scales, the rest of the upper surface set with scattered darker scales, the head, prothorax, and elytra also with a short, rough, decumbent setosity. Head and rostrum densely punctate and narrowly sulcate, the head broad, short, the eyes

very prominent and narrowly separated from the prothorax; joint 2 of the funiculus about twice as long as 1, the scape extending to about the posterior margin of the eyes. Prothorax transverse, rounded at the sides, a little narrowed in front, deeply bisinuate at the base; closely, finely punctate and obsoletely canaliculate. Elytra moderately long, considerably wider than the prothorax, broader in ♀, flattened on the disc anteriorly, the base sinuate and obliquely truncate laterally, the humeri somewhat tumid; rather coarsely punctate-striate, the interstices flat or feebly convex and closely punctulate. First ventral segment slightly hollowed down the middle in ♂. Anterior tibiæ sparsely denticulate, sharply unguiculate in ♂, the intermediate pair also with a small uncus in this sex.

Length $8\frac{1}{4}$–$10\frac{1}{2}$, breadth $2\frac{9}{10}$–4 millim. (♂ ♀.)

Hab. Costa Rica (*Pittier, in Mus. Brit.*), Surubres near San Mateo, 250 metres, Pacific slope (*Biolley*), Piedras Negras (*U.S. Nat. Mus.*).

I have seen twelve specimens of this species; two of those in the British Museum, received in 1855, are labelled "Guatemala," but no reliance can be placed on this locality. The insect when fresh is thickly clothed with an ochreous or sulphur-yellow exudation, through which the markings are traceable. The short, broad head and the still more prominent eyes separate the southern *N. laticeps* from its Mexican allies.

4. **Naupactus (?) cinerascens.**

Naupactus cinerascens, Perroud, Ann. Soc. Linn. Lyon, (2) i. p. 454 (1853)[1]; Mélanges Ent. ii. p. 70[2].

Hab. Guatemala [1 2].

This insect is stated to be near *N. cinerosus*, Schönh., but to differ in its larger size, and in having the prothorax broader than long and bisinuate at the base, the elytra each extending forward at the base, &c. It is 11 mm. long, including the rostrum; uniformly clothed with cinereous scales, and also pubescent; the elytral interstices 4–7 gibbous towards the apex. This last-mentioned character differentiates *N. cinerascens* from any of the species in our collection.

GERMARIELLA, gen. nov.

Rostrum broad, flattened, subquadrate, the upper portion widened towards the base, sulcate, emarginate at the apex, the bare nasal plate extremely short, the scrobes deep, sinuous, extending to beneath the eyes, the latter rounded, convex, and strictly lateral; antennæ slender, the scape feebly clavate and about reaching the posterior margin of the eye, joint 2 of the funiculus much longer than 1. 3–7 obconic; prothorax short, rounded at the sides, broadly margined (as seen from behind) and strongly bisinuate at the base; scutellum small, depressed; elytra very broad, comparatively short, sinuate at the base, conjointly rounded at the apex, 10-striate, the outer striæ approximate from the basal third; legs slender, comparatively short; anterior tibiæ feebly denticulate and unguiculate; posterior tibiæ narrowly laminate and squamose at the apex, the glabrous articular surface cavernous and ascending; tarsal claws free; body oblong, winged, uniformly squamose, in life clothed with a powdery exudation.

Type, *Curculio juvencus*, Oliv. (=*diadema*, F.).

Curculio juvencus, Oliv., and the very closely allied *Cyphus pudens*, Boh., seem to me to be best separated from *Cyphus*, from which they differ in several details of structure, as well as in general facies. The basal margin of the prothorax is as deeply hollowed for the reception of the separately rounded anterior edge of each elytron as

it is in the insects here placed under *Naupactus*. One only of the two species is at present known from within our limits.

1. Germariella juvencus.

Curculio juvencus, Oliv. Ent. v. no. 83, p. 352, t. 1. fig. 11 [1].

Cyphus juvencus, Boh. in Schönh. Gen. Curc. i. p. 623 [2]; vi. 1, p. 145 [3]; Lacord. Gen. Col. vi. pp. 114, 115, nota [4]; Labr. et Imhoff, Gen. Curc. ii. t. 62 [5].

Curculio diadema, Fabr. Ent. Syst. i. 2, p. 465 [6].

Cyphus columbianus and *sulphureus*, Jekel, in litt.[7].

Hab. NICARAGUA, Mosquito Coast (*ex coll. Jekel*), Chontales (*Janson*).—SOUTH AMERICA, Colombia [7], Venezuela, Cayenne [1 2 3 5 6], Amazons [7].

I have seen three specimens of this widely distributed Tropical-American insect labelled as from Nicaragua. It has the prothorax very deeply bisinuate at the base; the elytra strongly lobed in front, with the humeri angular, and the seriate punctures somewhat conspicuous; and the anterior tibiæ feebly unguiculate *. The entire surface is uniformly clothed with cinereous scales, which in fresh specimens are again hidden by a dense sulphur-yellow or brownish exudation. *G. pudens* (Boh.), of which I have seen a long series from the Windward Is., has the prothorax and elytra more feebly sinuate at the base.

CYPHUS.

Cyphus, Germar, Ins. Spec. nov. p. 427 (1824) (part.); Schönherr, Curc. Disp. Meth. p. 107; Gen. Curc. i. p. 620, and vi. 1, p. 141; Lacordaire, Gen. Col. vi. p. 114; Horn, Proc. Am. Phil. Soc. xv. p. 89.

Schönherr included a variety of forms under *Cyphus*, and the type of his Stirps I. (*C. argillaceus*, Germ. = *gibber*, Pallas) does not agree very well with the N.- and Central-American species †, which mostly belong to his Stirps II. (type *Curculio* 16-*punctatus*, L.); *C. juvencus* and its allies are here placed under a separate genus, and there are other southern forms that will probably have to be eliminated sooner or later. The species from our region placed under *Cyphus* may be known by their subquadrate, broad, sulcate rostrum; the very prominent, convex, laterally placed eyes; the comparatively short scape and the short obconic outer joints of the funiculus of the antennæ; the bisinuate, feebly margined base of the prothorax; the fusion or approximation of the outer elytral striæ from about one-third from the base; the prominent humeri; the minute or obsolete scutellum; the laminate, squamose apex of the posterior tibiæ, with the glabrous articular surface ascending; and the broad tarsi, at least in the males. The females of all of them have an oblique impressed line on each side of the fifth ventral segment in front.

* Lacordaire [4] says they are without mucro.

† *C. gibber* has an irregular additional row of punctures on the alternate elytral interstices, the outer striæ free, the rostrum longer, &c.

a. Humeri angularly projecting laterally ; elytra with the sutural region gibbous at posterior third ; species very large, viridi- or cæruleo-squamose, prothorax and elytra with small scattered black spots . . . 16-*punctatus*, L.

b. Humeri less prominent laterally, obliquely truncate in front.

a^1. Seriate punctures on elytra more closely placed.

a^2. Vestiture cinereous, brownish, bluish, or green.

a^3. Prothorax and elytra each with four or more black spots.

a^4. Spots on elytra widely scattered.

a^5. Eyes very prominent ; prothorax subconical in ♀ ; vestiture cinereous or olivaceous . . . . . *modestus*, Gyll.

b^5. Eyes less prominent ; prothorax campanulate in ♀ ; vestiture green or greenish-cinereous . . . . . *forreri*, sp. n.

b^4. Spots on elytra clustered into two transverse fasciæ on the disc, the rest of the vestiture cinereous . . . . . *lautus*, Lec.

b^3. Prothorax with two (basal) spots only, the humeri also with a spot beneath, the rest of the vestiture uniformly cinereous . . 4-*punctatus*, sp. n.

c^3. Prothorax and elytra immaculate or nearly so, the alternate interstices of the latter sometimes darker, the vestiture variable in colour . . . . . *modestus*, Gyll., var. [*viridans*, Boh.

b^2. Vestiture uniformly green on the prothorax and elytra, cupreous on the head and under surface . . . . . *roseiventris*, sp. n.

b^1. Seriate punctures on elytra scattered ; vestiture cinereous, elytra fusco-bifasciate ; surface somewhat shining . . . . . *yucatanus*, sp. n.

1. Cyphus 16-punctatus.

Curculio 16-*punctatus*, Linn. Syst. Nat., 10th edit., i. p. 386 [1] ; Mus. Lud. Ulr. p. 58 [2] (specific name misprinted 6-*punctatus* in margin) ; Drury, Ill. iii. p. 74, t. 49. fig. 4 [3] ; Oliv. Ent. v. no. 83, p. 298, t. 2. figg. 17 *a*, *b* [4] ; Fabr. Syst. Eleuth. ii. p. 509 [5].

Cyphus sedecimpunctatus, Schönh. Gen. Curc. i. p. 625 [6] ; vi. 1, p. 148 [7].

Cyphus hilaris, Perty, Del. Anim. Art. Bras. p. 74, t. 15. fig. 6 [8].

Cyphus nigropunctatus, Dej. in Mus. Brit. [9].

Hab. Costa Rica (*Van Patten*).—South America [3 4 6], Colombia, Venezuela, Guiana, Brazil [5 7 8], &c.

We have five specimens of this conspicuous Tropical-American insect from Van Patten's Costa Rican collection, though this locality seems to require confirmation. These examples agree with others before me from Colombia and Venezuela. They are densely clothed with small green or pale blue scales ; the prothorax and elytra together with sixteen small, sharply-defined, black spots—two on each side of the prothorax and six on each elytron, the one beneath the shoulder not visible from above and the one near the suture sometimes transversely arcuate ; the intermediate and posterior femora spotted with black. The elytra have laterally projecting, angular humeri, and the sutural region gibbous at the commencement of the apical declivity,

characters separating *C.* 16-*punctatus* from its northern representative, *C. modestus.* The anterior tibiæ, too, are distinctly unguiculate in the southern form, and almost unarmed in *C. modestus.* South-American specimens sometimes have larger spots or the subapical markings partly confluent.

2. **Cyphus modestus.** (Tab. X. figg. 12–15.)

Cyphus modestus, Gyll. in Schönh. Gen. Curc. i. p. 625 [1] ; vi. 1, p. 148 [2].
Cyphus viridans, Boh. op. cit. vi. 1, p. 149 [3].
Cyphus 20-*punctatus*, Jekel, in litt.[4].
Cyphus (*Cenchroma*) *sublineata*, Sturm, in litt.[5].

♂. First ventral segment hollowed down the middle, the fifth obsoletely canaliculate to near the tip.
♀. Fifth ventral segment with an oblique impressed line on each side in front.

Hab. Mexico [1 2 4 5] (*Sallé, ex coll. Sturm ; Truqui*), Cuernavaca, Huetamo, Almolonga, Misantla (*Höge*), El Camaron, Puebla, Tehuantepec (*Sallé*), Guerrero (*Baron*), Amula, Rio Papagaio (*H. H. Smith*), Rio Balsas, near Cuernavaca (*Wickham*), Oaxaca [3].

A common insect in Mexico and varying in colour of the vestiture—white, cinereous, brownish, or olivaceous—and in the development of the black markings on the prothorax and elytra. The following forms may be noted :—

α. Prothorax with three arcuately-arranged spots on each side and a transverse one on the disc, the elytra each with six spots (two below the shoulder, obliquely placed, one on the disc before the middle, transverse, and three forming an interrupted, angulate, subapical fascia), and a common scutellar one. [=20-*punctatus*, Jekel.] [Fig. 12, ♀.]—Rio Papagaio, &c.

β. The prothorax with the subapical spots wanting and the one on the disc sometimes divided into two, the scutellar spot distinct. [=*modestus*, Sturm coll., nec Gyll.].—Huetamo, Rio Balsas, &c.

γ. The prothorax with the subapical spots, and the one on the disc also, wanting, the others small; the elytra without scutellar spot, those on the disc cordate or divided into two, the subapical spots varying in size—sometimes small, sometimes partly coalescent. [=*modestus*, Gyll.] [Figg. 13, 13 *a*, *b*, ♂.]

δ. The spots on the prothorax as in γ, those on the elytra surrounded by a line of cupreous scales, the scutellar spot wanting. [Fig. 14, ♀.]—Puebla, Amula, Tehuantepec.

ε. The spots small, or partly or entirely wanting, the elytra sometimes with the alternate interstices somewhat raised and clothed with darker scales ; the femora faintly spotted or immaculate. [=*viridans*, Boh.] [Fig. 15, ♂.]—Puebla, Tehuantepec, Cuernavaca, &c.

Mr. Wickham informs us that he has taken this species in abundance at Rio Balsas, freshly emerged, in the early part of August, upon various bushes on the face of the mountain just across the river from the village. Amongst the eighty-two specimens examined by me, two only belong to var. α, eighteen to var. β, and three to var. δ, the true *C. modestus* (= var. γ) being represented by a long series, and the var. *viridans* (= var. ε) by numerous examples, including three from the Sturm collection. The male (of both *C. modestus* and *C. viridans*) has the penis-sheath broad and truncated at the apex (figg. 13 *a*, *b*). The length varies from 12–20 mm. The types of Gyllenhal and Boheman were examined some years ago by Dr. Sharp.

3. **Cyphus forreri,** sp. n. (Tab. X. fig. 16, ♂.)

Oblong, robust, black, densely clothed (a small space behind each eye excepted) with pale green, bluish-green, or greenish-cinereous scales, with minute, scattered, whitish, decumbent hairs intermixed; the prothorax with two small spots on each side (those at the base sometimes obsolete), the elytra each with six or seven small spots (one above and one below the shoulder, one on the disc before the middle, and sometimes another in a line with it on the eighth interstice, and from 2–4—the inner ones sometimes coalescent—at about one-third from the apex), and the intermediate and posterior femora each with a single spot, black. Head and rostrum sharply sulcate and densely punctate, the rostrum hollowed at the apex; antennæ rather stout, the scape reaching the middle of the eyes, the latter moderately convex, joint 2 of the funiculus twice as long as 3. Prothorax transverse, sinuate at the sides towards the base, campanulate in ♀; densely, finely punctate, the disc transversely excavate in the middle posteriorly and with an abbreviated median sulcus. Elytra finely seriate-punctate, the ninth row of punctures subobsolete for some distance before the middle, the interstices flat and densely punctulate, the apices acuminate and dehiscent. Fifth ventral segment with an oblique impressed line on each side in front in ♀. Legs short, the tarsi broad, the anterior tibiæ unarmed at the tip.

Length 12–16, breadth 4–6 millim. (♂ ♀.)

Hab. MEXICO, Ventanas in Durango 2000 feet (*Forrer*), Alamos (*Buchan-Hepburn*).

Seven specimens, one only in good condition. This is a form of *C. modestus* with the eyes less convex and the prothorax of the female campanulate. The spots on the elytra vary in number, and the one at the sides beyond the middle is often geminate.

4. **Cyphus lautus.** (Tab. X. fig. 17, ♂.)

Tanymecus lautus, Lec. Proc. Acad. Phil. 1854, p. 85[1].

Cyphus lautus, Horn, Proc. Am. Phil. Soc. xv. p. 89[2]; Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 360[3].

Hab. NORTH AMERICA, New Mexico[3], Arizona[2 3], Frontera, Rio Grande[1].—MEXICO, Northern Sonora (*Morrison*).

Sent us in numbers by Morrison as from Sonora, these examples agreeing with others before me from Arizona, &c. Smaller than *C. modestus*, with the elytra more or less distinctly nigro-bifasciate on the disc (the fasciæ formed by oblong spots) and the punctures of the striæ somewhat scattered and not covered by the vestiture, the prothorax with two small, obliquely placed, black spots on each side posteriorly, the head (as in *C. modestus*) with a small bare spot behind the eyes. *C. placidus*, Horn, also from Arizona, must be a very closely allied form, perhaps not really distinct from *C. lautus*.

5. **Cyphus quadripunctatus,** sp. n. (Tab. X. fig. 18, ♂.)

Oblong, black, densely, uniformly clothed with small cinereous or cupreo-cinereous scales, intermixed with minute, white, adpressed hairs; the prothorax with two small spots at the base, the elytra with a spot at or below the shoulder, and sometimes a very small triangular scutellar patch also, and the intermediate and posterior femora each with a single spot, black. Head and rostrum sulcate, densely, finely punctate; antennæ rather stout, the scape reaching to the middle of the eyes, joint 2 of the funiculus nearly twice as long as 1. Prothorax transverse, subconical in ♀, the sides subparallel behind and more rounded anteriorly in ♂, the base bisinuate; feebly sulcate, and densely, finely punctate, with coarser punctures

intermixed. Scutellum very small, depressed. Elytra moderately long, subparallel in their basal half in ♂, widened to the middle and broader in ♀, sinuate at the base, the humeri rather prominent, the apices acuminate and dehiscent; with rows of rather fine punctures, the tenth row sometimes subobsolete in its median third. Fifth ventral segment with an oblique impressed line on each side in front in ♀. Legs stout, the tarsi very broad in ♂, a little narrower in ♀, the anterior tibiæ obsoletely unguiculate. Length 11⅓–15, breadth 4⅓–6 millim. (♂ ♀.)

Hab. Mexico (*Sallé*), Acapulco, Almolonga (*Höge*), Rincon and Dos Caminos in Guerrero (*H. H. Smith*).

Twelve examples. This species may be at once known by the dense, uniform, cinereous vestiture, and the four small sharply-defined black spots—two at the base of the prothorax and one on each shoulder of the elytra. The prothorax is more even than in *C. modestus*, the central groove being shallow. The short claw at the tip of the anterior tibiæ is hidden by the hairy vestiture. The deciduous falciform piece of the mandibles is rounded at the apex.

6. **Cyphus roseiventris,** sp. n. (Tab. X. fig. 19, ♂.)

Hadrotomus roseiventris, Dupont, in litt.[1].

Oblong, black, the prothorax and elytra densely clothed with green, and the rest of the body (the lower surface included) with pale cupreous scales, with scattered, inconspicuous, minute, pallid hairs intermixed. Head and rostrum deeply sulcate; antennæ rather short, stout, more slender in ♀, the scape not reaching beyond the middle of the eyes, joint 2 of the funiculus twice as long as 1, 4–7 transverse. Prothorax transverse, gradually, arcuately narrowed from near the base, somewhat conical in ♀, narrowly sulcate and more or less depressed down the middle, the base bisinuate; closely, minutely punctate, with coarser punctures intermixed. Scutellum not visible. Elytra broad, moderately long, subparallel in their basal half in ♂, widened to the middle in ♀, sinuate at the base, the humeri obliquely truncated in front and somewhat prominent, the apices acuminate and dehiscent; with rows of rather coarse punctures, the tenth row obsolete for some distance before the middle, the interstices densely punctulate. Fifth ventral segment with an oblique impressed line on each side in front in ♀. Legs stout, the tarsi very broad in ♂, narrower in ♀, the anterior tibiæ strongly unguiculate in both sexes.
Length 8⅓–10, breadth 3½–4½ millim. (♂ ♀.)

Hab. Mexico (*Mus. Brit.*[1]), Cerro de Plumas [Palmas] (*Höge*).

Two males, in good condition, in the British Museum, received in 1863 (one labelled with the above-quoted MS. name), and a worn pair sent us by Höge. A very distinct form, with the scales on the prothorax and elytra very differently coloured from the others on the rest of the surface. The wings are fully developed, though there is no visible scutellum. The specific name has been used by Boheman in *Naupactus*.

7. **Cyphus yucatanus,** sp. n. (Tab. X. fig. 20, ♀.)

Oblong, shining, black or piceous, thickly clothed with small, cinereous or cupreo-cinereous, glossy scales; the prothorax with two small spots at the base, and the elytra with two undulate or interrupted fasciæ on the disc (the anterior one extending forward to the humeral callus), dark brown. Head and rostrum deeply sulcate; antennæ moderately stout, rather short, the scape reaching to the middle of the eyes, joint 2 of the funiculus nearly twice as long as 1, 3–7 transverse. Prothorax transverse, obliquely narrowed anteriorly, subconical in ♀, the sides subparallel behind in ♂, deeply, interruptedly, sulcate

down the middle, and sometimes transversely depressed towards the base, the latter bisinuate; finely punctate, with coarser punctures intermixed. Scutellum not visible. Elytra broad, moderately long, sinuate at the base, the humeri obliquely truncated, the apices acuminate and dehiscent; with rows of coarse scattered punctures, the tenth row obsolete for some distance before the middle, the interstices closely punctulate. Fifth ventral segment with an oblique impressed line on each side in front in ♀. Legs comparatively short, stout, the tarsi broad, the anterior tibiæ sharply unguiculate in both sexes.

Length $7\frac{1}{2}$–12, breadth $2\frac{3}{4}$–$5\frac{1}{2}$ millim. (♂ ♀.)

Hab. MEXICO, Temax in N. Yucatan (*Gaumer*).

Sent us in abundance by Gaumer, the specimens varying in size and in the development of the markings. Easily recognizable by the shining surface, and the bifasciate elytra, with the seriate punctures widely separated one from another.

TETRAGONOMUS, gen. nov.

Rostrum broad, flattened, oblongo-quadrate, emarginate at the apex, with a large, triangular, depressed, rugose, bare nasal plate, which extends backwards to between the points of insertion of the antennæ and is limited on each side by an oblique ridge, the scrobes lateral, sinuous, deep, running downward to beneath the eyes, the latter convex, strictly lateral, very prominent; antennal scape not extending beyond the eyes, flattened, rapidly widened outwards, slender at the base, joint 2 of the funiculus much longer than 1, 3–7 obconic, the club stout, acuminate-ovate; mentum large, covering the maxillæ; mandibular scar placed on the lower surface; prothorax subcylindrical; scutellum very small, triangular; elytra broad, oblongo-subquadrate, set with large tubercles, 10-striate, the outer striæ contiguous from about the basal third, the lower margin strongly sinuate; femora clavate, unarmed; anterior tibiæ dilated, strongly bisinuate within, sharply unguiculate at the tip; posterior tibiæ narrowly laminate at the apex, the glabrous articular surface ascending and densely ciliate externally; tarsal claws free; body oblong, winged, squamose, covered with an earthy exudation.

Type, *T. tuberosus*.

Amongst the Tropical-American genera with a broad, subquadrate rostrum, and laterally placed, very prominent eyes, *Tetragonomus* may be known by the large, triangular, depressed, rugose nasal plate, the subcylindrical prothorax, the broad, subquadrate, strongly tuberculate elytra, and the dilated, deeply sinuate anterior tibiæ. The single species referred to this genus has the appearance of a subcortical insect, and it may have been found under bark.

1. **Tetragonomus tuberosus,** sp. n. (Tab. X. figg. 21, 21 *a*.)

Oblong, black or piceous, the funiculus and tarsi reddish; coated with a dull brown earthy-looking exudation, which partly hides the small, closely placed, reddish-brown scales, the elytral tubercles with a few setiform scales, the legs strongly setose, the setæ becoming more crowded on the anterior tibiæ. Head and rostrum densely, rugulosely punctate, finely sulcate to the nasal plate, the rostrum parallel-sided and a little longer than broad. Prothorax transverse, slightly narrowed in front, bisinuate at the base, the hind angles rather sharp and extending backwards; transversely wrinkled and irregularly punctate. Elytra nearly twice as broad as the prothorax, flattened and subparallel to beyond the middle, and then abruptly declivous and obliquely narrowing to the apex, deeply sinuate at the base, rather coarsely seriate-punctate; each elytron with about ten large tubercles—one on the third interstice below the base, one on the shoulder, two oblique series across the disc (the tubercle on 3 at about one-third from the apex very large), and two placed transversely near the apex. Intermediate tibiæ with a rather long uncus in ♂.

Length $6\frac{2}{3}$–$7\frac{1}{4}$, breadth $2\frac{1}{2}$–$2\frac{7}{8}$ millim

Hab. Panama, Bugaba (*Champion*).

Four specimens, one (apparently female, with a very short claw to the middle tibiæ) free from incrustation, and showing the sculpture and vestiture much better than the others, which are certainly males.

MEGALOSTYLUS.

Megalostylus, Schönherr, Gen. Curc. vi. 1, p. 114 (1840); Lacordaire, Gen. Col. vi. p. 111.

Megalostylus agrees with *Cyphus* in having the posterior tibiæ laminate and squamose at the apex, and their articular surface ascending, and the rostrum deeply, triangularly emarginate at the tip (so that there is no definite bare nasal plate) and sides; the outer striæ of the elytra are entire; and the scape of the antennæ of the male is very stout, as in *Platyomus*. It is related to the Antillean *Apotomoderes*, which has toothed, strongly clavate anterior femora and the corbels of the posterior tibiæ small and open, and to the new genus described below, in which the intermediate and posterior femora are so deeply excavate near the apex as to appear toothed. The species, so far as at present known, are all confined to Mexico *. They are extremely variable in size and in the colour of the scales (there being both green and cinereous forms † in at least three species); and the prothorax sometimes differs in shape in the two sexes, as in certain *Steirarrhinus*. The males may be known by their longer and stouter antennal scape, the broader third tarsal joint, the unguiculate apex of the intermediate tibiæ, and the more or less hollowed first ventral segment; the females are broader, and often have the prothorax less sinuate at the base and the hind angles more extended outwards than in the males. The anterior tibiæ are toothed at the outer apical angle in both sexes. The smallest specimens seen, as in *Megalostylodes*, are females. Unfortunately, nothing has been recorded of the habits of these insects.

a. Eyes very prominent, rounded.
  *a*¹. Prothorax with base deeply bisinuate and sides rounded; upper surface villose.
    *a*². Scales green . . . . . *sturmi,* Boh.
    *b*². Scales cinereous . . . . . *sturmi,* Boh., var.
  *b*¹. Prothorax with base moderately or feebly bisinuate. [*villosus,* Chevr.
    *c*². Prothorax more or less conical.
      *a*³. Legs rufescent.
        *a*⁴. Upper surface villose: scales metallic golden-green . . . . *tomentosus,* sp. n.
        *b*⁴. Upper surface not villose, elytra setose along the suture posteriorly: scales greenish or cinereous . . . . . *rhodopus,* Boh.

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* *M. albicans* has been recorded from California, probably in error, and *M. renggeri*, Labr. et Imhoff, from Paraguay, must belong to a different genus.

† As in *Hadromerus*, *Cyphus*, *Atactogenus*, &c.

b^3. Legs black.
c^4. Scape of antennæ slender at base; elytra broader than the prothorax, the interstices each with a row of fine hairs: scales whitish . . . . . *brevipilis*, sp. n.
d^4. Scape of antennæ stouter at base; elytra with or without minute hairs.
a^5. Prothorax not rounded at the sides anteriorly.
a^6. Body more elongate (length 6–13 mm.); prothorax at base usually as wide as elytra, the hind angles in ♀ sometimes extending beyond the humeri; fifth ventral segment tumid or plicate along the median line in ♀.
a^7. Scales green . . . . . *albicans*, Lac., var.
b^7. Scales cinereous or whitish . . . . . *albicans*, Lac.
b^6. Body less elongate ($3\frac{1}{10}$–9 mm.); prothorax at base not so wide as elytra, at least in ♀, the hind angles not extending beyond humeri in this sex; fifth ventral segment not plicate in ♀.
c^7. Scales green . . . . . *splendidus*, Chevr.
d^7. Scales cinereous . . . . . *splendidus*, Chevr., [var.
b^5. Prothorax slightly rounded at the sides anteriorly, the sides at base forming a continuous outline with those of elytra (general shape fusiform): scales green . . . . . *fusiformis*, sp. n.
d^2. Prothorax broadly quadrangularly dilated in its basal half: scales whitish . . . . . *dilaticollis*, sp. n.
b. Eyes not prominent, oblong; prothorax conical; elytra comparatively short, set with bristly hairs: scales bluish-grey on the upper surface, whitish beneath . . . . . *macrophthalmus*, sp. n.

1. **Megalostylus sturmi.** (Tab. X. figg. 22, ♂; 23, ♀, var. *villosus*.)

Megalostylus sturmi, Boh. in Schönh. Gen. Curc. vi. 1, p. 115 [1].

Var. The scales uniformly cinereous.

Megalostylus sturmi, Boh., var. γ (*Pachnæus villosus*, Sturm), loc. cit.[2].
Megalostylus villosus, Chevr. Bull. Soc. Ent. Fr. 1878, p. liv * [3].

Length $5\frac{1}{5}$–13, breadth 2–$5\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico [1 2 3] (*Sallé, ex coll. Sturm; Mus. Brit.*), Tacambaro and Huetamo in Michoacan, Acapulco and Chilpancingo in Guerrero (*Höge*).

The green type-form has been sent us in numbers from Michoacan and the cinereous variety sparingly from Guerrero. Easily recognizable by the strongly bisinuate base and rounded sides of the prothorax, and the rather close, erect, stiff pilosity of the

* In the characters given by Chevrolat to distinguish *M. villosus* from *A. albicans* "les yeux" must be a lapsus for "hind angles of the prothorax."

elytra. The fifth ventral segment is flattened in both sexes. The hairs vary in length and are sometimes more closely placed and longer in the variety than in the type. I have seen the specimens described by Boheman from the collections of Sturm and Sommer.

2. **Megalostylus tomentosus,** sp. n. (Tab. X. fig. 24, ♂.)

Oblong, piceous, the deciduous mandibles and legs ferruginous; densely clothed above and beneath with metallic golden-green scales, and also thickly clothed with long, pallid, erect hairs. Rostrum broadly excavate from the apex to near the eyes, the latter rounded, convex, and very prominent in ♂; antennæ with the scape greatly thickened towards the apex and extending to beyond the eyes in ♂, shorter and more slender in ♀, joints 1 and 2 of the funiculus subequal in length. Prothorax transverse, conical, feebly bisinuate at the base, the hind angles acute. Scutellum triangular. Elytra considerably wider at the base than the prothorax, gradually narrowing from the shoulders in ♂, subparallel in their basal half in ♀, finely punctate-striate, the interstices flat. First ventral segment broadly hollowed down the middle in ♂, the fifth flattened in both sexes.

Length 7–7$\frac{1}{5}$, breadth 2$\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico, Yolotepec in Oaxaca (*Sallé*: ♂), Jalapa? (*Höge*: ♀).

One pair. This insect is very like the green forms of *M. splendidus* and *M. albicans*, but it is as hairy as *M. sturmi*. Possibly there is a cinereo-squamose variety of it?

3. **Megalostylus rhodopus.** (Tab. X. fig. 25, ♂.)

Megalostylus rhodopus, Boh. in Schönh. Gen. Curc. vi. 1, p. 116[1].

Length 4$\frac{3}{4}$–10, breadth 2–4 millim.

Hab. Mexico (*coll. Sommer*[1]), Cordova, Jalapa (*Höge*), Oaxaca (*Mus. Brit.*, *Sallé*).

This species may be known by its not very densely squamose surface; the red legs; the conical prothorax, with the base feebly sinuate, and the hind angles acutely extending outwards in both sexes; the rather large scutellum; the posteriorly setose suture of the elytra, the elytra themselves broader than the prothorax, and somewhat depressed in the female; and the hairy under surface and legs. The scales on the upper surface vary in colour—greenish, bluish, olivaceous, or cinereous, those on the scutellum and the sides of the body beneath whitish. The first ventral segment is hollowed down the middle in the male. *M. rhodopus* is apparently a common insect in Oaxaca. I have seen the types belonging to the Sommer collection.

4. **Megalostylus brevipilis,** sp. n. (Tab. X. fig. 26, ♂.)

♂. Oblong, robust, subfusiform, black, densely clothed with whitish or greenish-white scales, and also set with short, fine, decumbent hairs, those on the elytra uniseriately arranged down each interstice, the legs with longer hairs. Rostrum broadly excavate anteriorly; antennal scape strongly clavate, slender at the base, reaching to just beyond the eyes, the latter rounded and very prominent. Prothorax transverse, conical, the hind angles acutely directed outwards, the base moderately bisinuate. Scutellum small. Elytra broader than the prothorax, narrowing from the humeri, finely punctate-striate, the

interstices almost flat, the minute piligerous punctures somewhat conspicuous. First ventral segment hollowed down the middle, the fifth slightly tumid in the centre posteriorly.
Length $7\frac{1}{2}$–$8\frac{1}{2}$, breadth $2\frac{5}{6}$–$3\frac{1}{5}$ millim.

Hab. Mexico, Acapulco (*H. H. Smith*).

Two males, found in September, one showing the commencement of the change of colour in the scales—from whitish to green. Closely related to *M. albicans*, but with the scape of the antennæ slender at the base (and therefore strongly clavate), the elytra considerably wider than the prothorax and with a series of short, fine, decumbent hairs down each interstice. The slender base of the antennæ also separates *M. brevipilis* from *M. fusiformis* and the cinereo-squamose variety of *M. splendidus*.

5. **Megalostylus albicans.** (Tab. X. figg. 27, ♂ ; 28, ♂, var.; 29, ♀, var. *expansus*.)

♀. *Apotomoderes albicans*, Lacord. Gen. Col., Atlas, p. 21, t. 62. figg. 5, 5 *a*, *b* [1].

♀. *Apotomoderus albicans*, Chevr. Bull. Soc. Ent. Fr. 1878, p. liv [2].

♂. *Megalostylus farinosus*, Chevr. loc. cit. p. lxvi [3].

♀. *Megalostylus expansus*, Pasc. Ann. & Mag. Nat. Hist. (5) vii. p. 42 (1881) [4].

♂. First ventral segment depressed down the middle and the fifth somewhat tumid in the centre posteriorly.

♀. Prothorax with the hind angles usually a little more prominent than in ♂, sometimes extending outwards to beyond the elytra (*M. expansus*, Pasc.); fifth ventral segment tumid along the median line.

Var. The scales above and beneath green or golden-green.
Length 6–13, breadth of elytra 2–5 millim. (♂ ♀.)

Hab. Mexico [3 4] (*Truqui, in Mus. Brit.*), Puebla, Guanajuato (*Sallé*), Cuernavaca, Chilpancingo, Irapuato, Matamoros Izucar (*Höge*), Amula, Xucumanatlan (*H. H. Smith*).

The typical form of this species, sent us in abundance from Cuernavaca, is uniformly cinereous or whitish, the variety with the scales green (not previously recorded) being apparently much scarcer. Both forms have been received from Chilpancingo and Amula. The prothorax is as wide at the base as the elytra in both sexes. The rostrum is broadly excavate from the tip to near the eyes. The longitudinal plica on the fifth ventral segment of the female is conspicuous. About sixty specimens have been examined, the females showing considerable variation in the lateral development of the hind angles of the prothorax. Lacordaire [1] gave no locality for his *A. albicans*, and that given for it by Chevrolat [2]—California—must be due to some mistake in labelling.

6. **Megalostylus splendidus.** (Tab. X. figg. 30, ♀ ; 31, var., ♂.)

Megalostylus splendidus, Chevr. Bull. Soc. Ent. Fr. 1878, p. lv [1].

Var. The scales above and beneath cinereous (in one specimen cupreo-cinereous), sometimes with brownish

scales intermixed, these latter rarely condensed into three vittæ on the prothorax and several faint stripes on the elytra (fig. 31).

Megalostylus physops, Jekel, in litt.[2].

♂. Antennal scape much thickened outwards, reaching beyond the eyes; first ventral segment hollowed down the middle, the fifth tumid along the median line towards the apex.

♀. Antennal scape shorter and more slender; fifth ventral segment almost flat.

Length $3\frac{1}{10}$–9, breadth $1\frac{1}{4}$–$3\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico [1 2] (*Truqui, in Mus. Brit.*), Durango, Tepehuanes, Rio Balsas (*Wickham*), Puebla, Parada (*Sallé*), Cholula (*Ferrari-Perez*), Matamoros Izucar (*Sallé, Höge, U.S. Nat. Mus.*), Cuernavaca (*Sallé, Höge*), Yautepec, Irapuato (*Höge*), Chilpancingo, Amula and Omilteme in Guerrero (*H. H. Smith*).

The type-form of *M. splendidus* is densely clothed with metallic golden- or bluish-green scales, the much more abundant variety being cinereous or cinereous faintly striped with brown. Our examples of the former are mainly from Guerrero, and the others from Durango, Puebla, Guanajuato, and Morelos. This species is comparatively much smaller and less elongate than the equally variable *M. albicans*, the prothorax is usually more sinuate at the base, the elytra in the female (and often in the male also) are considerably wider than the dilated basal portion of the prothorax, and the fifth ventral segment wants the longitudinal plica in that sex. In one or two examples the elytra have a series of minute hairs along each interstice. Both metallic and cinereous forms have been received from Cuernavaca and Cholula. One of the green examples from Chilpancingo (♀) measures $3\frac{1}{10}$ mm. only in length. Four rather large females, without definite Mexican locality, have the hind angles of the prothorax extending outwards and the base feebly bisinuate, and the vestiture cinereous mottled with brown; they may belong to a different species.

7. **Megalostylus fusiformis,** sp. n. (Tab. X. fig. 32, ♂.)

♂. Oblong, fusiform, black, densely clothed with subopaque green or golden-green scales, and also set with short, fine, semierect, pallid hairs. Rostrum slightly widened towards the base, broadly excavate anteriorly, the median groove long; antennal scape much thickened outwards, reaching beyond the eyes, the latter rounded and very prominent. Prothorax broad, transverse, conical, the sides slightly rounded anteriorly, the hind angles acutely extending outwards, the base rather strongly bisinuate. Scutellum very small. Elytra with the sides at the base forming an almost continuous outline with those of the prothorax, gradually narrowing from the humeri, finely punctate-striate, the interstices flat. First ventral segment hollowed down the middle, the fifth somewhat tumid along the median line.

Length $7\frac{1}{3}$–$7\frac{1}{2}$, breadth $2\frac{5}{6}$–$2\frac{7}{8}$ millim.

Hab. Mexico, Rio Balsas, near Cuernavaca (*Wickham*).

Two males, found in 1909. This insect approaches the green forms of *M. albicans* and *M. splendidus*, but differs from them in the fusiform outline of the body, and the largely developed prothorax, with rather strongly bisinuate base and the sides slightly rounded anteriorly. The general shape is very suggestive of that of certain *Epitragi* (fam. Tenebrionidæ) of the same region.

8. **Megalostylus dilaticollis,** sp. n. (Tab. X. fig. 33, ♂.)

♂. Oblong, black, densely clothed above and beneath with whitish scales, the head, under surface, and legs also more or less pilose, the antennal club blackish. Rostrum widened towards the base, broadly excavate anteriorly; eyes rounded, very prominent; antennal scape reaching the front of the prothorax, stout, rapidly widening outwards, joints 1–3 of the funiculus subequal in length, the other joints shorter. Prothorax abruptly, quadrangularly explanate on each side from about the middle to the base, and here much wider than the elytra and nearly twice as broad as long, the base moderately bisinuate. Scutellum transverse. Elytra moderately long, gradually narrowing from the base, very finely punctate-striate, the seriate punctures on the disc scarcely coarser than those of the flattened interstices. First ventral segment hollowed down the middle, the fifth slightly tumid along the median line posteriorly.

Length 8, breadth of prothorax 3, of elytra $2\frac{4}{5}$ millim.

Hab. Mexico, Rio Balsas, near Cuernavaca (*H. F. Wickham*).

One specimen only of this remarkable species has been sent us by Mr. Wickham. It was found in the summer of 1909. The broadly quadrangularly explanate prothorax separates it at once from all the allied forms. It is possible that the female may differ in this respect.

9. **Megalostylus macrophthalmus,** sp. n. (Tab. X. fig. 34, ♀.)

♀. Comparatively short, black, the legs obscure ferruginous; above clothed with bluish-grey, and beneath with whitish, scales, and also set with pallid bristly hairs, those on the elytra long, erect, and uniseriately arranged down each interstice. Rostrum transverse, broadly hollowed anteriorly; antennal scape barely reaching the posterior margin of the eyes, the latter oval and not very prominent. Prothorax transverse, conical, feebly bisinuate at the base, the hind angles acute. Scutellum transverse, small. Elytra subparallel in their basal half, wider than the prothorax at the base, rather short, finely punctate-striate, the interstices flat.

Length $4\frac{1}{2}$, breadth 2 millim.

Hab. Mexico, Jalapa (*Höge*).

One specimen, somewhat abraded. Differs from the females of all the other members of the genus in the oblong, somewhat depressed eyes; the elytra are comparatively short and setose; and the legs are ferruginous, as in *M. rhodopus.*

MEGALOSTYLODES, gen. nov.

Femora clavate, the intermediate and posterior pairs deeply excavate near the apex beneath, so as to appear subangularly dilated; anterior tibiæ unarmed at the outer apical angle; head comparatively small; rostrum subquadrangular; eyes convex, prominent, lateral; prothorax much narrower than the elytra in both sexes; body hirsute and sparsely squamose above; the other characters as in *Megalostylus.*

Type, *M. hirsutus.*

The single species referred to this genus must be separated from *Megalostylus,* owing to its less developed head and prothorax, the subdentate, stout posterior femora (especially noticeable in the male), the unarmed outer apical angle of the anterior tibiæ, and the hirsute, sparsely squamose upper surface of the body. It appears to be not uncommon in the Mexican State of Oaxaca.

1. **Megalostylodes hirsutus,** sp. n. (Tab. X. figg. 35, 35 *a*, ♂.)

Oblong, black; above sparsely clothed with cinereous or bluish-white scales, and also thickly set with long, erect, stiff, bristly hairs; beneath densely clothed with whitish scales and also thickly pilose; the legs squamose and hirsute. Head longitudinally rugulose and narrowly sulcate between the eyes; antennal scape clavate, slender at the base, in ♂ extending beyond the eyes, in ♀ shorter and more slender, joints 3–7 of the funiculus decreasing in length, 1 and 2 subequal. Prothorax transverse, somewhat rounded at the sides, feebly bisinuate at the base, the hind angles acute in ♀ and more obtuse in ♂; closely, finely granulate. Scutellum triangular, depressed. Elytra moderately long, broad and subparallel in their basal half in ♀, gradually narrowing from the base in ♂; punctate-striate, the interstices somewhat convex, rugulosely punctate, and subgranulate. First ventral segment slightly hollowed down the middle in ♂. Legs stout, more slender in ♀; all the tibiæ in ♂, and the anterior pair in ♀, unguiculate.

Length $4\frac{3}{4}$–$9\frac{1}{2}$, breadth $2\frac{1}{10}$–4 millim. (♂ ♀.)

Hab. Mexico (*Koltze, in Mus. Dresden*), Tehuantepec (*Sallé; Knab, in U.S. Nat. Mus.*), Oaxaca (*Höge*).

Numerous examples, varying greatly in size.

Group **EXOPHTHALMINA.**

Exophthalmini (*Evotini*), Horn.

The genera referred to this group have the scrobes lateral, long, and descending (only in part visible from above); the eyes not strictly lateral; the vibrissæ wanting; the scutellum distinct; the elytra with or without supplementary striæ, the outer striæ free (except in *Mazenes*); the metathoracic episterna widened in front; the anterior tibiæ unguiculate; the posterior tibiæ laminate at the apex (corbels closed) and with the articular surface more or less cavernous; the tarsal claws free; and the body winged (rudimentary or wanting in *Naupactopsis*, *Mazenes*, and one or two species of *Chaulio-pleurus*). The Exophthalmina include a large number of conspicuous South American and Antillean forms, and the three genera referred to it by Horn—*Lachnopus*, *Omileus*, and *Evotus*. *Exophthalmus* is represented by many species within our limits, but some of the other Tropical American genera are wanting, e. g. *Præpodes*, *Lachnopus*, *Ischionoplus*, &c. *Mazenes* and *Naupactopsis* have a visible scutellum and the sternal side-pieces shaped as in the winged forms, and they are therefore included in th s group.

a. Wings fully developed *.

*a*¹. Elytra with abbreviated supplementary striæ on the outer part of the disc.

*a*². Rostrum dilated anteriorly, tricarinate, and with a transverse inter-antennal ridge, the scrobes long and deep; elytra very little wider than prothorax in ♂, the apex hairy; tibiæ more or less distinctly sulcate externally: body elongate, fusiform, robust . . . . . Rhinospathe.

*b*². Rostrum without definite inter-antennal ridge; elytra much wider than the prothorax in both sexes, the apex not hairy; tibiæ (except in *Exophthalmus sulcicrus*) not sulcate externally.

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* Except in certain species of *Chaulioplеurus*.

a^3. Elytra not dilated at the sides below the humeri . . . . . EXOPHTHALMUS.
b^3. Elytra with the flanks angularly dilated or tumid below the humeri. CHAULIOPLEURUS.
b^1. Elytra without supplementary striæ.
c^2. Femora unarmed ; rostrum with the apical portion not carinate at the sides.
c^3. Anterior tibiæ abruptly bowed towards the apex ; upper portion of the rostrum parallel-sided ; nasal plate squamose; elytra bilobed or produced in front . . . . . EUSTALES.
d^3. Anterior tibiæ gradually curved towards the apex ; upper portion of the rostrum widened anteriorly ; nasal plate bare ; elytra separately rounded at the base . . . . . DECASTICHA.
d^2. Femora dentate ; rostrum with the apical portion carinate laterally . CLÆOTEGES.
b. Wings rudimentary or wanting.
c^1. Elytra with abbreviated supplementary striæ, the outer striæ entire ; rostrum without diverging ridges, the scrobes becoming broad and shallow behind : sexes dissimilar . . . . . NAUPACTOPSIS.
d^1. Elytra without supplementary striæ, the striæ geminate, the outer ones approximate or coalescent ; rostrum with diverging ridges, the scrobes not wider behind : sexes not very dissimilar, body elongate . . . . MAZENES.

RHINOSPATHE.

Rhinospathe, Chevrolat, Bull. Soc. Ent. Fr. 1878, p. xix.

This genus includes two elongate, robust, subfusiform, winged, polished, black insects nearly related to *Exophthalmus*. They have the rostrum broad, widened anteriorly, bicarinate above, and also with a transverse inter-antennal ridge, the scrobes obliquely descending, the antennæ inserted near the apex; the eyes large; the scutellum transverse ; the elytra with two abbreviated supplementary striæ towards the apex externally, the outer striæ entire, the humeri (in the type) obtuse in ♀ and dentiform in front in ♂, the apical declivity densely villose or squamose ; the tibiæ more or less sulcate externally, the posterior pair with the glabrous articular surface large and cavernous ; the tarsi broad.

1. **Rhinospathe albomarginata.** (Tab. XI. figg. 1, 1 *a*, ♂.)

Rhinospathe albomarginata, Chevr. Bull. Soc. Ent. Fr. 1878, p. xx (♂ ♀)[1].
Teratorhinus phœnomenalis, Jekel, in litt.[2].

♂. Elytra narrower, the humeri with an angular or dentiform prominence in front ; ventral segment 1 excavate down the middle, 5 bluntly rounded at the tip ; rostrum with the posterior margin of the buccal cavity angularly raised in the middle.
♀. Elytra broader and widened to the middle, the humeri obtuse ; ventral segment 5 longer, subtriangular.
Var. Elytra with the sutural stripe very narrow beyond the basal excavation, the broader one on the lower margin interrupted or reduced to a short oblique streak ; the bristly hairs on the apical declivity black or dark brown and intermixed with dark scales ; the disc sometimes with a small white submarginal spot at about one-third from the tip.
Length 15–25½, breadth 4–8½ millim. (♂ ♀.)

Hab. Costa Rica[2] (*Wagner*[1], *Sallé*, *Van Patten*, *Mus. Brit.*), San José, Guaitil de Pirris (*Biolley*), Escazu, Pozo Azul (*Underwood*), Irazu (*Rogers*), Piedras Negras (*U.S. Nat. Mus.*); Panama, Chiriqui (*Trötsch, ex Staudinger*).

A common insect in Costa Rica; the variety is represented by five specimens (♂ ♀) from Chiriqui. The squamose portions of the surface are usually more or less coated with a powdery ochreous exudation, this being particularly noticeable on the excavate scutellar patch. Chevrolat's reference[1] to *Hypsonotus albomarginatus*, Motsch. (Études Ent. v. p. 22), is incorrect.

2. **Rhinospathe v-album,** sp. n. (Tab. XI. figg. 2, 2 *a*, ♀.)

♀. Elongate, robust, subfusiform, shining, black or piceous; almost glabrous above, except on the apical declivity of the elytra, which is clothed with black or blackish-brown scales intermixed with semierect black and white setæ, the dark scales preceded by a common, v-shaped, irregular fascia of white scales, the lower margin of the elytra and the sides of the body beneath also more or less albo-squamose, the rest of the under surface with a few widely scattered adpressed hairs, the tibiæ and antennæ setose. Head and rostrum closely punctate; the rostrum longer than broad, widened outwards, obsoletely carinate down the middle, and with a fine oblique carina on each side extending from the transverse inter-antennal ridge to near the small inter-ocular fovea, the declivous apical portion hollowed, the sides deeply foveate before the eyes, the latter large, rounded, and moderately prominent; antennal scape widened from near the base. Prothorax about as long as broad, subcylindrical, gradually narrowing from the middle forwards; transversely wrinkled and very sparsely punctate, depressed and longitudinally sulcate in the middle at the base. Scutellum transverse, small. Elytra widened to the middle, conically produced at the apex, excavate along the suture at the base; seriate-punctate, the interstices flat or transversely wrinkled. Tibiæ denticulate within, the anterior pair feebly unguiculate.

Length 14–20, breadth $4\frac{2}{3}$–$6\frac{2}{3}$ millim.

Hab. Guatemala (*ex Donckier*), Zapote (*Champion*), Escuintla (*Conradt*).

Four specimens. This species differs from *R. albomarginata* in having the rostrum less excavate behind the transverse inter-antennal ridge, and the declivous apical portion less dilated; the elytra neither depressed along the suture nor densely villose at the apex, the basal excavation small and almost bare, the squamose apical portion of their surface preceded by a common v-shaped fascia of white scales.

EXOPHTHALMUS.

Exophthalmus, Schönherr, Curc. Disp. Meth. p. 115 (1826); Gen. Curc. ii. p. 4; Lacordaire, Gen. Col. vi. p. 120 (part.).

The numerous species referred to this Tropical-American genus agree with the type (*Curculio quadrivittatus*, Oliv.) in having two or more abbreviated supplementary rows of punctures on the exterior portion of the disc of the elytra; the outer striæ entire; the genæ emarginate in front; the scrobes lateral, long, and descending; the eyes large, more or less prominent, not strictly lateral; the vibrissæ wanting; the scutellum well developed; the femora unarmed; the tibiæ with or without denticles, the anterior

pair unguiculate; and the body winged. *Diaprepes* * (type *Curculio spengleri*, L.) and *Præpodes* (type *Curculio vittatus*, L.) are sunk by Lacordaire as synonyms of *Exophthalmus*, but the former has well-developed vibrissæ and the latter a conical, flattened prothorax, regularly 12-striate elytra, &c.; *Eustales* (type *Curculio thunbergi*, Dalm.) has a densely squamose triangular nasal plate, regularly 10-striate elytra, and strongly bowed, stout anterior tibiæ. Amongst the species now added to *Exophthalmus* —the type of which has a somewhat strongly exserted head and the base of the elytra lobate,—one (*E. sulcicrus*) has grooved tibiæ; but as this insect is closely related to *E. jekelianus*, &c., it can remain in the same genus for the present. The humeri are prominent in both sexes of *E. verecundus*, *interpositus*, and *roralis*, obtuse in *E. nicaraguensis*, *nubilus*, *lunaris*, &c., and more prominent in the male than in the female of *E. agrestis*. The sexes of the last-mentioned insect are so dissimilar that they have been described as separate species. All these forms, when fresh, are more or less coated (especially on the depressed portions of the upper surface) with an ochreous or yellow powdery exudation, which disguises the true colour of the scales and often hides the sculpture also; the scales, moreover, in some of the species (as in *Megalostylus*, &c.) vary in colour from metallic green to cinereous or white. The Central-American forms may be grouped thus :—

a. Antennal scape widened from near the base; tibiæ feebly denticulate towards the apex: species large, sharply maculate . . . . . Species 1.

b. Antennal scape more slender, clavate at the tip.

*a*¹. Upper surface with or without short decumbent setæ (the setæ sometimes longer and erect towards the apex in *E. jekelianus*).

*a*². Tibiæ not or obsoletely sulcate on their outer edge.

*a*³. Tibiæ not or feebly denticulate on their inner edge.

*a*⁴. Elytra not or moderately depressed anteriorly, not gibbous behind.

*a*⁵. Prothorax with or without vittæ, the elytra sharply fasciate with black and white scales; prothorax sinuate at the base: species very large . . . . . Species 2, 3.

*b*⁵. Prothorax obsoletely vittate and the elytra faintly fasciate with whitish, the scales on the rest of the surface reddish-brown; the prothorax truncate at the base, the elytral striæ interrupted in two places on the disc, the humeri prominent . . . . . Species 4.

*c*⁵. Prothorax and elytra with the scales uniformly coloured (green, bluish, cinereous, or white), the prothorax and elytra sometimes faintly vittate, or the elytra fasciate at the base, the seriate punctures on the latter fine or not placed in large foveæ.

*a*⁶. Prothorax truncate at the base, the humeri very prominent . Species 5.

*b*⁶. Prothorax and elytra more or less sinuate at the base (the alternate elytral interstices raised in typical *E. carinirostris*) . Species 6–12.

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* *Cf.* anteà, p. 180.

*d*⁵. Prothorax immaculate or obsoletely vittate, the elytra with one or two shallow foveæ or bare spots on the disc, the scales uniformly coloured and closely placed, sometimes here and there clustered into inconspicuous denser patches on the disc of the elytra . . . . . Species 13, 14.

*e*⁵. Prothorax and elytra densely albo-squamose, with numerous irregular small bare scratches or spots . . . . . Species 15.

*f*⁵. Prothorax and elytra vittate, the elytra with shallow foveiform or bare spots on the disc, the humeri not prominent . . . . . Species 16.

*g*⁵. Prothorax uni- or trivittate, the elytra with a narrow marginal stripe, and sometimes another down the suture also, the rest of their surface (some widely scattered bare shining spots excepted) densely cinereo-squamose . . . . . Species 17.

*h*⁵. Prothorax bi- or trivittate, the elytra variegated with dense irregular confluent patches of white or brown scales . . . . . Species 18, 19.

*i*⁵. Prothorax broadly ochreo-bivittate, the elytra with a discoidal and lateral series of large, subquadrate ochreous patches separated by narrow transverse raised bare lines . . . . . Species 20.

*j*⁵. Prothorax immaculate, the elytra with an interrupted incomplete white stripe on the disc, the other scales greenish, the prothorax truncate at the base and the humeri prominent . . . . . Species 21.

*k*⁵. Prothorax and elytra with a complete continuous white or yellowish submarginal stripe and another stripe on the flanks, the rest of the scales green or cinereous . . . . . Species 22, 23.

*l*⁵. Prothorax and elytra reticulate with raised bare lines, the depressed portions of the surface densely clothed with pale green scales . Species 24.

*m*⁵. Prothorax and elytra irregularly reticulated with coarse, oblique, confluent rugæ, the depressed portions of the surface densely clothed with coppery-white scales . . . . . Species 25.

*n*⁵. Prothorax and elytra cæruleo- or carneo-vittate, the scales on the rest of the surface green or golden-green, the seriate punctures on the elytra placed in large foveæ . . . . . Species 26, 27.

*o*⁵. Prothorax and elytra with scintillating green scales clustered into lines or vittæ, the alternate elytral interstices raised and almost bare . . . . . Species 28.

*b*⁴. Prothorax vittate and elytra maculate with cupreous or pallid scales; the elytra (as seen in profile) concave or depressed to about the middle and gibbous behind, the humeri not prominent, obliquely truncated in front . . . . . Species 29.

*b*³. Tibiæ, or at least posterior pair in ♀, sharply denticulate on their inner edge; upper surface variegate with metallic-green or cinereous scales, which are in part condensed into spots or sharply-defined stripes . . Species 30–32.

*b*². Tibiæ sulcate on their inner edge and feebly denticulate within; upper surface (except in vars.) variegated with metallic-green or whitish

scales, which are often condensed into spots or stripes towards the sides of the elytra . . . . . Species 33.

b[1]. Upper surface with long erect bristly hairs, the scales wanting on various irregular spaces on the elytra; head depressed between the eyes, the latter prominent; prothorax truncate at the base . . . . . Species 34.

1. **Exophthalmus nicaraguensis.** (Tab. XI. figg. 3, 3 *a*, ♀.)

Exophthalmus nicaraguensis, Bovie, Ann. Soc. Ent. Belg. 1907, p. 327 [1].

Length 15–22, breadth 5½–9 millim. (♂ ♀.)

Hab. Nicaragua [1] (*Sallé*), Chontales (*Belt*, *Janson*, *Richardson*); Costa Rica, Carrillo (*Biolley*, *Underwood*), Azahar de Cartago (*Underwood*), Cariblanco (*Lankester*), Guatuso, La Flor (*Biolley*), San Carlos, Tuis (*U.S. Nat. Mus.*); Panama, Chiriqui (*Trötsch*).

This fine species, the type (♀) of which I have seen, approaches the Antillean *E. quadrivittatus*, Oliv., the type of the genus; but it has the head shorter and the elytra less lobed at the base, the depressed dense patches of ochreous or whitish scales on the latter arranged into interrupted arcuate or angulate fasciæ and a common transverse scutellar spot. The scape of the antennæ is widened from near the base and setose; the rostrum has a broad smooth space down the middle; the prothorax is feebly canaliculate and transversely depressed at the base, bivittate, the bare portion in some specimens coarsely punctate and in others almost smooth; the seriate punctures on the bare portions of the elytra are coarse and deep; the small scattered scales on the legs, apex of elytra, and rostrum are usually green or blue; the tibiæ are feebly denticulate towards the apex; and the body is winged. Most of the examples seen are females, the male being narrower and less widened posteriorly.

2. **Exophthalmus fasciatus,** sp. n. (Tab. XI. fig. 4, ♂.)

Præpodes fasciatus, Jekel, in litt.

Exophthalmus princeps, Chevr. in litt.

Oblong, robust, broad, somewhat shining, black or nigro-piceous; the head, rostrum, prothorax, scutellum, basal margin of elytra, and legs thickly clothed with narrow whitish scales; the elytra with a large transverse humeral patch, two common transverse fasciæ (the anterior one extending forwards for some distance along the suture), and a large spot at the apex, clothed with black, and the rest of the surface with imbricate, white or brownish-white, scales; the surface also set with rather long, scattered, bristly hairs, which are semierect on the elytra; the lower surface thickly clothed with white scales intermixed with scattered adpressed hairs, the legs also pilose, the tibiæ setose. Head and rostrum closely, finely punctate, the rostrum considerably longer than broad, sharply carinate down the middle, and with a fine oblique carina towards the sides, the inter-ocular fovea deep; antennæ with a rather stout funiculus, joint 2 scarcely so long as 1, the scape slender, clubbed at the tip, not reaching the posterior margin of the eyes, the latter prominent. Prothorax transverse, obliquely narrowed anteriorly, sinuate at the sides behind, bisinuate at the base, narrowly sulcate down the middle; with scattered irregular confluent foveæ intermixed with a fine interstitial punctuation. Scutellum rather large. Elytra broad, oblong-subtriangular in ♂, widened to the middle in ♀, broadly depressed along the suture at the base, the humeri moderately prominent, the apices dentiform, dehiscent in ♀; with twelve rows of coarse, deep

punctures (those on the albo-squamose portion of the surface appearing minute), the interstices almost flat. Tibiæ without denticles, the anterior pair strongly unguiculate.

Length 17–22, breadth $6\frac{2}{3}$–$9\frac{2}{5}$ millim. (♂ ♀.)

Hab. Mexico (*Mus. Brit.*), Playa Vicente (*Sallé*), Atoyac in Vera Cruz (*H. H. Smith*).

Eight specimens. A remarkably distinct form, long known in collections under one or the other of the above-quoted MS. names. The elytra are sharply fasciate with black and white, the first white fascia curving forwards along the suture to the base, the others transverse. The antennæ are more slender at the base than in *E. nicaraguensis*.

3. **Exophthalmus ornatus,** sp. n. (Tab. XI. fig. 5, ♀.)

♀. Very like the Mexican *E. fasciatus*, but differing as follows:—The head, rostrum, legs, and under surface rather sparsely clothed with narrow, hair-like scales intermixed with long hairs, the scales towards the sides of the body beneath oval in shape; the prothorax with a sharply defined, posteriorly widened, oblique vitta on each side composed of imbricate, yellowish-white, oval scales, the intervening space on the disc with scattered blackish hair-like scales; the elytra with the curved yellowish-white band continued round the black humeral patch in front and the common subapical black fascia divided at the suture. Rostrum with the median carina flattened and less acute, the fine oblique carina on each side of it obsolete; the inter-ocular fovea small; antennæ a little shorter, joints 1 and 2 of the funiculus equal in length. Prothorax subconical, broader than long, coarsely, confluently foveolate on the disc. Elytra less depressed along the suture at the base, the humeri not so prominent.

Length $18\frac{1}{2}$, breadth 8 millim.

Hab. Guatemala, Coban in Alta Vera Paz (*Champion*).

One specimen, in very fresh condition. This is the Guatemalan representative of the Mexican (Vera Cruz) *E. fasciatus*, and it is best treated as a separate species.

4. **Exophthalmus interpositus,** sp. n. (Tab. XI. figg. 6, 6 *a*.)

Oblong, rufo-piceous; variegated with a rather dense clothing of brownish-ochreous and whitish scales, the latter condensed into two faint curved vittæ on the prothorax and two interrupted or faint transverse fasciæ on the elytra, and also set with rather long, fine, scattered, semierect setæ, the larger elytral punctures each bearing a minute scale. Head and rostrum rugulosely punctate, the rostrum broad, a little longer than wide, flattened, and with a smoother bare median line; eyes moderately large, feebly convex; antennal scape reaching to just beyond the eyes. Prothorax broader than long, rather convex, rounded at the sides, subtruncate at the base; densely, finely punctate, with scattered coarser punctures intermixed, the disc with an abbreviated narrow median sulcus. Scutellum rather large. Elytra elongate-triangular, feebly mucronate at the tip, flattened on the disc anteriorly; with rows of rather coarse punctures which become interrupted or sinuously diverted for some distance before and beyond the middle by various coarse, foveiform, irregularly distributed punctures in the interstices, the latter feebly convex, flat near the suture. Anterior tibiæ moderately unguiculate.

Length 11–$14\frac{1}{3}$, breadth $4\frac{1}{10}$–$5\frac{1}{3}$ millim. (♂ ?)

Hab. Mexico, Juquila in Oaxaca (*Sallé*).

Two specimens, the smaller one with the whitish markings more extended than in the other. An isolated form, with the humeri of the elytra as prominent as in *E. verecundus*, the striæ more or less interrupted or sinuously diverted on the disc between

and before the whitish fasciæ by the interposition of some coarse, foveiform, irregularly distributed punctures in the interstices, and the head and rostrum comparatively broad.

5. **Exophthalmus verecundus.** (Tab. XI. fig. 7, ♂.)

Diaprepes verecundus, Chevr. Col. Mex. fasc. i. no. 16 (1833)[1].

Diaprepes modestus, Gyll. in Schönh. Gen. Curc. vi. 1, p. 345[2].

Length 10–18, breadth $3\frac{1}{2}$–$6\frac{4}{5}$ millim. (♂ ♀.)

Hab. Mexico[2] (*Truqui*), Acapulco, Cordova, Jalapa, Tapachula (*Höge*), Rio Papagaio (*H. H. Smith*), Vera Cruz (*Sallé*, *Höge*), San Andres Tuxtla, Panistlahuaca (*Sallé*), San Rafael Jicaltepec, Almoloya (*U.S. Nat. Mus.*), Oaxaca (*Mus. Brit.*, *Höge*), Orizaba[1].

Apparently a common insect in the States of Vera Cruz and Oaxaca. It is easily known from its allies by the transversely depressed inter-ocular portion of the head; the prominent eyes; the long second joint to the funiculus; the basally truncate, closely punctured prothorax; the oblong, subtriangular, finely punctate-striate elytra, with rather convex interstices and prominent humeri; and the feebly unguiculate anterior tibiæ. The scales are uniformly coloured, usually pale green, sometimes bluish- or golden-green, rarely whitish or cinereous. In several examples the alternate elytral interstices are a little wider than the others, these specimens approaching *E. carinirostris*. Gyllenhal's type of *D. modestus* has been compared with our series of *E. verecundus*.

6. **Exophthalmus carinirostris.** (Tab. XI. figg. 8, 8 *a*, ♀.)

Platyomus (*Compsus*) *carinirostris*, Boh. in Schönh. Gen. Curc. vi. 1, p. 187[1].

Var. The alternate elytral interstices not or very slightly raised, the humeri with a few opalescent scales, similar to those on the legs and head.

Length 11–$15\frac{1}{2}$, breadth $3\frac{9}{10}$–$6\frac{1}{10}$ millim. (♂ ♀.)

Hab. Mexico (*Mus. Brit.*), Toxpam, San Andres Tuxtla, Juquila (*Sallé*), Cordova, Oaxaca[1] (*Höge*), Amula (*H. H. Smith*); Guatemala (*coll. Pascoe*), Coban (*Champion*); Nicaragua, Chontales (*Janson*).

Not rare in the Mexican States of Oaxaca and Vera Cruz; the type is from the first-mentioned State. The general vestiture is whitish or pearly-white, sometimes greenish with the raised alternate elytral interstices and two vittæ on the disc of the prothorax white, the head, rostrum, prothorax, and legs often tinged with cupreous or golden. The sharply carinate rostrum, with the upper anterior portion less divergent on each side in front, the more numerous elytral striæ, &c., readily distinguish this species from *Compsus auricephalus*. The antennal scape is slender at the base in the female. The elytra have the alternate interstices 2, 4, 6, 8, and the basal portion of 3, widened and subcostate, and 8 bifurcate beyond the middle, the intervening space enclosing two short supplementary striæ. The two examples (♀) from Guatemala have

the elytral interstices uniformly flattened or the third very slightly raised anteriorly; they are very like *E. margaritaceus*, which has an obsoletely carinate rostrum and less prominent eyes. The specimen figured on our Plate has been compared with the type in the Sommer collection, kindly lent by Mr. O. E. Janson.

7. **Exophthalmus margaritaceus,** sp. n. (Tab. XI. fig. 9, ♂.)

Oblong, black, densely squamose, the scales on the prothorax, scutellum, elytra, and part of the under surface bluish-white, those on the head, rostrum, legs, and last three ventral segments cupreous or opalescent; the surface also set with short, scattered, minute, adpressed hairs. Head and rostrum rugulosely punctate, the rostrum considerably longer than the head and with a smooth median line, followed by an oblong, narrow, inter-ocular fovea, the nasal plate short; eyes very large, moderately convex; antennæ rather slender, the scape extending to just beyond the eyes. Prothorax strongly transverse, feebly bisinuate at the base, arcuately narrowing from the middle forwards, faintly canaliculate; with scattered irregular foveiform punctures intermixed with a fine interstitial punctuation. Scutellum rather large. Elytra elongate-triangular, the apices divergent and mucronate, the humeri prominent; with rows of small conspicuous punctures placed in shallow foveæ, the two supplementary striæ placed between 5 and 6, the interstices feebly convex. Anterior tibiæ strongly, and the intermediate pair feebly, unguiculate.

Length 12–13, breadth 4–4¼ millim. (♂.)

Hab. NICARAGUA, Chontales (*Belt*).

Two specimens. This species approaches *E. opulentus*, but it has more prominent humeri, the seriate punctures on the elytra conspicuous, and the vestiture uniformly bluish-white above, except on the head, where it is cupreous. The obsoletely carinate rostrum and the less convex eyes separate *E. margaritaceus* from the variety of *E. carinirostris* with flattened elytral interstices.

8. **Exophthalmus albidus,** sp. n. (Tab. XI. figg. 10, 10*a*, ♂.)

Diaprepes albidus, Sturm, in litt.

Oblong, black, densely clothed with chalky-white scales, and also set with short, scattered, minute, adpressed hairs. Rostrum longer than the head, flattened above, shallowly sulcate on each side and subcarinate down the middle, the carina followed by a short inter-ocular groove and extending forward to the long, shining, triangular subapical plate; eyes large, rounded, convex; antennal scape extending to a little beyond the eyes. Prothorax nearly as long as broad (along the median line), narrowed anteriorly, feebly bisinuate at the base, slightly depressed down the middle, with scattered foveiform impressions intermixed with the fine interstitial punctures covered by the vestiture. Scutellum rather large. Elytra elongate-triangular, the apices divergent, the humeri prominent; with rows of conspicuous punctures, the two supplementary striæ placed between 7 and 8, the interstices almost flat. Anterior and intermediate tibiæ feebly unguiculate.

Length 14½, breadth 5⅓ millim. (♂.)

Hab. MEXICO (*Sallé, ex coll. Sturm*).

One specimen. Very near the Nicaraguan *E. margaritaceus*, but differing from it in the slightly smaller and more prominent eyes, the longer glabrous subapical portion of the rostrum, the less transverse prothorax, the position of the supplementary striæ, and the uniform chalky-white vestiture. *Diaprepes* is here restricted to forms having well-developed vibrissæ.

9. **Exophthalmus opulentus.** (Tab. XI. fig. 11, ♀.)

Eustales opulentus, Boh. in Schönh. Gen. Curc. vi. 1, p. 365[1].

Eustales humeralis, Chevr. in litt.[2].

The scales on the head, rostrum, scape, and legs, and sometimes on the humeral callus also (*E. humeralis*, Chevr.), cupreous or golden, those on the rest of the surface green or golden-green.

♂. Prothorax subcylindrical; elytra subparallel to near the middle, moderately produced at the apex, the apices feebly mucronate.

♀. Prothorax subconical; elytra broader, widening to the middle, conically produced at the apex, the apices dentiform.

Length $10\frac{1}{4}$–18, breadth $3\frac{1}{5}$–$6\frac{2}{3}$ millim. (♂ ♀.)

Hab. Mexico (*Mus. Brit.*), Playa Vicente, Toxpam, Santacomapan (*Sallé*), Cordova, Jalapa (*Höge*), Santa Lucrecia, San Rafael Jicaltepec, Tehuantepec City (*U.S. Nat. Mus.*), Teapa, Tapachula (*Höge, H. H. Smith*), Chiapas (*coll. Fry*), Oaxaca (*Mus. Brit., Höge*), Yucatan (*coll. Pascoe*), ? Tultepec [Toulcpec][1].

Var. The scales uniformly green or bluish-green.

Hab. Mexico, Tapachula in Chiapas (*Höge*); Guatemala, El Tumbador, Las Mercedes, El Reposo (*Champion*).

This species has a smooth, slightly raised median line on the rostrum; an incomplete impressed line on the prothorax (often obsolete or hidden by the vestiture), the prothorax itself sparsely, irregularly, foveato-punctate; the elytra separately rounded at the base, with the seriate punctures moderately coarse, somewhat crowded, and each placed in a shallow fovea. *E. opulentus* (the type of which we have seen) is a common insect on the Atlantic slope of Vera Cruz and Tabasco; the variety has been found in some numbers in Guatemala, as well as at Tapachula, on the Pacific slope. The cupreous humeral spot is evanescent and often obsolete. Fresh specimens are sometimes coated with a brownish exudation.

10. **Exophthalmus vitticollis,** sp. n. (Tab. XI. figg. 12, ♂; 13 ♀, 14 ♂, vars.)

Eustales vitticollis, Chevr. in litt.

Very like *E. opulentus*; the head, rostrum, scape, legs, a median vitta on the prothorax, the scutellum, and sometimes the elytral suture and a humeral spot also, clothed with cupreous or golden-cupreous scales, the other scales green or golden-green; the prothorax distinctly impressed along the median line; the elytra transversely flattened or depressed at the base, the seriate punctures usually more conspicuous, less approximate, and placed in larger foveæ. (Fig. 12.)

Var. *α*, *cærulescens*, n. The scales on the head, rostrum, humeri, and legs golden-cupreous, those on the prothorax, scutellum, and elytra blue, and those on the apical half of the suture and under surface green. (Fig. 13.)

Var. *β*, *mutatus*, n. The prothorax with two broad stripes on the disc and another on the flanks, and the elytra each with a broad stripe on the disc and another on the flank, clothed with brown or brownish scales, the scales on the rest of the surface green. (Fig. 14.)

Length $9\frac{1}{2}$–17, breadth $3\frac{1}{5}$–$6\frac{1}{4}$ millim. (♂ ♀.)

Hab. British Honduras (*U.S. Nat. Mus.*), Temash River [var. α] (*Mus. Brit.*), Belize (*Blancaneaux*); Guatemala, Yzabal (*Sallé*), Livingston [var. β], Cacao near Trece Aguas (*Schwarz and Barber, in U.S. Nat. Mus.*), Panzos (*Conradt*), Teleman, Chacoj (*Champion*).

The typical form of this insect is common in the lower portions of the Polochic Valley and it has long been known in collections under Chevrolat's MS. name; the var. *α* is represented by a single female from Temash River; and the var. β by five males from Livingston, on the Atlantic coast. The median groove on the prothorax is conspicuous and usually indicated by an irregular row of coarse punctures. The smooth line along the rostrum is sometimes obsolete.

11. **Exophthalmus cupreipes,** sp. n. (Tab. XI. fig. 15, ♀.)

Oblong, narrow (♂), broader and widened posteriorly (♀), black; densely squamose, the scales on the head, rostrum, and legs, and along the middle of the prothorax anteriorly or to near the base, cupreous or golden-cupreous, those on the rest of the surface green or golden-green, the elytral interstices also set with short, scattered, adpressed setiform scales. Head and rostrum rugulosely punctate, the rostrum longer than broad, sharply carinate, the carina extending forward to the v-shaped prominence limiting the bare triangular nasal plate and followed by a narrow deep inter-ocular sulcus; antennæ rather slender, the scape reaching beyond the eyes, the latter large and moderately convex. Prothorax transverse, arcuately narrowing forwards, feebly bisinuate at the base, hollowed down the middle anteriorly and also canaliculate; with irregular, scattered foveæ intermixed with fine punctures. Elytra with twelve rows of moderately coarse punctures, the interstices equal and feebly convex, the apices feebly mucronate, somewhat acuminate in ♀, the humeri moderately prominent.

Length 8–11½, breadth 2⅔–4⅓ millim. (♂ ♀.)

Hab. Mexico (*Koltze, in Mus. Dresden; coll. Solari*), Chiapas (*coll. Fry*), Oaxaca, ? Jalapa, ? Cordova (*Höge*).

Ten specimens, scarcely varying in colour, and probably all from the State of Oaxaca. Easily separable from *E. opulentus* and *E. vitticollis* by the sharply carinate rostrum and the v-shaped prominence limiting the bare nasal plate; the prothorax, too, is also more or less hollowed down the middle anteriorly, as well as being finely canaliculate.

12. **Exophthalmus carneipes,** sp. n. (Tab. XI. figg. 16, 16 *a*, ♂.)

Oblong, narrow (♂), broader (♀), black or piceous; densely squamose, the scales on the head, rostrum, scape, legs, base and apex of elytra, and the greater part of the under surface, flesh-coloured or cupreous, those on the rest of the body glittering golden-green. Head and rostrum rugulosely punctate, the rostrum very little longer than broad, and with a smooth stout median carina, which is widened posteriorly and encloses a deep lanciform inter-ocular sulcus; eyes large, rounded, convex; antennæ long, the scape reaching beyond the front margin of the prothorax in both sexes. Prothorax transverse, subcylindrical, rounded at the sides anteriorly, hollowed or flattened down the middle, feebly bisinuate at the base; with a few scattered foveiform punctures intermixed with a fine interstitial punctuation. Elytra elongate-triangular in ♂, widened to the middle in ♀, acuminate and feebly mucronate at the tip; seriate-punctate, the interstices feebly convex.

Length 9–12, breadth 3⅕–5 millim. (♂ ♀.)

Hab. Costa Rica (*Mus. Dresden*), Pirris, Pacific slope (*Biolley*), Pozo Azul (*Underwood*); Panama, Volcan de Chiriqui (*Champion, Trötsch*).

Seven specimens. In this insect the very prominent median carina of the rostrum is bifurcate behind and encloses the deep lanciform inter-ocular sulcus, a character separating *E. carneipes* from its allies. The general coloration of the vestiture is similar to that of *Pandeleteius erubescens*, except that the base and apex only of the elytra are carneous or cupreous.

13. **Exophthalmus agrestis.** (Tab. XI. figg. 17–20.)

♀. *Geonemus agrestis*, Boh. in Schönh. Gen. Curc. ii. p. 291 [1]; vi. 1, p. 212 [2].

Brachyomus agrestis, Lacord. Gen. Col. vi. p. 131, nota [3].

♂. *Liophlœus canus*, Gyll. in Schönh. Gen. Curc. ii. p. 306 [4].

♂. *Præpodes canus*, Schönh. op. cit. vi. 1, p. 357 [5].

♂. *Præpodes canescens*, Boh. op. cit. vi. 1, p. 357 [6].

♀. *Præpodes farinolentus*, Boh. op. cit. vi. 1, p. 358 [7].

♂. *Præpodes mexicanus*, Sturm, in litt. [8].

Elytra with a more or less distinct foveiform depression or bare spot on the fifth interstice at about the basal third and often another on the second or third interstice beyond the middle; narrow and subparallel in their basal half in ♂, much broader and widened to the middle in ♀, the dorsal striæ sometimes interrupted or sinuous in this sex. Rostrum finely carinate, the carina followed by a narrow sulcus. Eyes somewhat depressed in ♀, a little more prominent in ♂. Scales varying in colour from whitish or cinereous (with cupreous reflections) to green, the elytra often with denser patches on the disc and the prothorax with a faint submarginal denser stripe on each side, the vestiture frequently covered in part or disguised by a yellowish powdery exudation; the head, rostrum, and legs sometimes cupreous. Anterior tibiæ unguiculate.

Var. *a*. The scales green or bluish-green, those on the head, rostrum, and legs more or less cupreous or golden. [Fig. 20, ♀.]

Length $6\frac{3}{4}$–$10\frac{1}{4}$, breadth $2\frac{1}{8}$–$4\frac{1}{8}$ millim. (♂ ♀.)

Hab. Mexico [1–8] (*ex coll. Sturm*), Orizaba, Toxpam, Santacomapan, Chiapas (*Sallé*), Vera Cruz, Oaxaca (*Höge*), Cordova (*Höge*; *Mason and Knab*, *in U.S. Nat. Mus.*), San Rafael Jicaltepec (*U.S. Nat. Mus.*), Jalapa (*Höge*, *Smith*), Teapa (*Höge*, *H. H. Smith*).

The types of the four species described by Boheman and Gyllenhal have been examined by Dr. Sharp or myself, and there can be little or no doubt that they all belong to one variable insect, for which the most appropriate name would be *farinolentus*: *G. agrestis* was based upon a single example (♀) completely encrusted with dirt, *L. canus* and *P. canescens* upon poor specimens (♂), and *P. farinolentus* upon an individual (♀) with the characteristic vestiture intact. About 100 examples are now available for comparison (including long series from Teapa, Cordova, Jalapa, Toxpam, &c.), and these show great variation in the colour of the scales; the metallic green variety, with cupreous rostrum and legs, is from Santacomapan in Vera Cruz, and the other green specimens are from Teapa or Chiapas. The foveiform or bare depressions on the third and fifth elytral interstices (unnoticed in Schönherr's work, though clearly visible in the dirty type of *G. agrestis*) are not accidental or due to abrasion, as they are also to be found in *E. nubilus*, *E. distigma*, &c. We figure four specimens: a

greenish male from Teapa (fig. 17); a female, agreeing with the type of *P. farinolentus*, from Toxpam (fig. 18); a female of a greenish variety from Chiapas (fig. 19); and a female of the var. *a* from Santacomapan (fig. 20).

14. **Exophthalmus distigma,** sp. n. (Tab. XI. fig. 21, ♂.)

Oblong, black; densely clothed with cinereous scales, which are usually cupreous, purplish, or greenish in certain lights, and also set with small, scattered, adpressed setæ, the vestiture sometimes more or less hidden or disguised by a yellowish exudation. Head and rostrum rugulosely punctate, the rostrum a little longer than broad and finely carinate to the rather long inter-ocular groove; eyes rounded, moderately large, feebly convex; antennæ rather long and slender, the scape about reaching the anterior margin of the prothorax, joint 2 of the funiculus slightly longer than 1. Prothorax transverse, obliquely narrowed from the middle forwards, feebly bisinuate at the base, broadly depressed or flattened, and sometimes obsoletely canaliculate, down the centre; with a few, coarse, scattered punctures intermixed with a close fine punctuation. Scutellum prominent, rather large. Elytra subparallel in their basal half in ♂, broader and widened to the middle in ♀, feebly mucronate at the tip, the humeri rather prominent; with rows of scattered punctures placed in small foveæ, the interstices densely punctulate, 3 slightly raised to beyond the middle, and the space between it and the suture flattened or depressed, 5 with a more or less distinct, transverse, bare, almost smooth, foveiform depression at about the basal third, and 4 sometimes with a similar depression beyond the middle. Anterior tibiæ strongly, and the intermediate tibiæ more feebly, unguiculate in both sexes.

Length $7\frac{9}{10}$–$12\frac{1}{4}$, breadth $2\frac{4}{5}$–5 millim. (♂ ♀.)

Hab. GUATEMALA, Cerro Zunil, Volcan de Atitlan, and Mirandilla, Pacific slope (*Champion*).

Found in abundance at Cerro Zunil in August 1880. This is the Guatemalan form of the Mexican *E. agrestis*, from which it differs in having the elytra broadly flattened or hollowed along the suture (the depression extending forwards on to the disc of the prothorax), the seriate punctures more scattered, and the third interstice slightly raised. The upper surface usually has a cupreous or greenish lustre. The bare depression on the fifth elytral interstice is constant.

15. **Exophthalmus scalptus,** sp. n. (Tab. XI. fig. 22, ♀.)

Oblong, narrow (♂), broader (♀), black; densely clothed (the head and rostrum more sparsely) with pearly-white scales (which sometimes have a cupreous or greenish tinge), the prothorax and elytra with small, scattered, bare—transverse, oblique, or foveiform—asymmetrically-arranged spots; the surface also set with minute, widely scattered, adpressed, setiform scales. Head and rostrum rather sparsely punctate, the rostrum short, about as broad as long, hollowed on each side of the stout, arcuate median carina, the latter followed by a small inter-ocular fovea, the eyes large and somewhat depressed; antennæ rather slender, the scape extending beyond the anterior margin of the prothorax. Prothorax transverse, convex, rounded at the sides, feebly bisinuate at the base; the spaces between the scattered, bare, irregular, foveiform depressions densely punctulate. Scutellum well developed. Elytra elongate-triangular in ♂, broader and widened to the middle in ♀, separately mucronate at the tip, the humeri not very prominent; interruptedly seriate-punctate, the interstices (except in the places occupied by the bare transverse marks) densely punctulate, 3 usually a little raised and the space between it and the suture flattened or depressed. Anterior tibiæ feebly denticulate and with a long claw at the tip.

Length 3–5, breadth $9\frac{1}{2}$–13 millim. (♂ ♀.)

Hab. COSTA RICA (*Sallé; Van Patten*), Cachí (*Rogers, Biolley*), Irazu (*Rogers*), La Palma, San José (*Biolley*).

Fifteen examples. This species has the facies of a *Compsus*, but it is really related to *E. impositus* (Pasc.), having a similarly formed rostrum, &c. The irregular scattered bare transverse scratches on the prothorax and elytra give the insect a peculiar appearance; the eyes, too, are depressed, the rostrum short and arcuately carinate, and the vestiture of the elytra is so dense as to make the seriate punctures appear quite small.

16. **Exophthalmus nubilus.** (Tab. XI. figg. 23, ♂; 24, ♀.)

Præpodes nubilus, Rosensch. in Schönh. Gen. Curc. vi. 1, p. 355 [1].

Naupactus aurivittis, Sturm, in litt.[2].

Prothorax with a cupreous or coppery-white stripe on each side, and the elytra each with two similarly-coloured stripes—one on the disc, sometimes evanescent or interrupted, the other along the lower margin—the space between them bluish. Rostrum finely carinate to the inter-ocular fovea; eyes moderately prominent; prothorax hollowed down the middle and towards the sides, impressed with coarse, scattered, irregularly distributed punctures; elytra narrowed towards the base in both sexes, broad and widened to the middle in ♀, narrower in ♂, the humeri not very prominent, punctate-striate, the third interstice (beyond the middle) and the fifth interstice (at the basal third) irregularly foveate, the depressions in some examples diverting the striæ and in others smoother and bare; anterior tibiæ feebly unguiculate; body winged.

Length 10–13, breadth $3\frac{1}{4}$–$5\frac{1}{10}$ millim. (♂ ♀.)

Hab. Mexico [2] (*Sturm, in coll. Sallé; Mus. Brit.*), between Acapulco and Oaxaca [1].

I have seen seven specimens of this species (five of which belong to the Sommer collection), one only of which bears a locality-label "Oaxaca." The females have the vestiture between the dorsal vittæ of the elytra more or less cupreous, so that the stripes are less distinct in this sex than in the males. The foveiform depressions on the disc of the elytra (which are sometimes bare and almost smooth) are very similar to those of *E. agrestis* and *E. distigma*.

17. **Exophthalmus scalaris.** (Tab. XI. fig. 25, ♂.)

Præpodes scalaris, Boh. in Schönh. Gen. Curc. vi. 1, p. 349 [1].

Chlorima hieroglyphica, Sturm, Cat. 1826, p. 115 [2].

Oblong, rather narrow (♂), broad (♀), black; above densely clothed with yellowish-white scales, the prothorax with three narrow vittæ (the central one evanescent), and the elytra with a marginal stripe of variable length (and in the ♂ the suture also), more sparsely set with smaller white or bluish-white scales, similar to those on the under surface and legs; the dense vestiture more or less coated with a powdery yellowish exudation; the elytra with a transverse or oblique spot on the disc at about the basal third, another within the shoulder, and three or four small spots beyond the middle, bare. Rostrum longer than broad, flattened, rugulosely punctate, neither carinate nor sulcate; eyes large, rounded, moderately prominent. Prothorax short, strongly bisinuate at the base, densely, finely punctate. Elytra elongate triangular (♂), much broader and widened to the middle in ♀, mucronate at the tip, the humeri prominent; punctate-striate, the outer interstices convex, 8 abruptly bifurcate at the middle and partly enclosing the two supplementary striæ, the bare spots almost smooth. Anterior tibiæ feebly denticulate and strongly unguiculate.

Length $9\frac{4}{5}$–$13\frac{1}{2}$, breadth $3\frac{1}{2}$–$5\frac{1}{2}$ millim.

Hab. Costa Rica, San José (*Biolley*).—Antilles, Cuba [1 2].

The above description is taken from a pair received from the late P. Biolley as from San José, agreeing with others I have seen from the Antilles. Can the insect have been introduced into Costa Rica?

18. **Exophthalmus impositus.** (Tab. XI. figg. 26, 26 *a*, ♀.)

Eustales impositus, Pascoe, Ann. & Mag. Nat. Hist. (5) v. p. 427 (1880) [1].

Oblong, shining, black; densely clothed (except along the middle of the head and rostrum, on two vittæ on the disc of the prothorax, on numerous irregular, confluent streaks or patches on the elytra, and along a broad space down the middle of the metasternum and the ventral segments 1–4) with white or pale brown scales—usually pale brown, with a broad stripe along the sides of the elytra and the legs white,—and also set with minute widely scattered adpressed hairs. Rostrum about as long as broad, depressed on each side of the smooth, stout, arcuate, median carina, which is widened behind and encloses the inter-ocular fovea; eyes large, rounded, not very prominent; antennæ long, the scape reaching the anterior margin of the prothorax. Prothorax strongly transverse, narrowed in front, bisinuate at the base, depressed or flattened down the middle, with scattered, irregular, foveiform punctures. Elytra subparallel in their basal third in ♂, broader and widened to the middle in ♀, mucronate at the tip, the humeri prominent; coarsely punctate-striate, the punctures appearing small where covered by the dense, confluent, large patches of scales, the interstices flattened, the bare portions smooth. Anterior tibiæ obsoletely denticulate and with a long terminal claw.

Length 10–14, breadth $3\frac{1}{2}$–$5\frac{3}{4}$ millim.

Hab. Nicaragua, Chontales [1] (*Belt*, *Janson*, *Richardson*); Costa Rica, Reventazon (*Biolley*), Turrialba, Zarzero (*U.S. Nat. Mus.*).

I have seen about a dozen examples of this species, mostly females, varying very little in the arrangement of the scales on the elytra. The prothorax is constantly trivittate and the under surface bare down the middle. *E. impositus* cannot possibly be included in *Eustales*, the type of which is *Curculio thunbergi*, Dalm.

19. **Exophthalmus triangulifer,** sp. n. (Tab. XI. fig. 27, ♂.)

Very like *E. impositus*; the scales more uniformly distributed above and beneath, brown or greyish-brown (sometimes with a cupreous tint), intermixed with white, the white scales on the prothorax condensed into a narrow sinuous stripe on each side and another on its flanks, and those on the elytra into an angulate series of spots down the middle of the disc; the prothorax unimpressed along the median line; the elytra with fewer bare spaces, one only (triangular or <-shaped) near the suture before the middle being conspicuous, the scales clustered into smaller patches and giving a nodose or uneven appearance to the flattened surface.

Length 8–12, breadth $2\frac{1}{2}$–$4\frac{1}{2}$ millim. (♂ ♀.)

Hab. Costa Rica, Limoncito, Cañas Gordas (*Pittier*), Cachí (*Rogers*), Turrialba, Tucurrique (*U.S. Nat. Mus.*); Panama (*Mus. Brit.*), Bugaba, Volcan de Chiriqui (*Champion*), Chiriqui (*coll. Fry*).

A common insect in Chiriqui. It is very closely related to *E. impositus*, both forms occurring at Turrialba; but the uniformly squamose under surface, the non-sulcate prothorax, and the different arrangement of the scales on the elytra readily distinguish *E. triangulifer*.

20. **Exophthalmus tessellatus,** sp. n. (Tab. XI. fig. 28, ♂.)

♂. Elongate, subfusiform, shining, black; densely clothed with pale ochreous scales, except on the following portions of the body—a line down the middle of the head and rostrum, a narrow vitta on the disc of the prothorax and another on each flank, the scutellum, the suture, a submarginal stripe, the lower margin, and various narrow transverse connecting lines on the elytra (leaving a series of eight large subquadrate ochreous patches on the disc and another along the flanks), and a narrow stripe down the middle of the body beneath,—which are sparsely cæruleo-squamose, like the legs and tip of the rostrum; the surface also set with minute scattered adpressed hairs. Head and rostrum closely punctate, almost smooth down the middle, the rostrum much longer than broad and distinctly canaliculate, the inter-ocular fovea small; antennæ rather slender, the scape reaching the posterior margin of the eyes, the latter rounded, large, and prominent. Prothorax transverse, obliquely narrowed anteriorly, bisinuate at the base, narrowly sulcate down the middle; irregularly foveato-punctate, and with a fine interstitial punctuation. Scutellum large. Elytra elongate-triangular, the apices each produced into a long tooth; the series of coarse punctures (which appear minute where covered by the ochreous scales) interrupted by the raised transverse lines connecting the sutural and submarginal partially denuded stripes. Anterior tibiæ strongly unguiculate.

Length $14\frac{1}{4}$, breadth $4\frac{2}{3}$ millim.

Hab. Costa Rica, Navarro 1400 metres (*Biolley*).

One male. A remarkably distinct form, approaching *E. sphacelatus* and various other Antillean species, and easily recognizable by the series of large, subquadrate, narrowly separated, pale ochreous patches on the disc and flanks of the elytra, the rest of their surface being sparsely cæruleo-squamose, like the legs.

21. **Exophthalmus albolineatus,** sp. n. (Tab. XI. fig. 29, ♀.)

Elongate, flattened above, black, the antennæ (the club excepted) and tarsi piceous, the latter ferruginous at the tip; clothed with olivaceous and green scales above and green scales beneath, the elytra each with a denser sinuous band of whitish scales running down the fourth or fifth interstice—this being broken up into spots or streaks beyond the middle—and a short whitish stripe along the basal fourth of the lower margin; the surface also set with very short, scattered, decumbent hairs. Head and rostrum rugulosely punctate, the rostrum longer than the head, flattened, and with an almost obsolete smooth median line, followed by a small inter-ocular fovea; eyes somewhat depressed, moderately large, separated by the full width of the upper portion of the rostrum; antennæ rather slender, the scape reaching the posterior margin of the eyes. Prothorax a little broader than long, cylindrical, narrowed in front, truncate at the base, obsoletely canaliculate; densely, finely punctate. Scutellum rather large. Elytra elongate-subtriangular, acuminate at the tip, the sutural angles divergent; finely punctate-striate, the interstices flat and densely punctulate. Fifth ventral segment with an oblique impressed line on each side in front. Legs rather slender, anterior tibiæ feebly unguiculate.

Length 14, breadth 5 millim. (♀.)

Hab. Mexico, Cordova (*Höge*).

One example, partly abraded above, the green scales distinctly clustered into patches along the sides of the elytra beyond the middle. This insect has the general facies of a *Chlorophanus*. The eyes are widely separated (though not so strictly lateral as in the Cyphina), the prothorax is truncate at the base and comparatively smooth, the elytra are flattened above and have an interrupted whitish stripe on the disc. The oblique lines on the fifth ventral segment are peculiar to the female, at least in the Cyphina.

22. **Exophthalmus albovittatus,** sp. n. (Tab. XI. fig. 30, ♀.)

Oblong, rather narrow (♂), broader (♀), black; above somewhat thickly clothed with small green or greenish-olivaceous scales, the prothorax with a denser submarginal vitta of pure white imbricate scales on each side, these stripes being continued down the disc of the elytra to near the apex, the scales around the eyes, along the lower margin of the elytra, and on the body beneath white, or, like those on the legs, white intermixed with green. Head and rostrum rugulosely punctate, the rostrum broad, a little longer than wide, obsoletely carinate, not or feebly foveate between the eyes, the latter rounded and moderately convex; antennæ rather slender, the scape not extending beyond the eyes. Prothorax broader than long, narrowed anteriorly, feebly bisinuate at the base, slightly hollowed or interruptedly canaliculate down the middle, and with a transverse depression opposite the scutellum; densely, rugulosely punctate. Scutellum small. Elytra subparallel for a short distance below the base in ♂, much broader and widened to the middle in ♀, flattened on the disc anteriorly, conjointly acuminate at the tip, the humeri not very prominent; rather finely punctate-striate, the interstices feebly convex and densely rugulose.

Length $10\frac{1}{5}$–12, breadth $3\frac{2}{5}$–$4\frac{1}{5}$ millim. (♂ ♀.)

Hab. GUATEMALA, Quiché Mountains 7000–9000 feet (*Champion*).

One pair. This species may be known by the dense pure white stripe extending down the disc of each elytron from the submarginal vitta on the prothorax, the rest of the scales on the upper surface being less crowded and green or olivaceous in colour. The scutellum is small and the humeri not very prominent. The rostrum is much broader and the humeri less prominent than in the Mexican *E. duplicatus*.

23. **Exophthalmus duplicatus,** sp. n. (Tab. XII. fig. 1, ♂.)

Elongate, somewhat fusiform, narrow (♂), broader (♀), black; above rather sparsely, and beneath densely, clothed with cinereous or green scintillating scales, the prothorax with a submarginal vitta on each side and another along the flanks, and the elytra with a broader irregular submarginal stripe and another along the lower margin, densely clothed with yellowish or white scales, the surface also set with minute scattered adpressed hairs and often partly covered by a powdery yellowish exudation. Head and rostrum rugulosely punctate, the rostrum rather narrow, much longer than broad, and very finely carinate; eyes large, rounded, moderately prominent; antennæ rather slender, the scape reaching the posterior margin of the eyes, joints 1 and 2 of the funiculus long, equal in length. Prothorax transverse, narrowed in front, bisinuate at the base, transversely depressed in the middle behind; with scattered, irregular, foveiform impressions intermixed with a fine interstitial punctuation. Elytra elongate-triangular in ♂, broader and widened posteriorly in ♀, conjointly acuminate at the apex, the humeri prominent; coarsely punctate-striate, the interstices punctulate and almost flat. Legs rather slender; anterior tibiæ strongly unguiculate.

Length 9–13, breadth 3–5 millim. (♂ ♀.)

Hab. MEXICO (*Truqui*), Las Vigas, Cordova, Oaxaca (*Höge*), Jalapa (*coll. Fry, Höge*).

Eleven specimens, one only (♂) with metallic scales, the others with the prothoracic and elytral vittæ intensified by a powdery yellow exudation. The rostrum is rather long and narrow (very like that of *Eustales curvimanus*) and the head comparatively small. *E. duplicatus* approaches *E. scalaris*, Boh.

24. **Exophthalmus clathratus,** sp. n. (Tab. XII. fig. 2, ♀.)

♀. Oblong, moderately broad, black; thickly clothed (except on the raised portions of the surface) with pale green scales, with a few blue scales intermixed on the head and along the suture, the femora and tibiæ also cæruleo-squamose. Head and rostrum rugulosely punctate, the rostrum a little longer than broad, sulcate on each side before the eyes and sharply carinate down the middle, the carina extending forwards to the transverse inter-antennal ridge and followed by an oblong inter-ocular fovea; eyes moderately large, rounded, convex; antennæ rather slender, the scape extending beyond the eyes. Prothorax rather convex, a little broader than long, rounded at the sides, slightly hollowed down the middle, feebly bisinuate at the base; irregularly reticulato-foveate and with a fine interstitial punctuation, the obliquely raised bare rugæ very conspicuous. Elytra broad, widening to the middle, acuminate and feebly mucronate at the apex; the entire surface reticulate with transversely confluent, sinuous, raised bare lines, interrupting the finely punctured striæ.

Length 14, breadth $5\frac{1}{2}$ millim.

Hab. MEXICO, Tumbalá in Chiapas (*Flohr*).

One specimen. Recognizable by the sharply carinate rostrum and the curious reticulate sculpture of the elytra, the transverse, confluent, raised, bare lines partly enclosing subquadrate or hexagonal viridi-squamose spaces, these becoming smaller towards the sides. The scales on the femora and tibiæ are pale blue, as in various species of *Compsus*.

25. **Exophthalmus vermiculatus,** sp. n. (Tab. XII. fig. 3, ♂.)

Oblong, rather convex, broad (♀), narrower (♂), black; densely clothed (except on some of the prominent rugæ of the upper surface) with whitish, coppery-white, or bluish-grey scales, and also set with a few scattered minute hairs. Head and rostrum densely punctate, the rostrum a little longer than broad and sharply carinate to the inter-ocular fovea or sulcus; antennal scape reaching the posterior margin of the eyes, the latter large and somewhat depressed. Prothorax about as long as broad in ♂, a little shorter in ♀, rounded at the sides, truncate at the base, and hollowed down the middle; coarsely, confluently foveolate, the intervening spaces oblique or sinuous and very prominent, and also with a fine dense punctuation. Scutellum well developed. Elytra convex, transversely depressed at the base, oblong-subtriangular in ♂, broad and widened to the middle in ♀, moderately acuminate and without mucro at the apex, the humeri obtuse; the rows of punctures interrupted by a network of transversely or obliquely confluent asymmetrical rugæ.

Length $13\frac{1}{4}$–15, breadth $4\frac{2}{5}$–$6\frac{1}{4}$ millim. (♂ ♀.)

Hab. MEXICO, Chiapas (*Sallé*).

Three specimens. A very rugose form approaching the Guatemalan *E. cæruleovittatus* and *E. bilineatus*, but with more convex elytra, the scales on the upper surface uniformly coloured, the anastomosing rugæ partly bare, &c. *E. vermiculatus* has the general appearance of a *Cleonus*.

26. **Exophthalmus cæruleovittatus,** sp. n. (Tab. XII. fig. 4, ♀.)

♀. Oblong, black, densely clothed with golden (or golden-green) and blue scales, the latter condensed into four vittæ on the prothorax (two on the disc and one on each flank) and three stripes on each elytron (one near the suture, broad, one at the sides, and one, narrow, along the lower margin), the scales around the eyes white, those on the legs and head blue or bluish-green; the surface also set with very short, fine, adpressed, scattered hairs. Head and rostrum rugulosely punctate, the rostrum longer than broad, finely carinate, the carina followed by a short inter-ocular groove; eyes rounded, convex; antennæ rather stout, the scape extending beyond the eyes. Prothorax broader than long, obliquely narrowed

anteriorly, hollowed down the middle and towards the sides, the median sulcus faintly canaliculate towards the apex, the base feebly bisinuate; foveato-punctate and transversely wrinkled. Elytra broad, gradually widened to the middle, acuminate and mucronate at the tip, the humeri not very prominent; with rows of rather fine scattered punctures which are each placed in a large foveæ, the fovea themselves here and there transversely confluent, the interstices uneven throughout.

Length $13\frac{1}{4}$–$15\frac{1}{2}$, breadth $4\frac{1}{2}$–$5\frac{1}{2}$ millim.

Hab. GUATEMALA, Cerro Zunil 4000 feet, Pacific slope (*Champion*).

Five specimens, probably all females. The prothorax and elytra in this insect have alternate pale blue and golden-green stripes, and the surface very uneven. The following is an allied form from the Atlantic slope of the same country.

27. **Exophthalmus bilineatus,** sp. n. (Tab. XII. fig. 5, ♀.)

♀. Oblong, black; densely clothed with golden-green and flesh-coloured (or pale cupreous) scales, the latter predominating on the head and rostrum, and condensed into two vittæ on the disc of the prothorax, a spot at each angle of the latter, and two stripes on each elytron (one, sinuous, running down the middle of the disc to near the apex, the other along the lower margin), the legs green with golden and cupreous tints, the minute scales between the bristles on the antennæ (except on the brown club) pale cupreous; the surface also set with very short, fine, adpressed, scattered hairs. Head and rostrum rugulosely punctate, the rostrum finely carinate, the carina followed by a short inter-ocular groove; eyes large, rounded, moderately prominent. Prothorax a little broader than long, narrowed anteriorly, depressed down the middle; confluently foveato-punctate. Elytra broad, parallel in their basal third, acuminate and mucronate at the tip, the humeri rather prominent; closely seriato-foveate, the rows 3–5 (covered by the carneous sinuous stripe) irregular or interrupted before the middle, the third interstice distinctly raised, the space between it and the suture flattened anteriorly.

Length $14\frac{3}{4}$, breadth $5\frac{1}{2}$ millim.

Hab. GUATEMALA, Purula in Vera Paz (*Champion*).

One specimen in very fresh condition. Very near *E. cæruleovittatus* (♀), but with the elytra parallel at the base, and each ornamented with a sinuous flesh-coloured stripe, which is limited inwards by the slightly raised third interstice, the prothorax with two similarly coloured vittæ on the disc; the foveæ (in which the small seriate punctures of the elytra are placed) large, the rows 3–5 interrupted or irregular.

28. **Exophthalmus sulcipennis,** sp. n. (Tab. XII. fig. 6, ♀.)

♀. Elongate, subcuneiform, shining, black; above sparsely, the legs and under surface densely, clothed with scintillating metallic-green scales, those on the prothorax condensed into a narrow vitta on each side of the disc and those on the elytra into a stripe down each alternate interstice. Rostrum longer than broad, with a rather broad, smooth, raised median line, which is continued narrowly backwards beyond the inter-ocular fovea; antennal scape reaching the posterior margin of the eyes, the latter rounded and prominent. Prothorax about as long as broad, subquadrate, slightly narrowed in front, feebly bisinuate at the base, and hollowed down the middle; irregularly, confluently foveolate and finely punctate. Scutellum rounded. Elytra elongate, widened to the middle, transversely depressed at the base, acuminate and sharply mucronate at the apex, the humeri not very prominent; with twelve rows of coarse punctures, the interstices transversely confluent, 3, 5, 7, and 9 raised, the others almost flat and squamose. Tibiæ without denticles, the anterior pair strongly unguiculate.

Length 17, breadth $5\frac{1}{2}$ millim.

Hab. GUATEMALA, Purula in Vera Paz (*Champion*).

One specimen. More elongate than the female of *E. jekelianus*; the rostral carina broader and less acute; the prothorax subquadrate; the alternate elytral interstices raised and almost bare, the others flattened and squamose, the apices more sharply mucronate. The tibiæ are not sulcate.

29. **Exophthalmus lunaris,** sp. n. (Tab. XII. figg. 7, ♂; 8, 8*a*, ♀.)

Oblong (♂), pyriform (♀), concave above as seen in profile, black; densely clothed with brown, olivaceous, or cinereous scales, those on the head, rostrum, antennal scape, and legs often cupreous; the prothorax, with a line down the middle and another along each side, the central one continued for some distance down the suture, and various other markings on the elytra—a streak on the fifth interstice below the base, three others along the flanks, a transverse crescentiform patch at about the middle of the disc, and an oblong or angulate streak near the apex,—also cupreous, greenish or dirty white, the elytral markings sometimes more extended and coalescent, so as to leave two stripes on the anterior part of the disc and a common post-median fascia darker than the rest; the surface also set with scattered, curled, decumbent, pallid setæ, the legs with bristly hairs. Head and rostrum densely punctate, the rostrum considerably longer than broad, not or obsoletely carinate, and with a triangular, smoother area behind the very short nasal plate, the inter-ocular fovea small or wanting; antennal scape reaching the posterior margin of the eyes, the latter large and not very prominent. Prothorax nearly as long as broad, a little shorter in ♀, subcylindrical, slightly narrowed anteriorly, canaliculate down the middle, and feebly bisinuate at the base; confluently foveolate, and with a dense fine interstitial punctuation. Scutellum well developed, convex. Elytra subparallel at the base in ♂, broader and rapidly widened to the middle in ♀, transversely depressed or concave anteriorly and gibbous behind, the apices acuminate and mucronate, the humeri obliquely truncate; with twelve rows of coarse punctures, the interstices feebly convex and densely punctulate, sometimes transversely wrinkled. Anterior tibiæ strongly unguiculate. Body winged.

Var. The markings on the prothorax and elytra wanting, the squamiform vestiture brown or coppery-brown, with a few white or cinereous scales intermixed, the prothorax with three sparsely squamose vittæ; the elytra of the ♀ less flattened anteriorly. [British Honduras.]

Length $9\frac{1}{2}$–17, breadth $3\frac{1}{4}$–6 millim. (♂ ♀.)

Hab. British Honduras (*Mus. Brit.*), Rio Hondo (*Blancaneaux*); Guatemala (*Sallé*), Cubilguitz, Chiacam, Cahabon, Senahu, San Juan, Purula, San Gerónimo (*Champion*), Coban (*Conradt*), Cacao near Trece Aguas (*Barber and Schwarz, in U.S. Nat. Mus.*).

The form of this insect selected as typical—that with sharply-defined cupreous markings on the elytra and three lines on the prothorax—has been found in plenty at San Juan and Trece Aguas, the specimens with more extended markings coming from Cubilguitz, &c. The immaculate variety is represented by five examples from British Honduras, all the others being from Vera Paz. The gibbous, basally depressed elytra, and the subpyriform body of the female, give this insect the general facies of a *Brachyomus* (type *Curculio octotuberculatus*, F.) or *Synthlibonotus*, from which it may be separated by the long, lateral, obliquely descending scrobes, the free outer striæ of the elytra, the presence of supplementary striæ on the disc of the latter, &c.

30. **Exophthalmus viridilineatus,** sp. n. (Tab. XII. fig. 9, ♀.)

♀. Oblong, somewhat pyriform, shining, black; the head with a narrow stripe on each side between the eyes, the prothorax with three narrow vittæ, the scutellum, and the elytra with the suture, a stripe down the sixth interstice, and another along the lower margin, densely clothed with glittering green scales, the

sides of the body beneath, the basal margin of the first ventral segment, and the legs also viridi-squamose, the rest of the surface almost bare. Head and rostrum sparsely punctate, the rostrum longer than broad, smooth and raised along the median line, the inter-ocular fovea small; eyes large, depressed; antennæ rather slender, the scape reaching the front of the prothorax. Prothorax slightly broader than long, somewhat rounded at the sides, narrowing from the middle forwards, bisinuate at the base; sparsely granulate, the space occupied by the three narrow vittæ depressed. Scutellum transverse. Elytra elongate, widened to the middle and then arcuately narrowing to the broadly produced apical portion, with a common transverse excavation at the base, the apices mucronate, the humeri not prominent; finely seriato-punctate, the interstices flat, 6 slightly depressed. Fifth ventral segment tumid along the middle posteriorly. Legs rather slender; anterior tibiæ strongly unguiculate; posterior tibiæ irregularly denticulate to the apex within.

Length $16\frac{1}{2}$, breadth $5\frac{4}{5}$ millim.

Hab. Panama, Chiriqui (*Mus. Brit., ex coll. Fry*).

One specimen. A species sharply viridi-trilineate above, and with the rest of the upper surface almost bare and shining, the elytra feebly seriate-punctate and with a deep transverse post-scutellar excavation, the tibiæ not sulcate the posterior pair irregularly denticulate. *E. viridilineatus* approaches the trilineate variety of *E. sulcicrus*, which has a sharply carinate rostrum, distinctly sulcate tibiæ, &c.

31. **Exophthalmus jekelianus.** (Tab. XII. fig. 10, ♀.)

Præpodes jekelianus, White, Ann. & Mag. Nat. Hist. (3) ii. p. 357 (1858) (♀ nec ♂)[1].
Eustales stellaris, Pascoe, Ann. & Mag. Nat. Hist. (5) v. p. 425 (1880)[2].

Oblong, narrow (♂), broader (♀), shining, black or piceous, the tibiæ and the base of the femora ferruginous in immature specimens; thickly clothed (more sparsely on the disc of the elytra) with small green or cinereous scales, which are condensed into two faint submarginal vittæ on the prothorax and numerous sharply-defined spots on the elytra (mainly on the alternate interstices), the metasternum and first two ventral segments almost bare down the middle; the legs viridi- or cinereo-squamose, the scales on the tibiæ and apices of the femora often violaceous or blue; the surface also set with very short (or longer) scattered hairs. Rostrum longer than broad, widened anteriorly, convexly raised and smooth along the median line; head feebly foveate between the eyes, the latter large, rather depressed, and separated by about their own width; antennal scape reaching the front of the prothorax, the club long. Prothorax transverse, bisinuate at the base, broadly flattened or depressed down the middle, irregularly, confluently foveato-punctate. Elytra subparallel in their basal half in ♂, widened posteriorly in ♀, convex, with a common transverse depression behind the scutellum, mucronate at the tip; with twelve rows of rather coarse punctures, the interstices here and there transversely confluent. First ventral segment slightly depressed down the middle in ♂. Tibiæ slender, not grooved externally, the anterior pair strongly unguiculate, the posterior pair usually irregularly denticulate within in ♀.

Length 8–13, breadth $2\frac{3}{4}$–5 millim. (♂ ♀.)

Hab. Nicaragua, Chontales (*Belt*, *Janson*); Costa Rica, Rio Sucio (*Rogers*), Turrialba (*Pittier*, *Biolley*), Siquirres, Reventazon, La Palma, La Flor (*Biolley*), Chirripo, Tuis (*Pittier*), Azahar de Cartago, Monte Retondo (*Underwood*), San Carlos, Zent, Puerto Limon (*U.S. Nat. Mus.*), Piedras Negras (*coll. Solari*); Panama[2], Bocas del Toro (*U.S. Nat. Mus.*); Pacific Shore of Central America[1].

Apparently a common insect in Nicaragua and Costa Rica, but I have not seen it from Chiriqui. Amongst the long series examined, seven only have the scales cinereous, instead of green, the form described by White and Pascoe. In a few

examples (cinereous and green) the scattered, intermixed, minute, hair-like scales on the elytra are replaced by long erect setæ towards the apex. This species, as already stated (cf. *anteà*, p. 230), bears an extraordinary resemblance (in both forms) to *Mimographopsis pustulatus*.

The type of *P. jekelianus* (labelled by White himself) is a female obtained from the collection made by Capt. Kellett during the voyage of H.M.S. 'Herald'; it was doubtless captured at Panama. The male of White's species has grooved tibiæ and it belongs to *E. sulcicrus*, infrà. One of Pascoe's types of *E. stellaris* is figured.

32. **Exophthalmus plicatus**, sp. n. (Tab. XII. fig. 11, ♀.)

♀. Oblong, shining, black, the femora (the apices excepted) and tibiæ rufo-piceous; sparsely clothed with glittering metallic-green, golden, and cupreous scales—those on the prothorax and the elytra placed in the depressed portions of the surface, and those on the lower surface confined to the sides of the body; the legs with a few bristly hairs. Head and rostrum closely, finely punctate, smooth down the middle, the rostrum longer than broad and with the median space raised and cariniform, the inter-ocular fovea small; antennal scape reaching the posterior margin of the eyes, the latter depressed. Prothorax transverse, rounded at the sides; narrowed in front, bisinuate at the base, hollowed down the middle; irregularly, confluently foveolate. Scutellum depressed. Elytra oblong, rather convex, gradually widened to the middle, acuminate and mucronate at the apex, with a common transverse excavation at the base, the apices not divergent, the humeri not very prominent; the rows of punctures (except along the suture and lower margin) interrupted or obliterated by numerous, smooth, closely placed, transverse or oblique, confluent ridges, the depressions between which are clothed with scales. Legs rather slender, the femora and tibiæ comparatively smooth; tibiæ not sulcate, the anterior pair strongly unguiculate, the posterior pair irregularly denticulate to the tip within.

Length $12\frac{1}{2}$, breadth $4\frac{1}{3}$ millim.

Hab. PANAMA, Tolé (*Champion*).

One specimen. Not unlike the typical form of *E. sulcicrus*, but with the numerous transverse, confluent, raised lines on the elytra extending across the disc from near the suture to the lower margin (obliterating or interrupting the striæ), and the mucronate sutural angles not divergent, the rostrum less sharply carinate, the tibiæ smoother and not sulcate.

33. **Exophthalmus sulcicrus**, sp. n. (Tab. XII. figg. 12–15.)

Præpodes jekelianus, White, Ann. & Mag. Nat. Hist. (3) ii. p. 357 (1858) (♂ nec ♀)[1].

Oblong, narrow (♂), broader and widened posteriorly (♀), shining, black; in the typical form variegated with green, cupreous, cinereous, or whitish scales—which are usually clustered into large patches towards the sides of the elytra, or condensed into three vittæ on the prothorax, and a sutural, submarginal, and marginal (lower) stripe on the elytra,—the scales on the legs varying in colour from green to cupreous or golden, sometimes blue on the knees and tibiæ and for the rest green; in the form with more rugose upper surface the larger scales almost wholly wanting and the punctures each bearing a minute, hair-like, pallid scale. Head and rostrum rugulosely punctate, the rostrum longer than broad, carinate down the middle, and often with an oblique finer ridge on each side extending to near the inter-ocular fovea; eyes large, depressed; antennal scape reaching the front of the prothorax. Prothorax transverse, obliquely narrowed forwards, bisinuate at the base, more or less depressed or canaliculate down the middle. the hind angles acute, directed outwards in ♀, and backwards in ♂, the surface granulate. Scutellum rather large. Elytra elongate-triangular in ♂, much broader and widened to the middle in ♀,

mucronate and slightly divergent at the tip, and with a common transverse depression behind the scutellum, the humeri not very prominent, obliquely cut off in front; with twelve rows of coarse subapproximate punctures, which are sometimes placed in rather deep striæ, the interstices often transversely confluent or more rarely granulate. Tibiæ irregularly denticulate to the apex within and more or less distinctly sulcate externally, the anterior pair strongly unguiculate in both sexes.

Length $7\frac{1}{2}$–$17\frac{1}{2}$, breadth $2\frac{2}{3}$–$6\frac{1}{2}$ millim. (♂ ♀.)

Hab. Guatemala; Nicaragua; Costa Rica; Panama.—Colombia, Choco [1].

This is one of the commonest of the winged Otiorhynchids in the warmer parts of Central America, from Guatemala southward, and it is unnecessary to enumerate the precise localities where the insect has been captured. Five forms of it may be noted:—

α. The scales clustered into large confluent patches towards the sides of the elytra, and sometimes into one or three vittæ on the prothorax also (♂ ♀). [Fig. 12, ♂.] [*jekelianus*, White (part.).]—Guatemala to Colombia.

β. The scales clustered into small patches over the whole of the elytral surface (♀). [Fig. 13, ♀.]—Costa Rica, Panama.

γ. The scales clustered into one or three vittæ on the prothorax, and a sutural, submarginal, and marginal stripe on the elytra, the rest of the upper surface almost bare (♂ ♀). [Fig. 15, ♀.]—Guatemala to Panama.

δ. The scales clustered into a faint submarginal vitta on each side of the prothorax and an interrupted submarginal stripe on the elytra (♂ ♀). [Fig. 14, ♂.]—Guatemala to Panama.

ε. The larger scales almost wholly replaced by minute, scattered, hair-like, pallid scales; the prothorax closely granulate, the elytral interstices rugose, the swollen portion of the femora smooth, almost bare, and usually rufous, the tibiæ more deeply sulcate.—Costa Rica, Panama.

These varieties are connected by intermediate forms: *γ* is represented by females only, and *ε* by a long series from Chiriqui, so that the specimens are probably not all abraded. White did not observe the grooved tibiæ of the male of his *P. jekelianus*, though he referred it somewhat doubtfully to the same species, the type of which is correctly stated to be a female. The tibial groove, it may be observed, is partly hidden by the scales, and it therefore appears deeper in the less densely squamose varieties. We figure four examples: a male of the typical form (*α*) from Chontales; a female of the var. *β* from Chiriqui; a male of the var. *δ* from Costa Rica; and a female of the var. *γ* from Guatemala.

34. **Exophthalmus roralis.** (Tab. XII. fig. 16, ♂.)

Præpodes roralis, Boh. in Schönh. Gen. Curc. vi. 1, p. 356 [1].
Hypsonotus chlorogaster, Chevr. in coll. Sallé [2].

Oblong, rather convex, narrow (♂), broad and subconical (♀), black or piceous, shining; mottled above with a rather dense clothing of small cinereous or pale brown scales (which are often condensed into two broad faint vittæ on the prothorax and are wanting on various, smoother, bare, irregular spaces on the elytra) and also set with long, stiff, erect setæ, the scales on the legs, apex of elytra, and under surface varying in colour from cinereous to green. Head and rostrum closely punctate, the rostrum longer than broad, depressed at the base, and with a smooth raised median line, which is followed and preceded by a rather deep fovea; antennæ long, the scape reaching to the posterior margin of the eyes, the latter rounded and prominent. Prothorax a little broader than long, rounded at the sides, truncate at the base; rather coarsely, confluently punctate. Elytra subparallel at the base in ♂, broad and widened to the middle in ♀; coarsely punctate-striate, the interstices almost flat.

Length 7–$10\frac{1}{4}$, breadth $2\frac{1}{3}$–$4\frac{1}{3}$ millim. (♂ ♀.)

Hab. Mexico (*coll. Sommer*[1]; *Flohr*), Juquila in Oaxaca (*Sallé*[2]).

Mr. Janson has lent us the types of this insect (♂ ♀) from the Sommer collection, and I have seen about a dozen others, including a series from Juquila. The species is scarcely recognizable from Boheman's description. The mottled vestiture and erect setæ, the truncate base of the prothorax, the basally depressed, subcarinate rostrum, and the prominent eyes are its chief characters. The scales are metallic green on the legs and under surface in the type (♂) (fig. 16) and some of the other examples before me.

CHAULIOPLEURUS, gen. nov.

Elytra with the flanks subangularly dilated or tumid below the humeri, the lower margin strongly sinuate, the humeri somewhat prominent in the fully winged type, obtuse in the other species, the supplementary striæ present; rostrum widened anteriorly, uni- or tricarinate, the nasal plate triangular, bare, the scrobes lateral, deep, and descending; eyes large, not prominent; antennal scape about reaching the anterior margin of the prothorax; scutellum small; tibiæ convex on their outer edge, the posterior pair narrowly laminate and biciliate at the apex, denticulate along their outer half within (at least in ♀), and with the glabrous articular surface large; body polished and almost bare in the type, the depressions of the prothorax and elytra squamose in *C. quadrifoveatus*; wings fully developed or rudimentary.

Type, *C. adipatus.*

The three Costa Rican forms referred to this genus approach *Exophthalmus jekelianus* and its allies, but are readily separable therefrom by the peculiar shape of their elytra. They all have the meso- and metasternal side-pieces largely developed, as usual in the winged forms. The three species, the type being only constantly winged, differ greatly in general facies: *C. adipatus* has inflated, subglabrous, polished elytra and the humeri prominent; *C. rufovittatus* is flattened on the disc and has rufo-vittate elytra; *C. quadrifoveatus* has the disc of the prothorax and the base of the elytra (behind the scutellum and on the outer part of the disc) deeply excavate, and the depressed spaces squamose. The last-mentioned insect approaches *Synthlibonotus*, Schönh. (type *S. rufipes*, Lacord.), but differs from it in having less inflated, 10-striate elytra, the scrobes more strictly lateral, the metathoracic episterna more dilated anteriorly, &c.

1. **Chauliopleurus adipatus,** sp. n. (Tab. XII. figg. 17, 17 *a*, ♂.)

Moderately elongate, acuminate-ovate, narrow (♂), broader (♀), shining, black, the femora (the apices excepted) and tibiæ rufous; when fresh clothed towards the sides (above and beneath), and on the tarsi above, with scattered minute blue scales, which give a pruinose appearance to the surface, the elytra also with a few semierect white setæ. Rostrum a little longer than broad, sparsely punctate, convexly raised or subcarinate down the middle, the inter-ocular fovea small; antennæ rather slender, the scape reaching the front of the prothorax; eyes not prominent. Prothorax broader than long, feebly bisinuate at the base, subconical in ♀, the sides parallel behind in ♂; broadly depressed and obsoletely canaliculate down the middle, the disc with a few scattered intermixed minute and larger punctures, and sometimes transversely wrinkled, the sides confluently foveolate. Scutellum small. Elytra inflated, oblong-subtriangular in ♂, broader and widened to the middle in ♀, transversely depressed at the base, and with an oblong smooth tuberculiform prominence on the flanks between the two outer striæ below the humeri, the latter tumid, the apices sharply, separately mucronate; finely seriate-punctate, the interstices flat, obsoletely punctate and usually transversely wrinkled towards the sides. Femora and tibiæ shining and

almost smooth, the tibiæ sparsely setose within, the anterior pair, and sometimes the others also, feebly denticulate. Wings fully developed.

Length $8\frac{3}{4}$–13, breadth 3–$4\frac{4}{5}$ millim. (♂ ♀.)

Hab. Costa Rica, Irazu, Rio Sucio (*Rogers*), La Palma (*Pittier*, *Biolley*), Savanillas de Pirris (*Underwood*), Cariblanco, Carrillo (*U.S. Nat. Mus.*).

Sent us in abundance from La Palma and Irazu. Separable at once from its allies by the very shining, almost glabrous, greasy-looking, black body, and the inflated elytra, with the flanks conspicuously nodose below the base and the humeri prominent. The spiniform prominences at the apex vary in development, and are often considerably lengthened in the female. *C. adipatus* has quite the facies of an *Otiorhynchus*.

2. **Chaulioplеurus rufovittatus,** sp. n. (Tab. XII. figg. 18, 18 *a*, ♀.)

Somewhat fusiform, flattened or concave above, shining, black, the femora (except at the apex), tibiæ, and a broad submarginal stripe on each elytron, rufous; the upper surface (except the disc of the prothorax and the sutural region of the elytra) and the sides of the body beneath clothed when fresh with very minute, scattered, blue or cinereous scales, which are soon abraded. Head and rostrum finely punctate, the rostrum tricarinate, the inter-ocular space depressed and feebly foveate; eyes large, not prominent. Prothorax slightly broader than long, subcylindrical, obliquely narrowed anteriorly, broadly depressed or flattened down the middle and sometimes with a short median sulcus behind, feebly bisinuate at the base; with irregularly scattered, coarse, transversely confluent punctures intermixed with a fine interstitial punctuation, the flanks rugose. Scutellum small. Elytra oblong-oval in ♂, broader in ♀, transversely excavate at the base, somewhat tumid at the sides below the shoulders (appearing obliquely narrowed anteriorly), flattened along the suture, gradually sloping outwards, and abruptly declivous at the apex, the humeri not prominent, the apices acuminate, feebly mucronate in ♂; finely seriate-punctate, the interstices broad, flat, finely granulate towards the sides. First ventral segment flattened or depressed down the middle in ♂. Legs rather slender, the femora and tibiæ almost smooth. Wings fully developed or rudimentary.

Length $8\frac{2}{3}$–$13\frac{1}{2}$, breadth 3–$4\frac{3}{4}$ millim. (♂ ♀.)

Hab. Costa Rica (*coll. Solari*), La Palma 1600-1700 metres (*Biolley*), Azahar de Cartago (*Underwood*).

Described from seven examples, two of which belong to Signor Solari. Easily recognizable by the somewhat concave upper surface of the body (as seen in profile), the rufo-vittate, sloping lateral portions of the elytra, and the non-prominent humeri. The wings are fully developed in one specimen, and rudimentary in another, of the two individuals (♀) softened for examination.

3. **Chaulioplеurus quadrifoveatus,** sp. n. (Tab. XII. figg. 19, 19 *a*, ♀.)

Moderately elongate, oval, shining, black, the legs sometimes piceous; the prothoracic cavity, the lateral excavations of the elytra, and an oblong space on the flanks between the latter and the lower margin somewhat densely clothed with white, green, or blue scales; the rest of the upper surface and the sides of the body beneath with scattered, whitish, green, or fuscous scales intermixed on the elytra with conspicuous semierect pallid setæ; the legs and antennæ with bristly hairs. Head and rostrum sparsely punctate, the rostrum widened outwards, a little longer than broad, carinate down the middle and with an oblique ridge on each side, the inter-ocular space depressed and feebly foveate; antennal scape reaching to the front of the prothorax; eyes large, depressed. Prothorax transverse, rounded at the

sides, obliquely narrowed anteriorly, feebly bisinuate at the base, the disc with a very large, oval or rounded, excavation extending from the base to near the apex; the entire surface shallowly, confluently foveolate and finely punctate. Scutellum transverse, small. Elytra broad, slightly narrower in ♂, inflated, oval, usually more or less tumid on the flanks at a little below the shoulder, with a common, deep, transverse excavation at the base, and a very large, broad, oblong or oblique depression on each side of it between the third interstice and the outer margin, the apices conjointly produced and usually obliquely truncate or mucronate at the tip; punctate-striate, the third interstice smooth, widened, sinuous, and more or less raised, the others sometimes raised or transversely wrinkled. Second ventral segment with a large, deep, angular, plicate excavation on each side behind in both sexes, the first broadly depressed down the middle in the male. Wings short, useless for flight.

Length $10\frac{1}{5}$–$13\frac{1}{2}$, breadth $3\frac{9}{10}$–$5\frac{1}{2}$ millim. (♂ ♀.)

Hab. Costa Rica (*Van Patten*), Rancho Redondo 1700 metres (*Underwood*), Poas, 7000 feet (*Schaus, in U.S. Nat. Mus.*), Turrialba 6500–8800 feet (*Lankester, in U.S. Nat. Mus.*), Irazu (*U.S. Nat. Mus.*).

I have seen eight specimens of this peculiar insect, varying in the colour of the scales on the excavate portions of the surface (which are often covered with an ochreous exudation) and in the greater or less inflation of the elytra. The sutural region of the elytra to about the middle and the raised portions of the prothorax are usually almost bare. The deep, angular, plicate depression on each side of the second ventral segment is noteworthy.

EUSTALES.

Eustalis, Germar, Ins. Spec. Nov. p. 453 (1824).

Eustales, Schönherr, Curc. Disp. Meth. p. 113 (1826); Gen. Curc. i. p. 649; Lacordaire, Gen. Col. vi. p. 118.

Phaops, Sahlberg, Peric. Ent. p. 25 (1823) (sine descr.).

A single species from the Pacific slope of Guatemala is referred to this genus*, the type of which is *Curculio thunbergi*, Dalm.; both these insects (and *E. adamantinus*, Germ., also) have the surface of the body densely viridi-squamose, and the prothorax and elytra albo-lineate. The chief structural characters are as follows:—

Rostrum longer than broad, dilated inferiorly towards the apex, with a densely squamose, sharply-defined, triangular nasal plate, and the upper portion parallel-sided, the genæ not or feebly marginate, the scrobes lateral and running direct to the lower anterior portion of the eyes, the latter oval, large, and not very prominent; scutellum well developed; elytra lobed at the base, regularly 10-striate, the outer striæ entire; anterior tibiæ abruptly bowed, stout, denticulate and unguiculate; posterior tibiæ laminate and densely clothed with long scales at the apex, the glabrous articular surface short and feebly cavernous.

1. **Eustales curvimanus,** sp. n. (Tab. XII. figg. 20, 20 *a*, *b*, ♂.)

♂. Elongate, narrow, black, the legs and antennæ piceous; thickly clothed with glittering pale green scales, the prothorax with two lines on the disc and another on each flank (all of them extending on to the head), and the elytra with the suture, the third interstice, and a broad stripe along the flanks, more densely set with imbricate whitish scales. Head and rostrum rugulosely punctate, the rostrum much longer than

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* *E. impositus* and *E. stellaris*, Pasc., are here placed under *Exophthalmus*.

the head, the flattened upper portion parallel-sided, the head with a short, fine, longitudinal groove between the eyes and a smooth space behind them; eyes oval, large, somewhat depressed; antennæ rather slender, joints 1 and 2 of the funiculus subequal in length, the others shorter and obconic. Prothorax gradually narrowed anteriorly, the sides parallel behind, the base deeply bisinuate; rugulosely punctate. Elytra narrowing from about the middle, bisinuate at the base, produced at the apex, the apices each armed with a prominent tooth at the sutural angle, the humeri obtuse and somewhat tumid; finely punctate-striate, the interstices rugulose, 1 (suture), 3, and 7 more or less raised. First ventral segment hollowed down the middle. Anterior tibiæ strongly, and the intermediate pair feebly, unguiculate; the anterior pair (fig. 20 *b*) stout, abruptly bowed, closely denticulate, and ciliate within.
Length $8\frac{1}{3}$, breadth $2\frac{3}{4}$ millim.

Hab. GUATEMALA, Zapote (*Champion*).

One specimen. Not unlike the Brazilian *E. thunbergi*, Dalm. (=*pentachordius*, Germ.), but less elongate, the rostrum, antennæ, and prothorax shorter, the scales larger and less densely packed, the elytra each armed with a strong tooth at the sutural angle. The anterior tibiæ are similarly bowed in the two species.

DECASTICHA, gen. nov.

Rostrum a little longer than broad, the upper portion obliquely divergent on each side of the triangular smooth nasal plate, the scrobes lateral, deep, curved, and descending; eyes not strictly lateral, moderately large, rounded; antennæ rather slender; prothorax feebly bisinuate at the base; scutellum well-developed; elytra much wider than the prothorax, separately rounded at the base, with the humeri moderately prominent and oblique in front, 10-striate, the outer striæ entire; legs rather slender; tibiæ without conspicuous denticles on their inner edge, the anterior and intermediate pairs unguiculate, the posterior pair laminate at the apex and with the glabrous articular surface short and cavernous; body winged, oblong or elongate, squamose.
Type, *D. subocellata*.

The four Costa Rican or Panama insects referred to this genus are closely related *inter se*, though not very similar in general appearance. The 10-striate elytra separates them from *Exophthalmus*; and the non-squamose nasal plate, the less abruptly bowed anterior tibiæ, the rounded eyes, the non-lobate base of the elytra, &c., distinguish them from *Eustales* (type *Curculio thunbergi*, Dalm.). *D. subocellata* superficially resembles *Exophthalmus obsoletus* (Oliv.) and *D. decemguttata* is marked like *E. jekelianus* (White). *Decasticha* will include at least one undescribed Colombian form (*Eustales gemmeus*, Klug, in litt.) in the British Museum.

1. **Decasticha subocellata,** sp. n. (Tab. XII. fig. 21, ♀.)

♀. Elongate, black, densely clothed with whitish scales, the prothorax and elytra confusedly variegate on the disc with fuscous scales, those on the elytra enclosing numerous small and two larger (longitudinally placed, transverse or rounded) whitish spots, the flanks of the elytra with a dark-edged spot at about the basal fourth; the surface also set with minute, scattered, decumbent setæ. Head and rostrum densely, finely punctate, the rostrum depressed down the middle to the feeble inter-antennal ridge and finely canaliculate to the small inter-ocular fovea; antennæ rather slender, the scape about reaching the posterior margin of the eyes, the latter rounded. Prothorax broader than long, bisinuate at the base, obliquely narrowed anteriorly; densely, finely punctate, and with some coarse scattered punctures along the sides, the disc incompletely sulcate down the middle and strongly, arcuately depressed at the base. Scutellum subquadrate. Elytra one-half wider than the prothorax, subparallel in their basal half,

acuminate and feebly mucronate at the tip, and broadly flattened towards the suture anteriorly; punctate-striate, the punctures becoming larger on the disc, the interstices densely punctulate and more or less convex throughout.

Length 16, breadth $5\frac{1}{2}$ millim.

Hab. Costa Rica (*coll. Fry*).

One female. This insect has the upper surface marked very much as in the Antillean *Exophthalmus obsoletus* (Oliv.). The broader elytra, with convex interstices, and the less elongate larger ocellated spots (which are also placed nearer the middle of the disc), distinguish *D. subocellata* from *D. quadriplagiata*.

2. **Decasticha quadriplagiata,** sp. n. (Tab. XII. fig. 22, ♀.)

♀. Elongate, subfusiform, black; densely clothed with small cinereous scales, the elytra confluently or asymmetrically nigro- or fusco-annulate to near the apical declivity (the prothorax also in one specimen with four irregular dark annuli on the disc), and each with two large, oblong, subangular, dark-edged spots on the outer part of the disc and a smaller spot near the lower margin (the enclosed spaces whitish, when the yellow exudation is removed); the surface also set with a few scattered, minute, decumbent setæ. Head and rostrum densely, finely punctate, the latter with a smooth median line extending backward to the narrow inter-ocular fovea; eyes convex; antennæ rather slender, joints 1 and 2 of the funiculus equal in length. Prothorax transverse, bisinuate at the base, the sides parallel behind and obliquely converging anteriorly; densely, finely punctate, and with some coarse scattered punctures along the sides, the disc broadly flattened down the middle, obsoletely canaliculate posteriorly, and arcuately depressed at the base. Scutellum small, flattened. Elytra elongate, subparallel in their basal half, acuminate and feebly mucronate at the tip, broadly flattened towards the suture; very finely punctate-striate, the punctures becoming larger on the disc, the interstices densely punctulate, flat, 5 convex at its point of termination.

Length $13\frac{1}{5}$–$14\frac{1}{2}$, breadth $4\frac{1}{2}$–$4\frac{3}{4}$ millim.

Hab. Panama, Volcan de Chiriqui (*Champion*), Chiriqui (*Trötsch, ex Staudinger*).

Two examples, one with the whitish scales on the larger submarginal spots on the elytra covered by a yellow exudation.

3. **Decasticha tetrastigma,** sp. n. (Tab. XII. fig. 23, ♀.)

♀. Moderately elongate, subfusiform, nigro-piceous or black; clothed with intermixed green, golden, and cinereous scales, which are condensed into two large oblong patches on the outer part of the disc of each elytron; the surface also somewhat closely set with short decumbent setæ. Head and rostrum closely punctulate, the latter canaliculate to the inter-ocular fovea; eyes somewhat depressed; antennæ slender. Prothorax transverse, feebly bisinuate at the base, obliquely narrowed anteriorly, densely punctulate, and with a few widely scattered coarse punctures, which become more numerous along the sides, the disc broadly depressed and uneven down the middle and sometimes with a small oblong fovea opposite the scutellum. Elytra elongate, subparallel in their basal half, acuminate and mucronate at the tip, broadly flattened on the inner half of the disc, and with two large, oblong, depressed spaces towards the sides; punctate-striate, the punctures coarse on the disc.

Length 10–$12\frac{3}{4}$, breadth $3\frac{1}{3}$–$4\frac{1}{2}$ millim.

Hab. Costa Rica, Irazu (*Rogers*), Turrialba (*Lankester, in U.S. Nat. Mus.*).

Three females, all more or less rubbed above and one with the oblong depressions on the outer part of the disc of the elytra coated with a yellow exudation.

4. **Decasticha decemguttata,** sp. n. (Tab. XII. fig. 24, ♂.)

♂. Oblong, narrow, moderately shining, black; above rather sparsely, the under surface densely, clothed with glittering green, golden, and blue scales, which are here and there clustered into small spots on the elytra, the elytra also each with five rather larger patches of pallid scales (two placed transversely at about the basal fourth—one on the fourth interstice and one near the lower margin beneath,—two placed transversely on the outer part of the disc beyond the middle, and one near the apex); the surface also set with scattered decumbent minute setæ. Head and rostrum sparsely punctate, the rostrum longer than broad, obsoletely canaliculate to the rather deep inter-ocular scales; antennal scape not reaching the posterior margin of the eyes, the latter large, rounded, and moderately prominent. Prothorax nearly as long as broad, bisinuate at the base, the sides becoming parallel posteriorly and converging in front; sparsely punctate and with coarser punctures along the flanks, the disc with a large, deep, horseshoe-shaped excavation preceded by a short median sulcus. Scutellum large. Elytra elongate-triangular, flattened towards the suture, mucronate at the tip, the humeri obliquely truncate in front; with ten rows of rather coarse punctures, the interstices closely punctulate and almost flat.

Length 9, breadth $2\frac{4}{5}$ millim.

Hab. Costa Rica (*Mus. Brit., ex coll. Sharp*).

One male, rather worn above, probably captured by Biolley. Very like *Exophthalmus jekelianus* (= *stellaris*, Pasc.), but with ten striæ only on the elytra, the elytra themselves narrowing from the base and flattened along the suture; the rostrum feebly canaliculate (instead of carinate); the prothorax more elongate; the legs and antennæ shorter. The elytra are shorter and differently marked, and the eyes much larger, than in *D. tetrastigma*.

CLÆOTEGES.

Clæoteges, Pascoe, Ann. & Mag. Nat. Hist. (5) v. p. 427 (1880).

Rostrum with a large triangular or subcordate bare nasal plate, the declivous horseshoe-shaped subapical portion limited laterally by a sharp carina, the carinæ sometimes extending longitudinally backwards, the scrobes very deep, sinuous, lateral, running to beneath the eyes, the latter large, not strictly lateral, oval as seen from above; scutellum small; elytra much wider than the prothorax, 10-striate, the outer striæ entire, the humeri prominent; first ventral suture feebly sinuate; femora dentate; all the tibiæ unguiculate in both sexes; body oblong, squamose, winged.

Type, *C. virosus*, Pasc.

Four species are now known of this well-defined genus, all peculiar to Central America. They may be separated by the following elytral characters:—

Third interstice with a prominent, curved, abruptly terminated ridge, the suture raised behind the scutellum . . . . . *virosus,* Pasc.

Third interstice with an anteriorly evanescent, straight, abruptly terminated ridge, the suture not raised at the base . . . . . *granulosus,* sp. n.

Third and fifth interstices each with a series of tubercles, the terminal one on the third large . . . . . *tuberculosus,* sp. n.

Third and fifth interstices feebly raised to near the apex . . . . . *obliteratus,* sp. n.

1. **Clæoteges virosus.** (Tab. XII. figg. 25, 25 *a*, ♀; 25 *b*, wing.)

Clæoteges virosus, Pascoe, Ann. & Mag. Nat. Hist. (5) v. p. 428[1].

♂. Elytra oblong-subtriangular, with a short straight dentiform prominence at the sutural angle.

♀. Elytra broader, suparallel to near the middle, and with a longer and stouter tooth at the sutural angle.

Length $8\frac{4}{5}$–$12\frac{1}{2}$, breadth 3–$4\frac{2}{5}$ millim. (♂ ♀.)

Hab. GUATEMALA, El Reposo, Las Mercedes, and Cerro Zunil, Pacific slope (*Champion*); NICARAGUA, Chontales[1] (*Belt, Janson*); COSTA RICA, Cariblanco, Sarapiqui (*Lankester*), Turrialba, San Carlos (*Dresden Mus.; U.S. Nat. Mus.*); PANAMA, Bugaba (*Champion*).

Found in profusion at Cerro Zunil. The vestiture varies in colour from almost uniformly brown to cinereous, with darker markings, the apical declivity being always paler than the space between the dorsal ridges; the Nicaraguan and Costa Rican examples have patches of green scales intermixed, and those from Panama are whitish, with the rostrum, head, and front tibiæ cupreous. The prothorax has the coarse granules on the median portion of the disc bare, so that the sides appear broadly vittate. The suture of the elytra is raised on each side of the scutellum, and the prominent curved ridge running down the third interstice terminates abruptly in a large tubercle at the commencement of the apical declivity, there being another tubercle at the end of the fifth; the seriate punctures are usually each placed in a shallow transverse foveiform depression, sometimes appearing quite small till the scales are removed. The wing (fig. 25 *b*) in the large females measures 15 mm. A Costa Rican specimen is figured.

2. **Clæoteges granulosus,** sp. n. (Tab. XII. figg. 26, 26 *a*, ♂.)

Oblong, narrow (♂), broader (♀), black or piceous; variegate with brown (or coppery-brown) and cinereous scales, the elytra usually with small patches of green scales intermixed and the apical declivity abruptly paler, the prothorax often with a green patch at each hind angle and another on the flanks, the cinereous scales rarely predominating over the whole surface; the elytral interstices each with a row of semierect stiff setæ. Head and rostrum densely, finely punctate, the rostrum bicarinate above, appearing hollowed down the middle from the transverse inter-antennal ridge, the latter extending obliquely forwards on each side; eyes very large, oval as seen from above, separated by about half the width of the rostrum. Prothorax transverse, slightly rounded at the sides, the hind angles rather prominent; densely, finely punctate and sparsely granulate, the granules usually a little larger along each side of the shallow median sulcus. Elytra very much wider than the prothorax, oblong-subtriangular in ♂, broader and subparallel to the middle in ♀, not or obsoletely mucronate at the tip; punctate-striate, the interstices densely punctulate and often sparsely granulate, the outer ones more or less convex, 3 subcostate and raised into a stout, oblong, tuberculiform prominence at the commencement of the apical declivity, 5 also with a tubercle at its point of termination.

Length $7\frac{3}{4}$–$10\frac{1}{2}$, breadth $2\frac{3}{5}$–$3\frac{4}{5}$ millim.

Hab. MEXICO (*Koltze, in Mus. Dresden*), Toxpam, San Andres Tuxtla, Santacomapan, Orizaba (*Sallé*), Cordova (*Höge*), Teapa (*H. H. Smith*), Amatan in Chiapas (*Flohr*); BRITISH HONDURAS, Rio Hondo (*Blancaneaux*); GUATEMALA, Senahu, Panzos, Teleman, Panima, and Purula in Vera Paz (*Champion*), Livingston and Trece Aguas (*Schwarz and Barber, in U.S. Nat. Mus.*).

Apparently a common insect in the "tierra caliente" of the Atlantic slope of Mexico and Guatemala. It differs from *C. virosus* in having the ridge on the third elytral interstice less curved and becoming obsolete towards the base, and the outer interstices convex, the suture not raised on each side of the scutellum, the apices

not or very feebly mucronate, and the surface set with longer setæ and often granulate. The scales vary in colour, but are usually darker on the flattened dorsal portion of the elytra, and there are often small green patches on the flanks and hind angles of the prothorax, as well as on the wing-cases.

3. **Clæoteges tuberculosus,** sp. n. (Tab. XII. figg. 27, 27 *a*, ♀.)

Oblong, narrow (♂), broader (♀), black; densely clothed with brown scales, the prothorax with a narrow sinuous stripe on each side and another on the lower part of the flanks, the elytra with an oblique row of irregular spots or streaks on the outer half of the disc before the middle, extending to beneath the humeri, a transverse interrupted fascia between the subapical tubercles, and an oblong patch on the flanks, and various small scattered patches on the under surface, golden-green; the elytral surface also set with scattered, curled, decumbent setæ, similar to those on the legs. Head and rostrum densely, rugulosely punctate, the rostrum obsoletely bicarinate towards the feeble transverse inter-antennal ridge; eyes large. Prothorax convex, a little broader than long, rounded at the sides, shallowly sulcate down the middle; densely punctulate and strongly granulate. Elytra subparallel in their basal half, wider in ♀, flattened towards the suture, obsoletely mucronate at the apex; punctate-striate, the interstices densely punctulate, 3 and 5 each with a series of tubercles extending from the base to the apical declivity, the terminal one on 3 large, 5 also with a conical tubercle at its point of termination, and 6 and 7 raised and subtuberculate. Ventral segments 2–5 clothed with long fulvous hairs down the middle in ♂. Anterior and intermediate femora sharply, the posterior pair feebly, dentate.

Length $9\frac{1}{4}$–$11\frac{1}{2}$, breadth $3\frac{1}{10}$–$3\frac{9}{10}$ millim. (♂ ♀.)

Hab. GUATEMALA, Senahu in Alta Vera Paz (*Champion*).

Three specimens. In this species the ridge on the elytral interstices 3 and 5 is broken up into tubercles, the granules on the prothorax are distributed over the whole surface, and the green scales above are condensed into narrow submarginal vittæ on the prothorax and two interrupted fasciæ on the elytra.

4. **Clæoteges obliteratus,** sp. n. (Tab. XII. figg. 28, 28 *a*, ♂.)

Oblong, rather convex, broader in ♀, nigro-piceous or black; mottled with coppery- and blackish-brown scales, with a few cinereous scales intermixed, in one specimen (♀) with numerous small scattered patches of green scales on the upper surface and legs; beneath (a sparsely pilose space down the middle excepted) cupreo- or viridi-squamose; the surface also set with stout, scattered, decumbent, curled setæ. Head and rostrum densely, rugulosely punctate, the rostrum sometimes obsoletely bicarinate towards the inconspicuous inter-antennal ridge; eyes large, widely separated. Prothorax nearly as long as broad, convex, rounded at the sides, narrowly sulcate down the middle; densely punctulate and somewhat closely granulate. Elytra rather convex in ♂, widened to the middle and slightly depressed towards the suture in ♀, acuminate and mucronate at the tip; punctate-striate, the interstices densely punctulate, 3 somewhat strongly, and 5–7 more feebly, costate, 5 with a small tubercle at its point of termination in ♂. Anterior and intermediate femora sharply, and the posterior pair feebly, dentate.

Length $9\frac{1}{10}$–10, breadth 3–$3\frac{1}{2}$ millim. (♂ ♀.)

Hab. GUATEMALA, Balheu [♂] and Purula [♀] in Vera Paz (*Champion*).

Three specimens, the female with an admixture of metallic-green scales above and beneath and on the legs, and the other scales brown. More convex than its allies, the ridge on the third elytral interstice uniformly convex and interrupted, not raised into a tuberculiform prominence at the commencement of the apical declivity.

NAUPACTOPSIS, gen. nov.

Prothorax and elytra truncate at the base; elytra in ♂ oblong and but little wider than the prothorax, in ♀ much broader and widened to middle, with additional, interposed, abbreviated striæ on the outer part of the disc, the outer striæ entire, the humeri obtuse or angular, the lower margin sinuate; rostrum broad, subquadrate, the scrobes lateral and obliquely descending, becoming shallow and much wider behind, the nasal plate triangular; eyes large, not strictly lateral, not prominent; joints 1 and 2 of the funiculus subequal in length; scutellum small; mesothoracic epimera moderately large, oblique; metathoracic episterna dilated anteriorly; first ventral suture arcuate; posterior tibiæ narrowly laminate and biciliate at the apex, the glabrous articular surface very large and cavernous; body oblong, more or less squamose; wings wanting or rudimentary.

Type, *N. delumbis*.

The Mexican insects from which the above characters are taken may be briefly described as apterous *Exophthalmi*, with the elytra in the males very little wider than the prothorax, and the upper marginal border of the scrobes obliterated posteriorly, so that they appear to be dilated towards the eyes. These forms were rightly rejected by Dr. Sharp when he enumerated our apterous Otiorhynchids, as they have a distinctly exposed scutellum and the meso- and metasternal side-pieces shaped as in the alate representatives of the group, and therefore belong to Horn's Division II. The sexes of *N. delumbis* and *N. auropictus* are so dissimilar that they might be mistaken for separate species.

1. **Naupactopsis delumbis,** sp. n. (Tab. XII. figg. 29, ♂; 30, ♀.)

♂. *Naupactus delumbis,* Chevr. in litt.[1].

♀. *Naupactus acutipennis,* Chevr. in litt.[2].

Elongate, narrow, and rather convex (♂), broad and pyriform (♀), nigro-piceous or black; clothed with minute, brown, cinereous, or cupreous scales, the prothorax with a denser vitta of larger whitish or coppery-white scales on each side of the disc, extending forwards on to the head and rostrum and backwards for some distance down the disc of each elytron, and the elytra with a sinuous line of similar scales exterior to it (often divided into two oblique streaks) running round to the suture at about one-fourth or one-fifth from the apex; the surface also set with a few very short, curled, pallid setæ. Head and rostrum rugosely punctate, the rostrum not or obsoletely carinate, the nasal plate triangular and limited behind by a v-shaped ridge, the inter-ocular fovea small or wanting; joints 1 and 2 of the funiculus equal in length; eyes rather prominent. Prothorax (♂) convex, about as long as broad, rounded at the sides, and almost equally narrowed in front and behind, (♀) parallel-sided behind and subtransverse, truncate at the base, not or obsoletely canaliculate down the middle; coarsely, confluently foveato-punctate, and with a fine dense interstitial punctuation. Scutellum small, transverse. Elytra truncate at the base, oblong-oval and with subangular humeri in ♂, broader, rapidly widened to the middle, abruptly, conically acuminate at the apex, and with obtuse humeri in ♀; coarsely punctate-striate, the striæ diverted and oblique (and crowded in ♂) on the outer part of the disc anteriorly, the interstices densely punctulate, feebly convex or flat. Tibiæ feebly denticulate.

Length 9–13$\frac{1}{5}$, breadth 2$\frac{9}{10}$–4$\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico (*Truqui, in coll. Fry; Flohr; Höge, in coll. Solari*), Juquila in Oaxaca (*Sallé*).

I have seen fifteen examples of this species, including seven from Juquila, labelled with one or the other of the above-quoted MS. names. It differs from *N. auropictus*

in having the prothorax more closely foveato-punctate in both sexes; the elytra irregularly striate towards the sides anteriorly, relatively shorter and more narrowly acuminate at the apex in the female, and with subangular humeri in the male. The markings, which are easily abraded, are somewhat different from those of *N. auropictus*, the prothoracic vittæ being placed further inwards and the streak on the elytra duplicated towards the base; the striæ, too, are more irregular on the disc.

2. **Naupactopsis auropictus,** sp. n. (Tab. XIII. figg. 1, ♂; 2, ♀.)

Elongate, rather convex, narrow, and subelliptic (♂), broad and subpyriform (♀), black or piceous, the legs varying in colour from black to ferruginous; clothed with minute brown, cinereous, or coppery scales, the prothorax with a narrow stripe on each side of larger, imbricate, whitish, green, cupreous, or golden scales which is often interruptedly continued down the disc of each elytron, the flanks of the latter and the larger punctures of the upper surface frequently bearing similar metallic scales; the surface also set with small, decumbent, scattered pallid setæ. Head and rostrum densely, finely punctate, the rostrum slightly longer than broad, feebly or obsoletely carinate down the middle, the nasal plate short, the inter-ocular fovea small; antennal scape reaching beyond the eyes, the latter large and depressed. Prothorax about as long as broad, rounded at the sides, in the ♂ scarcely narrower at the apex than at the base, in the ♀ broader behind and subtransverse, truncate at the base, narrowly sulcate down the middle; impressed with scattered irregular foveiform punctures intermixed with a fine dense interstitial punctuation. Scutellum small. Elytra oblong-oval in ♂, broader, widened to the middle, and more abruptly acuminate in ♀, the humeri obtuse, the apices feebly mucronate, the disc usually with two or three scattered shallow irregular depressions; coarsely punctate-striate, the striæ regular at the base, the interstices densely punctulate, narrow and uneven in ♂, broad and sometimes flat in ♀.

Var.? The prothorax with a broad submarginal vitta, which is continued down the disc of the elytra to the apex, and a broad stripe along the lower margin of the latter, densely clothed with greenish (♂) or golden-cupreous (♀) scales; the legs in great part ferruginous.

Length $9\frac{1}{2}$–15, breadth 3–$6\frac{1}{5}$ millim. (♂ ♀.)

Hab. Mexico, Las Vigas in Vera Cruz (*Höge*), Oaxaca (*Mus. Brit.*, *Höge*), Tepansacoalco, Parada, Jacale (*Sallé*), Omilteme in Guerrero (*H. H. Smith*).

A very variable insect, and the sexes dissimilar in form. The seriate punctures on the elytra are larger, scattered, and foveiform in the more rugose examples, and often bear a few metallic scales, like those on the submarginal vittæ of the prothorax. The penis-sheath of the male is broad, somewhat pointed at the tip. The second joint of the funiculus is somewhat elongated in the female. A long series of both sexes has been sent us by Höge. The variety? is represented by a pair obtained from M. Donckier labelled "Mexico."

3. **Naupactopsis sitonoides,** sp. n. (Tab. XIII. fig. 3, ♀.)

Oblong-oval, moderately convex, dull, nigro-piceous; densely clothed with small coppery-brown scales, with whitish scales intermixed, these latter becoming more numerous on the head, along the sides of the prothorax, and on the humeri and sides of the elytra, the surface also set with short, curled, scattered hairs. Head and rostrum densely, rugulosely punctate, the rostrum about as broad as long and obsoletely carinate to the small inter-ocular fovea; antennæ comparatively short, the scape barely reaching the posterior margin of the eyes, the latter widely separated and not prominent. Prothorax broader than long, rounded at the sides, narrowed in front, and truncate at the base; rather coarsely, closely punctate, and with a fine, dense, interstitial punctuation. Scutellum small. Elytra somewhat convex, much

broader than the prothorax, oval, gradually acuminate behind, the humeri obtuse; shallowly and rather finely punctate-striate, the striæ regular at the base, the interstices feebly convex and densely punctulate. Anterior tibiæ unguiculate.

Length $10\frac{1}{2}$, breadth 4 millim. (♀?)

Hab. Mexico, Ciudad in Durango (*Forrer*).

One specimen. This insect has quite the facies of a *Sitones* or *Tanymecus*. Compared with *N. auropictus* and *N. delumbis* (♀), it has the elytra more rounded at the sides, less abruptly acuminate at the tip, and more shallowly punctate-striate; the larger punctures on the prothorax not so deeply impressed. The male is doubtless narrower. The specific name was suggested long ago by Dr. Sharp.

MAZENES, gen. nov.

Rostrum subquadrate, a little longer than broad, widened outwards, hollowed down the middle to the inter-ocular fovea, and with the depression limited on each side by a stout oblique ridge, which extends forward to above the points of insertion of the antennæ, the nasal plate triangular, the genæ emarginate, the scrobes lateral, deep, and descending to beneath the eyes, the latter moderately large; antennæ rather stout, the scape not extending beyond the eyes, widened from near the base or subclavate; prothorax long, cylindrical or subcylindrical, constricted in front, truncate or feebly bisinuate at the base; scutellum visible; elytra elongate, 10-striate, the striæ placed in pairs between the alternately raised interstices and their position indicated by very fine impressed lines visible through the dense vestiture, the outer striæ approximate or coalescent from about the basal fourth, the small seriate punctures each placed in a foveiform depression, the humeri obtuse or subangular; mesothoracic epimera narrow, oblique; metathoracic episterna narrow, dilated inwardly in front; legs stout; femora unarmed; tibiæ closely setose and obsoletely denticulate, the anterior and intermediate pairs unguiculate, the posterior pair laminate at the apex, their articular surface large, cavernous, and not entirely glabrous; body elongate, apterous *, squamose.

Type, *M. bifoveatus.*

The three species belonging to this genus agree remarkably well *inter se*, not only in the general form of the rostrum, the peculiar elytral sculpture, &c., but in having two small, longitudinally placed, bare, polished foveæ on the disc of the prothorax. The meso- and metasternal side-pieces are shaped as in the winged Otiorhynchids, and there is a distinctly visible scutellum, though the wings are doubtless wanting or rudimentary and the elytra connate. These insects are from Mexico or Guatemala, and all of them appear to be very rare. *Pactorrhinus*, Ancey, type *P. grisescens*, from Arizona [Le Naturaliste, i. 485 (Oct. 1881)], may be an allied genus †.

1. **Mazenes bifoveatus,** sp. n. (Tab. XIII. figg. 4, 4 *a*.)

Elongate, narrow, black; thickly clothed (except on the raised portions of the prothorax and on the convex elytral interstices 3, 7, and 9) with pale brown imbricate scales, with a few white scales intermixed, these latter becoming more numerous on the under surface and condensed into a sharply-defined stripe down the fifth elytral interstice; the apical portion of the elytra also set with stiff decumbent setæ, similar to those on the legs. Head and rostrum densely, finely punctate, the rostrum excavate on each

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* Not definitely ascertained, owing to want of material.

† This insect does not appear to have been identified or noticed by American coleopterists. It is referred to the "Naupactides" of Lacordaire, and stated to be not unlike a *Cleonus*.

side before the eyes, as well as down the middle, the eyes convex ; antennæ stout, the scape widened from near the base, joint 2 of the funiculus a little longer than 1. Prothorax as long as broad, rounded at the sides anteriorly and constricted in front, densely, finely punctate ; with a deep arcuate transverse groove behind the middle and an oblong excavation on the disc towards the apex, in each of which is an oblong polished shining fovea, and various other large, confluent, irregular, foveiform depressions. Scutellum well developed, convex. Elytra not wider than the prothorax, elongate, subparallel from the obliquely rounded humeri to about the middle, transversely depressed at the base and conjointly produced at the apex ; with rows of coarse punctures placed along extremely fine geminate striæ, the interstices uneven, densely, finely punctate, 3, 5, 7, and 9 widened and costate, 3, 7, and 9 partly bare. Legs very stout ; anterior tibiæ strongly bowed.

Length $11\frac{1}{2}$–14, breadth 3–$3\frac{1}{2}$ millim. (♂ ?)

Hab. GUATEMALA, San Gerónimo in Baja Vera Paz (*Champion*).

Two specimens. A remarkably distinct form, easily separable from the following by the sharply albo-lineate fifth elytral interstice, the prominent scutellum, and the very coarsely wrinkled, foveolate prothorax, the two oblong, bare, polished foveæ on which form an interrupted median sulcus.

2. **Mazenes geminatus,** sp. n. (Tab. XIII. fig. 5, ♂ .)

Elongate, narrow, piceous ; above densely clothed with brown scales, with green and ochreous scales intermixed, the latter mainly confined to the foveiform depressions, the under surface uniformly viridi-squamose, the surface also set with stiff decumbent setæ similar to those on the legs. Head and rostrum densely, finely punctate, the oblique ridges on the rostrum broad and not very conspicuous ; antennal scape subclavate at the tip ; eyes feebly convex. Prothorax a little longer than broad, cylindrical, narrowed and feebly constricted in front, densely, finely punctate ; transversely wrinkled and irregularly foveolate, the disc with two longitudinally placed, small, polished foveæ. Scutellum very small. Elytra elongate, very little wider than the prothorax, subparallel in their basal third, transversely depressed at the base, the humeri oblique, subangular ; with rows of moderately coarse punctures placed along extremely fine geminate striæ, the interstices uneven, densely, finely punctate, 3, 5, 7, and 9 widened and more or less raised, the outer striæ coalescent from a little below the base. Legs stout.

Length $14\frac{1}{2}$, breadth $3\frac{3}{4}$ millim. (♂ .)

Hab. GUATEMALA, Purula in Vera Paz (*Champion*).

One specimen. More cylindrical than *M. bifoveatus*, the antennal scape more slender, the excavations on the prothorax much shallower, the scutellum smaller, the elytra at the base a little broader than the prothorax, and with the alternate interstices wider and less raised, the under surface uniformly clothed with pale green scales. It is probable that the green scales are partly abraded on the upper surface.

3. **Mazenes lineatus,** sp. n. (Tab. XIII. fig. 6, ♀ .)

Elongate, widened posteriorly, piceous ; thickly clothed with brown, pale ochreous, and whitish scales—the ochreous scales on the elytra condensed into lines on the depressed portions of the surface and those on the prothorax placed in the transverse furrows, the white scales on the elytra condensed into a faint stripe on the fifth interstice and an angular patch near the apex ; the scales on the under surface and legs cinereous or whitish, with brown scales intermixed ; the apex of the elytra and the under surface also set with bristly decumbent setæ, similar to those on the legs. Head and rostrum densely, finely punctate, the rostrum deeply excavate down the middle between the broad oblique ridges and also hollowed on each side before the eyes, the latter moderately convex ; antennal scape gradually widened outwards,

not reaching the posterior margin of the eyes, joint 2 of the funiculus slightly longer than 1. Prothorax a little longer than broad, cylindrical, constricted in front, densely, finely punctate; transversely furrowed and confluently foveolate, the disc with two longitudinally placed small, oblong, polished foveæ. Scutellum small, transverse. Elytra broader than the prothorax, widened to the middle, acuminate at the apex, and strongly transversely depressed at the base; with rows of fine punctures placed upon extremely fine striæ, the outer striæ distinctly separate throughout, the interstices uneven, densely, finely punctate, 3, 5, and 7 broadly, and 6 more narrowly, costate.

Length $16\frac{1}{2}$, breadth $5\frac{1}{2}$ millim. (♀.)

Hab. MEXICO, Colonia (*Flohr*).

One example, slightly worn. This insect has the prothorax formed as in *M. geminatus*, and the elytra sculptured and lineate somewhat as in *M. bifoveatus*. The actual position of the locality is not indicated on the printed label.

Group **PLATYOMINA.**

Cyphina, Horn (part.).
Cyphides (part.) and *Eustylides*, Lacordaire.

Under this heading are placed various genera with the scrobes superior (in great part or wholly exposed from above), short (or if continued backwards becoming shallow and squamose behind), parallel or divergent; the eyes not strictly lateral; the elytra 10-striate, the outer striæ coalescent from about the basal third or free; the anterior tibiæ unguiculate or unarmed; the posterior tibiæ laminate at the apex (corbels closed); the tarsal claws free (except in *Aphrastus*); the wings fully developed (except in a few species of *Eustylus*); and the body densely squamose.

The following genera belong here:—*Platyomus*, *Compsus*, *Artipus*, *Brachystylus*, *Brachyomus*, *Eustylus*, *Synthlibonotus*, and *Aphrastus*, Schönherr, *Pseudocyphus*, Schaeffer, *Temnoscapus*, Chevrolat, &c. *Aphrastus* agrees with *Phyllobius* in having the tarsal claws connate and the scrobes superior; but in the last-named genus the scrobes are open behind, foveiform, and subapical, and the corbels are open. *Pseudocyphus* has the rostrum less widened anteriorly than in the allied forms (*Platyomus*, &c.) and the scrobes sublateral; this genus would therefore seem to be better placed amongst the Cyphina, from which it differs, however, in having the eyes not strictly lateral. *Eustylus* and *Brachystylus* (with *Aptolemus*) were placed by Lacordaire in a separate Group, "Eustylides," near his "Phyllobiides." The six genera represented in our region may be separated thus:—

a. Tarsal claws free.
  a[1]. Rostrum not widened anteriorly, the upper portion narrowed and deeply excavate towards the apex, the nasal plate squamose; outer elytral striæ free; anterior tibiæ unarmed at the apex * . . . . . PSEUDOCYPHUS.

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* *Platyomus* belongs to this section.

b^1. Rostrum gradually widened anteriorly, the upper portion bifurcate towards the apex, the nasal plate bare; anterior tibiæ unguiculate.

a^2. Antennal scape elongate.

a^3. Articular surface of posterior tibiæ squamose; outer elytral striæ coalescent. . . . . COMPSUS.

b^3. Articular surface of posterior tibiæ glabrous.

a^4. Scrobes short; anterior femora toothed or unarmed; outer elytral striæ free or coalescent . . . . . EUSTYLUS.

b^4. Scrobes broadly and shallowly extended posteriorly; anterior femora toothed; outer elytral striæ free . . . . . PSEUDEUSTYLUS.

b^2. Antennal scape short; outer elytral striæ coalescent . . . . . BRACHYSTYLUS.

b. Tarsal claws connate . . . . . APHRASTUS.

PSEUDOCYPHUS.

Pseudocyphus, Schaeffer, Bull. Brooklyn Instit. i. p. 179 (1905).

Rostrum very stout, not longer than the head, not dilated anteriorly; the upper portion sulcate, narrowing forwards, sharply produced on each side between the points of insertion of the antennæ, and excavate and foveate in the middle; the nasal plate depressed, long, triangular, squamose, and emarginate in front; the genæ triangularly excised; the scrobes in great part visible from above, curved, sublateral, converging forwards, and not extending below the eyes. Eyes large, oval (as seen in profile), not strictly lateral. Antennal scape curved, flattened, more or less dilated or clavate. Prothorax short, bisinuate at the base, truncate in front. Scutellum well developed. Elytra subtriangular (♂) or oblong (♀), 10-striate, the outer striæ entire, the humeri prominent. Tibiæ unarmed at the inner apical angle in both sexes; posterior pair laminate and squamose at the apex, the articular surface glabrous and ascending. Body winged, densely squamose.

Under this genus are placed various moderate-sized Mexican and Guatemalan forms nearly related to the S.-American *Platyomus mutabilis*, *dianæ*, &c., all of which differ from the type of *Platyomus* (*Cyphus cultricollis*, Germ.) in having large, oval, moderately prominent eyes, an apically dilated scape, a subcylindrical or subconical prothorax, non-tuberculate elytra, &c. The type of *Pseudocyphus*, *P. flexicaulis*, Schaeff., from Brownsville, Texas, for specimens of which we are indebted to Mr. Wickham and the author (Tab. XIII. figg. 7, 7 *a*, ♂), has the head relatively broader, the antennæ stouter, and the outer joints of the funiculus more transverse than in the Central-American species, but these differences are insufficient for generic separation *.

* The allied genus *Chamælops* (type *C. munita*, Kirsch, from Colombia) has the scape strongly curved, slender at the base, and greatly dilated outwards, the funiculus slender, the elytra strongly lobed at the base, the legs very hairy, &c. *Temnoscapus fissirostris*, Chevr., from Bogota (the type of which I have seen), is another allied form; it superficially resembles the female of *Steirarrhinus conicollis*, differing from that insect in the short antennæ, with apically dilated curved scape, the not strictly lateral eyes, the non-descending scrobes, &c.

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The Texan, Mexican, and Guatemalan forms may be grouped thus:—

a. Head broader; elytra finely punctate-striate, cinereous, variegate with fuscous. [*flexicaulis.*]
b. Head narrower.
  a^1. Elytra finely punctate-striate.
    a^2. Elytra with the alternate interstices 3, 5, and 7 broader and more convex than the others, immaculate: general vestiture green, paler on the broader interstices . . . . . *geminus.*
    b^2. Elytra with the interstices equal, maculate: general vestiture cinereous.
      a^3. Elytra with scattered black spots, which are sometimes transversely confluent on the disc . . . . . *nigroguttatus.*
      b^3. Elytra with two or three interrupted dark oblique fasciæ . . . . . *macroscapus.*
  b^1. Elytra with coarser scattered seriate punctures.
    c^2. Elytra with dark oblique fasciæ, the seriate punctures more distant: general vestiture cinereous . . . . . *zebra.*
    d^2. Elytra with or without dark markings (the postmedian fasciæ transverse when present), the seriate punctures more approximate: general vestiture green or cinereous, that on legs often cupreous . . . . . *chrysopus.*

1. **Pseudocyphus geminus,** sp. n. (Tab. XIII. fig. 8, ♀.)

Platyomus geminus, Jekel, in litt.[1].

Oblong, rather narrow (♂), broader (♀), black or piceous, the legs paler; densely clothed with green scales, those around the eyes and on the alternate elytral interstices somewhat whitish, and also set with extremely short, scattered, adpressed hairs. Head and rostrum rugulosely punctate and finely sulcate; antennal scape widened from near the base, becoming broader outwards, reaching the front of the prothorax in ♂, a little shorter in ♀; eyes moderately large, somewhat depressed. Prothorax transverse, bisinuate at the base, rugulosely punctate. Elytra gradually narrowing from the shoulder (♂), subparallel to about the middle (♀), strongly bisinuate at the base; finely punctate-striate, the interstices rugulosely punctate, 3, 5, and 7 more convex, a little broader than the others, and set with a double row of minute hairs.

Length $6\frac{1}{5}$–$8\frac{1}{2}$, breadth $2\frac{1}{4}$–$3\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico [1] (*coll. Solari, ex Jekel*), Panistlahuaca in Oaxaca (*Sallé*).

Two males and two females. Easily distinguishable by the broader, paler, and more convex elytral interstices, and the finely punctate-striate elytra *.

2. **Pseudocyphus nigroguttatus,** sp. n. (Tab. XIII. figg. 9, ♂; 10, ♀, var.)

♂. Oblong, black, densely clothed with whitish scales, the elytra each with eight scattered, sharply-defined, subquadrate, black spots (2, transversely placed, at the base, the outer one on the shoulder, 5 on the alternate interstices, arranged in two irregular transverse rows across the disc, and 1 near the apex). Head and rostrum rugulosely punctate and finely canaliculate; antennal scape rapidly widened outwards, reaching the front of the prothorax; eyes large, somewhat depressed. Prothorax transverse, bisinuate at the base, rugulosely punctate, obsoletely canaliculate anteriorly. Elytra very gradually narrowed

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* There is an allied form in the British Museum, without locality, labelled *Platyomus eustaloides*, Jekel, in litt., differing from *P. geminus* in having the antennal scape clavate at the tip and slender at the base, the prothorax narrowed behind, the elytra lobed in front, and the interstices 4–6 equal.

from the somewhat prominent humeri, the base strongly bisinuate; finely punctate-striate, the interstices moderately convex and rugulose. First ventral segment slightly depressed down the middle.

♀. Var. *α*. The scales with a slight greenish tinge; the elytra with a small spot on the shoulder, two others on the fourth interstice below the base, an angulate, rather broad fascia beyond the middle, and a spot near the apex, black, the interstices each with a row of minute scattered hairs.

♀. Var. *β*. The scales whitish; the elytra with two transverse fasciæ on the outer half of the disc—one, narrow, just below the base, the other, angulate, beyond the middle,—a patch near the apex, and a common, narrow, transverse mark just behind the scutellum, black, the interstices with a row of minute hairs. [Fig. 10.]

Length 7–8½, breadth 2½–3½ millim. (♂ ♀.)

Hab. Mexico, Playa Vicente in Vera Cruz [type], Tapachula in Chiapas [var. *α*] (*Höge*), Oaxaca [var. β] (*Hegewisch, in coll. Sommer*).

Two males and two females, the three forms evidently belonging to one variable insect (the var. *β* kindly lent us by Mr. Janson), the females having a slightly shorter antennal scape than the males and a line of very minute hairs down each elytral interstice. Compared with *P. macroscapus* the present species may be known by the more strongly sinuate base of the elytra, the outwardly-dilated shorter scape of the male antenna, and the different markings *.

3. **Pseudocyphus macroscapus,** sp. n. (Tab. XIII. fig. 11, ♂.)

Oblong, narrow (♂), broader (♀), black; variegate with a dense clothing of whitish (or cinereous) and blackish (or brown) scales, the latter sometimes predominating and leaving two vittæ on the disc of the prothorax, a long streak at the base of the third elytral interstice, two angulated oblique fasciæ on the disc, and a patch at the apex, pale—in lighter individuals the dark markings are reduced to three faint stripes on the prothorax, two or three interrupted oblique fasciæ on the elytra, an interrupted sutural stripe, and an oblong spot on the third interstice below the base; the upper surface also set with short, semierect, bristly hairs, which are seriately arranged down each interstice, the lower surface uniformly cinereo-squamose. Head and rostrum rugulosely punctate and narrowly sulcate; eyes large, moderately convex; antennal scape widened from near the base, becoming a little broader at the apex, reaching to beyond the front of the prothorax in ♂, and to the posterior margin of the eyes in ♀. Prothorax transverse, somewhat rounded at the sides, closely punctate and feebly canaliculate. Elytra subparallel to about the middle in ♂, broader in ♀, feebly bisinuate at the base; rather finely punctate-striate, the interstices rugulose and somewhat convex. First ventral segment feebly hollowed down the middle.

Length 5–7½, breadth 2–3 millim. (♂ ♀.)

Hab. Guatemala (*Sallé*), Zapote, Capetillo, Dueñas, San Gerónimo (*Champion*), Chimaltenango (*Conradt*).

Found in numbers on the Pacific slope of Guatemala and singly in Baja Vera Paz. The specimens vary in colour, according to the predominance of the light or dark scales, but the oblique elytral fasciæ and the prothoracic vittæ are always distinctly visible. The scape of the antennæ is widened from near the base, and it is considerably elongated in the male. The setæ are sometimes extremely short, and the light scales

* An undescribed insect (♀) in the British Museum labelled "*Platyomus gratiosus*, Jekel, Brazil," is extremely like *P. nigroguttatus*, but it has the antennal scape more slender and the scattered black spots on the elytra differently arranged.

occasionally have a faint greenish or cupreous tinge. The Texan *P. flexicaulis* is somewhat like *P. macroscapus*, but it has a broader head and prothorax, differently marked elytra, &c.

4. **Pseudocyphus zebra,** sp. n. (Tab. XIII. fig. 12, ♀.)

Platyomus zebra, Pilate, in litt.[1].

Oblong, rather narrow (♂), broader (♀), black; variegate with a dense clothing of cinereous and blackish (or brown) scales; the latter condensed into three vittæ on the prothorax and various markings on the elytra—a large subquadrate patch on the outer part of the disc just below the base, another patch lower down near the suture, an angulate, curved, oblique post-median fascia, and a narrower interrupted fascia or transverse spot near the apex; the upper surface also set with minute, widely scattered, decumbent hairs. Head and rostrum rugulosely punctate and narrowly sulcate; antennal scape about reaching the posterior margin of the eye in both sexes, rapidly widening outwards in ♂, narrower in ♀; eyes very large, moderately convex. Prothorax transverse, subcylindrical, bisinuate at the base, closely punctate and obsoletely canaliculate. Elytra subtriangular (♂), subparallel to about the middle (♀), strongly bisinuate at the base, with rows of coarse scattered punctures, the interstices more or less convex and rugulosely punctate.

Length $5\frac{1}{2}$–$7\frac{1}{2}$, breadth 2–$3\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico, Yucatan (*Pilate*[1], *in Mus. Brit.*), Campeche (*Sallé*), Temax (*Gaumer*).

Nine specimens, one with the dark markings faint, but clearly traceable. Differs from *P. macroscapus* in having larger eyes, a shorter and more strongly clavate antennal scape, more prominent humeri (the elytra being subtriangular in the male), and widely separated, coarser, seriate punctures on the elytra, these being more distant one from another than in *P. chrysopus*.

5. **Pseudocyphus chrysopus,** sp. n. (Tab. XIII. figg. 13, ♂; 14, ♀, var.)

Platyomus chrysopus, Chevr. in litt.[1].

Platyomus auripes, Jekel, in litt.[2].

Oblong, narrow (♂), broad (♀), black; densely clothed with green scales, the scales on the head, antennal scape, anterior half of prothorax, and legs usually more or less cupreous, the prothorax often with a median vitta, and the elytra with a spot on the third interstice beyond the middle (and sometimes one or two others on the fifth and seventh in a line with it), black; the surface also set with short decumbent hairs, which are seriately arranged down each elytral interstice. Head and rostrum narrowly sulcate and rugulosely punctate; antennal scape rapidly widening outwards, reaching to a little beyond the eyes, slightly narrower in ♀, setose; eyes very large, moderately convex. Prothorax transverse, bisinuate at the base, rugulosely punctate. Elytra subtriangular (♂), parallel-sided to about the middle (♀), strongly bisinuate at the base, the humeri prominent; with rows of rather coarse somewhat widely separated punctures, the interstices convex and rugulosely punctate.

Var. *α*. The elytra with the base and a transverse post-median fascia (the latter including several blackish spots) cupreous.

Var. *β*. The prothorax with one or three vittæ on the disc, and the elytra with the suture, a large oblique or subquadrate patch on the outer part of the disc below the base, a common transverse patch before the middle, a transverse angulate post-median fascia, and another fascia near the apex, carneous, cupreous, fuscous, or black, the rest of the scales varying in colour from green to cinereous, those on the legs and antennal scape sometimes cupreous.

Length $6\frac{2}{5}$–10, breadth $2\frac{1}{3}$–4 millim. (♂ ♀.)

Hab. Mexico[1 2] (*Mus. Brit.; Truqui*), Toxpam in Vera Cruz (*Sallé*), Playa Vicente

(*Höge*), Santa Lucrecia (*Knab, in U.S. Nat. Mus.*); Guatemala, Livingston and Trece Aguas (*Schwarz and Barber, in U.S. Nat. Mus.*), Yzabal (*Sallé*), Chiacam, San Juan, Sabo, Teleman, Panzos (*Champion, Conradt*), Coban (*Conradt*).

This insect has long been known in collections under one or the other of the above-quoted MSS. names. It is extremely variable, as regards the colour of the scales and the development of the markings, which are very rarely altogether obsolete. The typical form is from the Mexican State of Vera Cruz, the var. α from Livingston and Yzabal, the var. β from various places in Alta Vera Paz (especially from the warmer part of the Polochic valley), all the localities being on the Atlantic slope. *P. chrysopus* is represented in Yucatan by *P. zebra*, which has still more widely separated seriate punctures on the elytra and the dark post-median fascia curved or oblique.

COMPSUS.

Compsus, Schönherr, Curc. Disp. Meth. p. 109 (1826); Gen. Curc. i. p. 640; Lacordaire, Gen. Col. vi. p. 116; Horn, Proc. Am. Phil. Soc. xv. p. 88.

? *Oxyderces*, Schönherr, Gen. Curc. i. p. 646.

This genus, like *Cyphus*, extends northward to the United States. It includes a large number of South American forms, most of which are so densely clothed with chalky-white or green scales that the sculpture cannot be properly seen. The essential characters of the species here referred to *Compsus* (the type of which is *Cyphus acrolithus*, Germ.) are:—

Rostrum broad, widened anteriorly, emarginate at the sides and apex, the upper portion obliquely bifurcate anteriorly, the nasal plate wide, triangular, bare, the scrobes visible from above, subangulate, not reaching to beneath the eyes; eyes not strictly lateral, more or less rounded (obliquely truncate in front in *C. argyreus*, L.); antennal scape flattened, narrow, feebly clavate; scutellum well developed; elytra regularly 10-striate, the outer striæ coalescent from the basal third, the humeri prominent; anterior tibiæ unguiculate, not denticulate within; posterior tibiæ narrowly laminate at the apex, the space between the marginal cilia bare, the articular surface large, feebly ascending or subterminal, squamose; body winged, densely squamose.

The scales in some of the species vary in colour from green to white (*C. auricephalus*, &c.), and several of the southern forms are ornamented with small blue evanescent spots, this colour sometimes extending to the legs also. The elytra in the females are often more distinctly divergent or mucronate at the tip than in the males. *C. carinirostris*, Boh., has two additional abbreviated striæ on the elytra, the articular surface of the hind tibiæ glabrous, &c., and it is here placed under *Exophthalmus* (anteà, p. 254).

a. Rostrum carinate anteriorly; elytra each with a bare black spot on the middle of the disc, the seriate punctures scattered, the alternate interstices scarcely more raised than the others, and the striæ normal; legs partly blue: general vestiture white . . . . . *cæruleipes*, sp. n.

b. Rostrum finely grooved.
  a^1. Alternate elytral interstices subequally raised.
    a^2. Prothorax and elytra with several minute blue spots, the legs also partly blue : general vestiture white . . . . . [18-*signatus*, sp. n.]
    b^2. Prothorax and elytra immaculate, head often cupreous : general vestiture varying from green to white . . . . . *auricephalus*, Say.
  b^1. Alternate elytral interstices unequally raised, the 3rd prominent and abruptly declivous posteriorly; prothorax and elytra with several small black spots : general vestiture white . . . . . *nigropunctatus*, sp. n.

1. **Compsus cæruleipes**, sp. n. (Tab. XIII. figg. 15, 15 *a*, ♂.)

Elongate, black; densely clothed with chalky-white scales, the legs (the basal half or more of the femora excepted) in great part cæruleous, the elytra each with three very small bare black spots (one on the shoulder, one at the middle of the disc, and one at the end of the fifth interstice), and the prothorax in the Bugaba specimen with three similar spots along the anterior margin; the surface also set with minute, scattered, adpressed hair-like scales, which become longer on the body beneath. Rostrum longer than the head, feebly carinate down the middle anteriorly, and obliquely grooved on each side of this towards the base, the upper portion obliquely divergent on each side in front, the scrobes subangular and obliquely descending to beneath the eyes, the latter rounded and convex; antennal scape reaching to a little beyond the eyes. Prothorax slightly broader than long, strongly bisinuate at the base, hollowed down the middle, irregularly foveato-punctate. Elytra elongate-triangular, flattened on the disc, separately rounded at the base, acuminately produced at the apex, the apices divergent and dentiform, the humeri tumid; with rows of small, oblong, somewhat widely separated, bare punctures, each placed in a large shallow fovea, the interstices 3 and 5 very slightly raised.

Length $13\frac{1}{2}$–18, breadth $4\frac{1}{2}$–$6\frac{1}{4}$ millim. (♂.)

Hab. Costa Rica, Pozo Azul (*Underwood*); Panama, Bugaba (*Champion*).

Two specimens. Distinguishable from the other Central American forms by the less raised alternate elytral interstices, the three small bare spots on each wing-case, and the partly blue legs; and from *C. lacteus* (F.) by the more scattered seriate punctures on the elytra, the elytra themselves less acuminate at the apex and not so strongly lobed at the base. There are various allied unnamed S.-American species in the British Museum *, some of which have doubtless been described by Kirsch †.

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* **Compsus 18-signatus**, sp. n. (Tab. XIII. fig. 16.)—Less elongate than *C. cæruleipes*; the prothorax and elytra together with 18 or 19 very small blue spots—the prothorax with three on the anterior margin, four in a transverse row across the middle (the outer one on the flanks), and one at the base (sometimes obsolete), and the elytra with five in a transverse series just below the base, one at the middle of the disc, one in a line with it on the flanks, and one at the end of the fifth interstice; the antennal scape, knees, tibiæ, and tarsi more or less blue; the rostrum neither carinate nor obliquely grooved, the anterior portion less divergent at the sides in front; the elytra with the alternate interstices slightly raised, the seriate punctures within the foveæ squamose, the apices moderately produced, conjointly rounded (♀?) or bluntly subdentate (♂?). Length 10–$12\frac{3}{4}$, breadth $3\frac{1}{2}$–$4\frac{1}{2}$ millim.

Hab. Mexico? and Venezuela (*Mus. Brit.*).

Two specimens, labelled with the MS. name *C.* 18-*signatus*, Chevr. The Mexican habitat seems doubtful. The coarser, scattered, foveiform, seriate punctures, the less raised subapical portion of the third interstice, and the different position of the subapical spot on the elytra distinguish the present species from *C. nigropunctatus*, apart from the colour of the legs, &c.

† Abhandl. Mus. Dresden, 1888–89, no. 4.

2. **Compsus auricephalus.** (Tab. XIII. figg. 17, ♀; 18, ♂, var.)

Curculio auricephalus, Say, Journ. Acad. Phil. iii. p. 310 (1823) [1].

Platyomus auricephalus, Boh. in Schönh. Gen. Curc. i. p. 645 [2].

Compsus auricephalus, Horn, Proc. Am. Phil. Soc. xv. p. 88 [3]; Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 360 [4]; Mitchell and Pierce, Proc. Ent. Soc. Wash. xiii. p. 48 [5].

Compsus auriceps, Boh. op. cit. vi. 1, p. 183 [6].

Platyomus auriceps, Labr. et Imhoff, Gen. Curc. ii. t. 52 [7].

Compsus venustus, Chevr. in litt.[8].

Length $7\frac{4}{5}$–$12\frac{1}{2}$, breadth $2\frac{2}{3}$–5 millim. (♂ ♀.)

Hab. North America, Mississippi [1 2 4 6 7], Arkansas, Georgia [3], Texas [4 5], Arizona [4].—Mexico [3 6 7] (*Mus. Brit.*), Monclova in Coahuila (*Dr. Palmer*), Victoria, Tampico (*Schwarz, in U.S. Nat. Mus.*), San Rafael Jicaltepec (*Townsend, in U.S. Nat. Mus.*), Oaxaca (*Sallé*, *Höge*).

Var. More elongate; the elytra more produced and acuminate at the apex, the alternate interstices costate throughout; the vestiture white, greenish, or pale brown.

Length $9\frac{1}{10}$–$16\frac{3}{4}$, breadth 3–$6\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico, Acapulco (*Höge*); Guatemala, Tactic in Alta Vera Paz (*Conradt*); Nicaragua, Chontales (*Belt*); Costa Rica, Boca del Limon (*Pittier*), Cangrejal de Aserri (*Biolley*), Atenas (*U.S. Nat. Mus.*); Panama, Caldera, Peña Blanca (*Champion*).

The specimens of this species before me (including a long series from Tampico) vary greatly in size and in the colour of the scales—from green to white or pale brown, the head, rostrum, and legs being often cupreous in the green typical form. The southern examples are more elongate, uniformly white or brownish *, and have the alternate elytral interstices 3, 5, and 7 strongly costate and the apices more produced; but they are connected with *C. auricephalus* by intermediate forms. The prothorax is trisulcate, and often more widened posteriorly in the female than in the male; the eyes, too, are sometimes rather depressed in the former sex. Found on *Phoradendron*, *Ambrosia*, *Gossypium*, and *Acacia* [5].

3. **Compsus nigropunctatus,** sp. n. (Tab. XIII. fig. 19.)

Elongate, black, densely clothed (the punctures included) with chalky-white scales, the elytra each with three or four small bare black spots—one on the fourth or fifth interstice below the base (sometimes obsolete), one at the middle of the disc, one in a line with it on the outer margin, and one on the third interstice towards the apex,—the prothorax also sometimes with three or five small black spots (three on the anterior margin and one on each side of the disc towards the base). Rostrum hollowed and obsoletely sulcate anteriorly, the upper portion obliquely divergent on each side in front, the scrobes descending for a short distance before the eyes, the latter rounded and convex; antennal scape reaching to a little beyond the eyes. Prothorax transverse, deeply bisinuate at the base, slightly rounded at the sides, broadly flattened or hollowed down the middle. Elytra elongate-triangular, flattened on the disc, lobed at the base, acuminate at the apex, the apices dentiform; with rows of fine, subapproximate punctures placed in very shallow foveæ, the third interstice gradually becoming more raised to the apical declivity and then abruptly declivous, the fifth also raised posteriorly and the seventh anteriorly.

Length 12–15, breadth $4\frac{1}{10}$–$5\frac{1}{2}$ millim. (? ♀.)

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* Probably discoloured, as may be the case in *C. isabellinus*, Boh.

Hab. Guatemala? (*Scherzer, in Mus. Brit.*); Costa Rica, Piedras Negras (*U.S. Nat. Mus.*); Panama, Chiriqui (*Trötsch*).

Three specimens, varying in the number of the spots on the prothorax and elytra, the individual from Chiriqui having the prothorax almost immaculate. The third elytral interstice becomes more prominent and cariniform posteriorly, but it is not tuberculate at the commencement of the apical declivity as in *C. cretaceus* (F.) and some other allied S.-American forms. The seriate punctures are closely placed, fine, and shallow, and the sutural region is flattened. The minute scattered hair-like scales are just traceable. *C. quadrisignatus* and *C. bisignatus*, Boh., are somewhat similarly maculate.

EUSTYLUS.

Eustylus, Schönherr, Gen. Curc. vii. 1, p. 40 (1843); Lacordaire, Gen. Col. vi. p. 207.

Schönherr referred two winged species to this genus—one with the anterior femora toothed (*E. puber*, Oliv., from Colombia*), the other with the anterior femora unarmed (*E. striatus*, Boh., from Mexico). Amongst the various new forms now added there are representatives of each of these sections, and three with rudimentary wings. They agree in the following characters:—

Rostrum widened anteriorly, the scrobes short, deep, superior, and wholly exposed from above, the bare nasal plate more or less concave, and limited behind by a v- or u-shaped ridge; antennal scape stout or moderately stout, reaching at least to the front of the prothorax; eyes prominent, not strictly lateral; prothorax subcylindrical; scutellum well developed or small; elytra 10-striate, the outer striæ coalescent from the basal third or free (*E. ruptus* and *E. veræpacis*), the humeri prominent in the winged forms; metathoracic episterna dilated anteriorly; anterior femora toothed or unarmed; anterior and intermediate tibiæ unguiculate; tarsal claws free; wings fully developed or rudimentary; body oblong or elongate, squamose, and sometimes conspicuously setose.

E. grypsatus superficially resembles a *Phyllobius*, from which it differs in having sharply defined, deep, oblong scrobes and free tarsal claws. The fusion or separation of the outer striæ of the elytra and the development of the wings prove to be unstable characters in *Eustylus*.

a. Wings fully developed; scutellum larger.
  *a*¹. Anterior femora toothed; rostrum longer than broad; head not abruptly convex behind the eyes.
    *a*². Elytra with the interstices feebly uniformly convex: scales uniformly green . . . . . [*puber*, Oliv.]
    *b*². Elytra with the alternate interstices raised, spotted and lineate: scales not metallic . . . . . *sexguttatus*, sp. n.
  *b*¹. Anterior femora unarmed; head abruptly convex behind the eyes.
    *c*². Rostrum longer than broad.
      *a*³. Elytra with the alternate interstices raised.
        *a*⁴. Elytral setæ erect, long, and stiff . . . . . *setipennis*, sp. n.

* There is a specimen of this species in the Pascoe collection labelled "*Platyomus*, Mexico," but the locality requires confirmation.

b^4. Elytral setæ shorter and decumbent . . . . . *striatus*, Boh.
b^3. Elytra with the alternate interstices interruptedly costate.
c^4. Third interstice with two very large oblong tubercles; outer striæ coalescent; humeri less prominent . . . . . *quadrigibbus*, sp. n.
d^4. Third interstice with a single moderately large tubercle below the base; outer striæ free; humeri very prominent . . . *ruptus*, sp. n.
d^2. Rostrum shorter, subquadrate; humeri prominent.
c^3. Elytra with the alternate interstices more or less raised; outer striæ coalescent . . . . . *grypsatus*, Boh.
d^3. Elytra with the interstices feebly uniformly convex; outer striæ free . . . . . *veræpacis*, sp. n.
b. Wings rudimentary; scutellum smaller; anterior femora unarmed; humeri not prominent; rostrum subquadrate.
c^1. Elytra with the alternate interstices more or less interruptedly costate . . . . . *chiriquensis*, sp. n.
d^1. Elytra with the alternate interstices more or less raised.
e^2. Elytral setæ broad, squamiform, raised. . . . . *subapterus*, sp. n.
f^2. Elytral setæ decumbent, narrow, hair-like . . . . . *cinericius*, sp. n.

1. **Eustylus sexguttatus**, sp. n. (Tab. XIII. fig. 20, ♂.)

Elongate, narrow (♂), broader (♀), piceous; densely clothed above with brown and whitish scales, the latter condensed into two vittæ on the disc of the prothorax and a stripe down each of the alternate elytral interstices, the elytra also each with three subquadrate blackish spots (two on the third, and one on the seventh interstice), and sometimes another small spot towards the apex; the scales on the under surface and along the flanks of the prothorax and elytra almost wholly whitish; the surface also set with minute scattered decumbent hairs. Rostrum longer than broad, widened anteriorly, the short deep scrobes converging posteriorly; eyes very large, separated by about their own width as seen from above; antennæ fully one-half the length of the body in ♂, the scape stout and reaching considerably beyond the front margin of the prothorax, joint 2 of the funiculus longer than 1. Prothorax slightly broader than long, narrowed and feebly constricted anteriorly, flattened down the middle of the disc, the punctures covered by the vestiture. Scutellum large. Elytra elongate-subtriangular in ♂, broader and gradually widened to the middle in ♀, the humeri prominent; punctate-striate, the alternate dorsal interstices costate. Anterior femora clavate and sharply dentate. Anterior and intermediate tibiæ strongly unguiculate in both sexes.

Length 7–10, breadth $2\frac{1}{5}$–$3\frac{1}{2}$ millim. (♂ ♀.)

Hab. Panama (*Salvin*), Volcan de Chiriqui, David (*Champion*), Tabernilla, Canal Zone (*Busck, in U.S. Nat. Mus.*), Taboga I. (*Champion*, *Busck*).

Numerous examples, varying in the intensity of the markings, according to the predominance of the whitish or of the brown scales, the darker individuals having the white line on the fifth elytral interstice obsolete and the blackish spots very conspicuous, and the paler specimens the spots almost obsolete. *E. sexguttatus* may be at once separated from the Mexican *E. striatus* by the sharply toothed anterior femora, apart from its greater size, larger eyes, longer antennæ, shorter prothorax, and different elytral markings.

2. **Eustylus setipennis,** sp. n. (Tab. XIII. figg. 21, 21 *a*, ♂.)

Elongate, narrow, rather convex, piceous; above densely clothed with brown scales, with cinereous or greenish-white scales intermixed, the lighter ones sometimes condensed into two faint vittæ on the disc of the prothorax and a more or less distinct short oblique streak on the outer part of the elytra at about the middle, the scales on the flanks in part, and those on the under surface, usually cinereous or greenish-white; the elytra also set with numerous long, stiff, suberect, blunt setæ down each of the dorsal interstices, the rest of the surface with short curled decumbent scattered setæ, the tibiæ pilose within. Head and rostrum canaliculate, the rostrum longer than broad, the scrobes subparallel as seen from above, the head flattened between the eyes and abruptly convex behind them, the eyes rounded and very prominent; antennal scape very stout, reaching beyond the front margin of the prothorax, joint 2 of the funiculus longer than 1. Prothorax much longer than broad, subcylindrical, slightly rounded at the sides, sparsely punctate. Scutellum small. Elytra moderately elongate, punctate-striate, the alternate dorsal interstices sometimes becoming more or less costate posteriorly, the humeri not very prominent. Legs stout, anterior femora unarmed.

Length 5–6½, breadth 1½–2 millim. (♂.)

Hab. GUATEMALA, Senahu and San Juan in Alta Vera Paz (*Champion*), Cacao near Trece Aguas (*Schwarz and Barber, in U.S. Nat. Mus.*).

Five examples, apparently all males, varying in the colour of the scales, the Senahu specimen having the flanks of the prothorax and elytra in great part greenish-white. Near *E. striatus*, Boh., differing from it in the subparallel scrobes, the longer antennal scape, and the strongly setose elytra.

3. **Eustylus striatus.** (Tab. XIII. fig. 22, ♂.)

Eustylus striatus, Boh. in Schönh. Gen. Curc. vii. 1, p. 42 [1].

Length 5½–7, breadth 1¾–2⅓ millim. (♂ ♀.)

Hab. MEXICO (*Hegewisch, in coll. Sommer* [1]).

An elongate, narrow form, variegate or lineate above with a dense clothing of light and dark brown scales (the dark scales clustered into three narrow vittæ on the prothorax and various interrupted lines or small confluent spots on the elytra), and also set with numerous, rather long, curved, adpressed, dark setæ, the scales on the under surface greyish or opalescent; the short deep scrobes converging posteriorly; the eyes large and prominent; the antennal scape very stout and reaching the front of the prothorax; the prothorax elongate; the elytra very gradually narrowing from the base in ♂, broader, subparallel in their basal half, and more abruptly acuminate in ♀, the alternate interstices costate; the anterior femora unarmed. This species is not represented in any of the extensive Mexican collections received by us, but there are six examples of it in the Sommer collection, now in the Oxford University Museum, the male figured having been kindly presented by Prof. Poulton.

4. **Eustylus quadrigibbus,** sp. n. (Tab. XIII. figg. 23, 23 *a*, ♂.)

Moderately elongate, narrow (♂), broader (♀), piceous or ferruginous; densely clothed with coppery-brown scales, the prothorax with an indication of two faint paler stripes on the disc and the elytra each with an irregular, oblique, dirty white fascia just beyond the middle; the surface also set with scattered, curled, decumbent setæ. Head and rostrum canaliculate, the rostrum longer than broad, widened

anteriorly, the short deep scrobes subparallel as seen from above, the head flattened between the eyes and abruptly convex behind them, the eyes rounded, moderately large, and very prominent; antennal scape very stout and setose, reaching the front of the prothorax, joint 2 of the funiculus much longer than 1. Prothorax longer than broad, cylindrical, narrowed and feebly constricted towards the apex, sparsely punctate. Scutellum prominent. Elytra subparallel in their basal half in ♂, broader and slightly widened posteriorly in ♀, the humeri rather prominent; coarsely punctate-striate, the alternate dorsal interstices costate, the ridge on the third swollen into a large oblong tubercle at the commencement of the apical declivity and a still broader tubercle below the base. Anterior femora unarmed. Anterior and intermediate tibiæ strongly unguiculate.

Length $6\frac{1}{5}$–8, breadth $2\frac{1}{5}$–3 millim. (♂ ♀.)

Hab. Mexico, Toxpam in Vera Cruz (*Sallé*).

One pair. Recognizable by the two very large tubercles on each elytron—the one below the base broad and occupying the space between the third and fifth rows of punctures, the other oblong,—and the single dirty white oblique fascia on the disc. The scrobes are less convergent behind than in *E. striatus*. The eyes in both these insects have the appearance of being inserted at the base of the rostrum, owing to the head being abruptly convex behind them.

5. **Eustylus ruptus,** sp. n. (Tab. XIII. figg. 24, 24 *a*, ♂.)

♂. Elongate, rather convex, piceous; above densely clothed with brown, coppery-brown, or greyish scales, often with a few widely scattered metallic-green (or golden) scales intermixed, these latter predominating at the base of the femora and on the ventral surface; the surface also set with short, scattered, adpressed setæ. Rostrum slightly longer than broad, widened forwards, with a smooth, anteriorly bifurcate, median carina extending forwards to the well-defined, horseshoe-shaped, declivous, sulcate, subapical space, the bare nasal plate concave and limited behind by a v-shaped ridge, the short scrobes converging posteriorly; eyes large, rounded, prominent; antennal scape moderately stout, reaching the front of the prothorax, joint 2 of the funiculus longer than 1. Prothorax cylindrical, a little longer than broad, slightly narrowed towards the apex, feebly bisinuate at the base; coarsely punctate. Scutellum rather large. Elytra elongate-triangular, at the base nearly twice as wide as the prothorax, the humeri very prominent; closely, rather coarsely punctate-striate, the alternate interstices 3, 5, and 7 interruptedly costate, the oblong elevation near the base of 3 tuberculiform and very prominent, the outer striæ free. Legs moderately stout; anterior and intermediate tibiæ strongly unguiculate.

Length $6\frac{1}{2}$–8, breadth $2\frac{1}{8}$–$2\frac{7}{8}$ millim.

Hab. Panama, Volcan de Chiriqui, Bugaba (*Champion*).

Six examples, evidently all males *. The elongate-triangular elytra, with prominent humeri and interruptedly costate alternate interstices, the relatively narrow, cylindrical prothorax, and the anteriorly bifurcate median carina of the rostrum, are the chief characters of *E. ruptus*. The scales, too, are brown on the upper surface and metallic green beneath. The elytra are broader at the base than in *E. sexguttatus*.

6. **Eustylus grypsatus.** (Tab. XIII. fig. 25, ♂.)

Phyllobius grypsatus, Boh. in Schönh. Gen. Curc. vii. 1, p. 27 [1].

Eustylus subsignatus, Chevr. in litt.[2].

Length $4\frac{1}{2}$–$7\frac{1}{2}$, breadth $1\frac{1}{2}$–$2\frac{1}{2}$ millim. (♂ ♀.)

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* The female of an allied viridi-squamose, non-tuberculate form from Savanillas de Pirris, Costa Rica, too worn to describe, has the elytra widened to the middle.

Hab. Mexico [1 2] (*Mus. Brit. ex coll. Flohr; Höge, coll. Solari*), Orizaba, Coscomatepec, Totosinapam (*Sallé*), Zacualtipam, Jalapa, Cerro de Palmas, Oaxaca (*Höge*).

Apparently a common insect in Mexico, to judge from the numerous examples available for examination. Fresh examples have the scales whitish or cinereous, and the alternate elytral interstices interruptedly fusco-lineate to beyond the middle, the prothorax sometimes with one or three darker vittæ on the disc. The decumbent setæ along the elytral interstices are sometimes long and conspicuous. Specimens occur with the scales brownish or cupreo-cinereous and the elytra faintly spotted with greenish or dirty-white. The alternate elytral interstices are a little more raised than the others, and the outer ones are coalescent from about the basal third. The head is abruptly convex behind the eyes. The males are narrow, the females broader and widened posteriorly. In four dirty examples (all more or less coated with an earthy-looking exudation) the tarsal claws appear to be connate at the base, instead of free, as in the type; they agree in all other respects with *E. grypsatus*.

7. **Eustylus veræpacis,** sp. n. (Tab. XIII. fig. 26, ♀.)

Moderately elongate, piceous or brown; thickly clothed with whitish, greenish-white, or bluish-white scales, the prothorax sometimes with a slightly darker median vitta and the elytra variegated with small white spots; the surface also set with short, scattered, decumbent setæ, those on the elytra uniseriately arranged down each interstice. Head and rostrum canaliculate, the rostrum broad, subquadrate, the short deep scrobes becoming slightly divergent anteriorly, the bare nasal plate large, concave, and limited behind by a v-shaped ridge; eyes very large, rounded, coarsely facetted; antennal scape moderately stout, reaching the front margin of the prothorax, joint 2 of the funiculus longer than 1. Prothorax subcylindrical, obliquely narrowed anteriorly, nearly as long as broad, flattened down the middle of the disc; sparsely, finely punctate. Scutellum large. Elytra elongate-subtriangular, broader in ♀, somewhat uneven, closely and conspicuously punctate-striate, the outer striæ free, the interstices feebly uniformly convex, the humeri prominent.

Length $6\frac{1}{2}$–9, breadth 2–$3\frac{1}{8}$ millim. (♂ ♀.)

Hab. Guatemala, Coban (*Conradt*), Sabo (*Champion*), Cacao near Trece Aguas (*Schwarz and Barber, in U.S. Nat. Mus.*).

Seven specimens, all from Alta Vera Paz, assumed to include both sexes, though the supposed females have the elytra narrowed from the base as in the males. Larger than the Mexican *E. grypsatus*; the eyes larger and more coarsely facetted; the prothorax relatively shorter; the elytra elongate-subtriangular in both sexes, the shoulders more prominent, the outer striæ free, the surface not fusco-lineate.

8. **Eustylus chiriquensis,** sp. n. (Tab. XIII. figg. 27, 27 *a*, ♂.)

Oblong (♂), somewhat pyriform (♀), rather convex, piceous; densely clothed with coppery- or greyish-brown scales, those on the apical declivity sometimes paler, and also set with scattered curled decumbent setæ. Head flattened and foveate between the eyes; rostrum short, broad, subquadrate, smooth, bare, and shining down the middle, sulcate towards the large, bare, concave nasal plate, the latter limited

behind by a ∪-shaped ridge, the scrobes short, converging posteriorly; eyes very large, rounded, prominent; antennal scape moderately stout, reaching the front of the prothorax. Prothorax longer than broad, somewhat rounded at the sides, very little narrower at the apex than at the base, the base subtruncate; with coarse scattered punctures intermixed with a fine interstitial punctuation. Scutellum small. Elytra subparallel in their basal half in ♂, broader and widened to near the middle in ♀, moderately produced at the apex, the humeri obliquely truncate, somewhat prominent in ♂, obtuse in ♀; uneven, coarsely punctate-striate, the alternate and outer dorsal interstices interruptedly costate, the prominences becoming tuberculiform beyond the middle. Anterior femora unarmed. Anterior and intermediate tibiæ unguiculate in both sexes, the anterior pair obsoletely denticulate. Wings rudimentary.

Var. The elytra more produced at the apex, the alternate and outer dorsal interstices almost uninterruptedly costate, the fifth sometimes with an oblong spot at about the basal fourth, or the scales of the apical declivity, yellowish.

Length $5\frac{1}{3}$–7, breadth $1\frac{4}{5}$–$2\frac{3}{4}$ millim. (♂ ♀.)

Hab. PANAMA, Volcan de Chiriqui 4000–8000 feet, Caldera, Boquete, Peña Blanca (*Champion*).

A long series from the Volcan de Chiriqui; the variety is represented by three examples from Peña Blanca and one from Boquete. This species differs from the Guatemalan *E. cinericius* in having a larger, concave, bare nasal plate; the rostrum smooth, bare, and more or less sulcate down the middle, and with the scrobes converging posteriorly; the alternate elytral interstices (in the typical form) interruptedly costate or tuberculate, and the humeri somewhat prominent in the male. The scrobes are shorter than in *Brachyomus* and *Synthlibonotus*.

9. **Eustylus subapterus,** sp. n. (Tab. XIII. figg. 28, 28 *a*, ♂.)

Elongate, rather convex, narrow (♂), broader (♀), piceous or obscure ferruginous; thickly clothed with coppery-brown and greyish scales, the elytra sometimes with an oblique pallid spot or fascia on the outer part of the disc at about the middle and an indeterminate or irregular transverse blackish patch just beyond it, the scales on the under surface greyish; the elytra also set with numerous semierect, broad, oval or oblong, light and dark scales, which are chiefly clustered along the alternate dorsal interstices, the rest of the surface with short, scattered, decumbent setæ. Head and rostrum canaliculate, the rostrum about as long as broad, the scrobes slightly converging posteriorly, the head flattened between the eyes, the latter rounded and very prominent; antennal scape gradually widened outwards, reaching beyond the front of the prothorax, joints 1 and 2 of the funiculus subequal in length. Prothorax longer than broad, slightly rounded at the sides, compressed before the middle, subtruncate at the base, finely punctate. Scutellum very small. Elytra oblong-oval in ♂, broadened and widened to the middle in ♀, convex, conjointly produced at the apex, the humeri obliquely truncate and not prominent; punctate-striate, the alternate dorsal interstices raised. Legs stout; anterior femora unarmed. Wings rudimentary.

Length $6\frac{2}{5}$–$8\frac{2}{3}$, breadth 2–3 millim. (♂ ♀.)

Hab. MEXICO, Chiapas (*Sallé*); GUATEMALA, Quiché Mts. (*Champion*), Tecpan (*Conradt*).

Six specimens, varying in the extent of the maculation of the elytra. The chief characters of this species are—the long, gradually widened antennal scape; the subquadrate rostrum with posteriorly converging scrobes; the comparatively smooth

prothorax (as seen with the vestiture intact); the non-prominent humeri; the broad, semi-erect, intermixed setiform scales on the elytra; and the rudimentary condition of the wings.

10. **Eustylus cinericius,** sp. n.

Elongate, rather convex, narrow (♂), broader (♀), piceous or ferruginous; densely clothed with whitish, cinereous, or greyish-brown scales (which often have a cupreous or greenish tinge in certain lights), the elytra sometimes with a faint oblique darker fascia crossing the disc at about the middle (perhaps due to discoloration), the surface also set with scattered, curled, short, decumbent setæ. Head and rostrum sulcate, the rostrum subquadrate, the scrobes subparallel, the head flattened between the eyes and convex behind them, the latter rounded and very prominent; antennal scape stout, reaching beyond the front of the prothorax. Prothorax longer than broad, slightly rounded at the sides, subtruncate at the base, and often feebly grooved down the middle; impressed with coarse scattered punctures, intermixed with a fine close interstitial punctuation. Scutellum depressed or very small. Elytra moderately long, slightly narrowed anteriorly in both sexes, broader and widened to near the middle in ♀, the sutural region broadly flattened to near the apical declivity, the humeri oblique and not prominent; coarsely punctate-striate, the alternate dorsal interstices raised. Legs stout; anterior femora unarmed. Wings rudimentary.

Length $4\frac{1}{2}$–$8\frac{3}{4}$, breadth $1\frac{3}{4}$–$3\frac{1}{5}$ millim. (♂ ♀.)

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

Twenty-four specimens, those from San Gerónimo with the vestiture more or less discoloured by a brownish exudation. From *E. subapterus* the present species may be known by the more convex basal portion of the head, the coarsely punctured prothorax, the small curled elytral setæ (which replace the intermixed broad, suberect scales), and the almost uniform cinereous or greyish vestiture. The head and rostrum are found to be deeply sulcate when the scales are removed. The metathoracic episterna are dilated anteriorly, as in the fully-winged forms.

PSEUDEUSTYLUS, gen. nov.

Mentum large, almost filling the buccal cavity; scrobes superior, broad, deep, extending backwards to the eyes, becoming broader, shallower, and squamose behind the points of insertion of the antennæ; nasal plate triangular, on the same plane as the anterior part of the rostrum and not limited behind by a conspicuous ridge; eyes very large; antennæ with a long, feebly clavate, rather slender scape, an elongated second joint to the funiculus, and an elongate club; scutellum large; elytra elongate, 10-striate, the outer striæ free, the humeri prominent; anterior femora toothed; anterior and intermediate tibiæ unguiculate; posterior tibiæ narrowly lamellate at the apex, the glabrous articular surface large and cavernous; tarsal claws free; body winged, elongate, squamose; the other characters as in *Eustylus*.

Type, *P. cupreoviridis.*

The two species from which the above characters are taken agree with *Eustylus puber* and *E. sexguttatus* in having toothed anterior femora, but the posteriorly widened and produced scrobes and the flattened nasal plate readily distinguish them from all the members of that genus.

1. **Pseudeustylus cupreoviridis,** sp. n. (Tab. XIII. fig. 29, ♀.)

Moderately elongate, piceous; densely squamose, the scales on the head, rostrum, and legs, on the anterior margin and down the middle of the prothorax, along the base, suture, and outer part of the disc of the elytra, and on part of the under surface, cupreous, those on the rest of the body green or greenish-cinereous; the elytra also sparsely set with uniseriately arranged fine, stiff, erect setæ, and the rest of the surface with short decumbent hairs. Head and rostrum canaliculate; eyes very large, rounded, convex; antennal scape moderately stout, joint 2 of the funiculus considerably longer than 1. Prothorax a little broader than long, subcylindrical, obliquely narrowing forwards, obsoletely canaliculate; with coarse scattered punctures intermixed with a fine dense punctuation. Elytra elongate-triangular, conspicuously punctate-striate, the interstices somewhat convex, the humeri prominent, the apices feebly mucronate.

Length $7\frac{3}{4}$–$9\frac{1}{5}$, breadth $2\frac{1}{2}$–$3\frac{1}{10}$ millim. (♂ ♀.)

Hab. PANAMA (*Ribbe, in Mus. Dresden*), Bugaba (*Champion*).

Three males and one female. A remarkably distinct form, with the cupreous and green portions of the surface sharply contrasted (recalling *Pandeleteius erubescens* and *Exophthalmus carneipes*), the eyes very large, the scrobes wholly visible from above, the anterior femora dentate.

2. **Pseudeustylus cupreotinctus,** sp. n. (Tab. XIII. figg. 30, 30 *a*, ♀.)

♀. Elongate, black, shining; above thickly clothed with cupreo-cinereous, the lower surface with whitish, scales, the scales on the elytra here and there condensed into denser patches which are separated by small partially denuded spaces (? abraded), and also set with short, scattered, decumbent, whitish setæ. Head and rostrum canaliculate, the rostrum longer than broad and with the upper portion parallel-sided; eyes very large, somewhat depressed, oval as seen from above; antennæ slender, the scape feebly clavate at the tip, joint 2 of the funiculus twice as long as 1. Prothorax about as long as broad, subcylindrical, obliquely narrowed anteriorly, interruptedly canaliculate; with coarse scattered punctures intermixed with a fine interstitial punctuation. Elytra elongate, subparallel to beyond the middle, the humeri prominent; coarsely punctate-striate (the punctures appearing fine where covered by the scales), the interstices flat on the disc, feebly convex towards the sides and apex.

Length $10\frac{1}{2}$, breadth $3\frac{2}{3}$ millim.

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

One specimen. More elongate than *P. cupreoviridis*, the antennæ more slender, the eyes depressed, the elytra relatively longer, with the setæ shorter and decumbent, the scales uniformly coloured. This species is extremely like *Exophthalmus distigma*, an insect occurring in abundance at the same locality, but it is separable at a glance by the superior scrobes, the longer, 10-striate elytra, and the dentate anterior femora.

BRACHYSTYLUS.

Brachystylus, Schönherr, Gen. Curc. viii. 2, p. 433 (1845); Lacordaire, Gen. Col. vi. p. 207; Horn, Proc. Am. Phil. Soc. xv. p. 90.

Brachystylus has hitherto included a single species only, *B. acutus* (Say), from North America; the two from Mexico now added are perfectly congeneric. They have a short broad rostrum, with short, superior, posteriorly converging scrobes, the

latter connected behind with a shallower, obliquely descending, densely squamose groove; the antennal scape short and stout; the eyes small and very widely separated; the elytra 10-striate, the outer striæ coalescent at about the basal third; the legs short and stout; the posterior tibiæ laminate and squamose at the apex, and with the articular surface short and terminal; the anterior tibiæ denticulate and unguiculate; the tarsal claws free; and the body winged and densely squamose. This genus must be placed near *Compsus*. The free tarsal claws separate *Brachystylus* from the Phyllobiina.

1. **Brachystylus tamaulipanus,** sp. n. (Tab. XIV. figg. 1, 1 *a*, ♀.)

Oblong, black, densely clothed throughout with chalky-white scales, and also set with minute, widely scattered, decumbent hairs. Head and rostrum obsoletely canaliculate, the rostrum short, broad, very little narrower than the head, hollowed anteriorly, and deeply emarginate at the apex, the bare nasal plate short and concave; antennæ rather short, the scape moderately thickened and about reaching the middle of the eyes, the latter small, depressed, truncate in front. Prothorax cylindrical, along the median line as long as broad, slightly narrower at the apex than at the base, sparsely punctate (as seen through the vestiture), transversely wrinkled before and behind the middle. Elytra subparallel in their basal half in ♂, gradually widened to beyond the middle and with the apices abruptly conjointly produced in ♀, flattened on the disc anteriorly, the humeri not very prominent; punctate-striate, the interstices more or less convex. Legs short and stout; anterior tibiæ denticulate within.

Length $6\frac{1}{10}$–$7\frac{1}{3}$, breadth $2\frac{1}{5}$–$2\frac{2}{3}$ millim. (♂ ♀.)

Hab. Mexico, Tampico in Tamaulipas (*Schwarz, in U.S. Nat. Mus.*).

Three specimens, found in December. Smaller than the N.-American *B. acutus* (Say), the rostrum more deeply excavate in front, the antennal scape not so stout, the eyes small and depressed, the humeri less prominent, the scales chalky-white.

2. **Brachystylus microphthalmus,** sp. n. (Tab. XIV. figg. 2, 2 *a*, ♂.)

Oblong, black, variegated above with a dense clothing of brown and whitish scales, the latter condensed into two faint vittæ on the disc of the prothorax, and various markings on the elytra—a patch on the shoulder, a short irregular oblique fascia on the disc at about one-third from the base, a common transverse fascia beyond the middle, and a large apical patch,—the scales on the under surface whitish, the surface also set with widely scattered, minute, decumbent hairs. Head canaliculate between the eyes, the rostrum short, broad, hollowed anteriorly and deeply emarginate at the apex, the nasal plate short and depressed; antennæ rather short, the scape moderately thickened and barely reaching the middle of the eyes, the latter small and convex. Prothorax cylindrical, nearly as long as broad, sparsely punctate. Elytra subparallel in their basal half, rather convex, comparatively short, the humeri moderately prominent and obliquely truncated in front; punctate-striate, the interstices convex. Legs short and stout; anterior tibiæ denticulate within.

Length 5, breadth $1\frac{3}{4}$ millim. (♂.)

Hab. Mexico, Oaxaca (*Höge*).

One specimen. More convex than *B. tamaulipanus*, the rostrum less excavate in front, the eyes smaller and convex, the upper surface variegate. The much smaller eyes, the less thickened antennal scape, the broader rostrum, the cylindrical prothorax, the shorter, more convex, differently marked elytra, &c., separate the present species from *B. acutus*.

APHRASTUS.

Aphrastus, Schönherr, Gen. Curc. vii. 1, p. 39 (1843); Lacordaire, Gen. Col. vi. p. 209; Horn, Proc. Am. Phil. Soc. xv. p. 98.

The two known species of this genus are from North America, and two others are now added from Mexico, these latter being less convex than *A. tæniatus* and *A. unicolor*, and having the elytra parallel-sided anteriorly and the humeri more prominent. The chief characters of *Aphrastus* are as follows:—

Rostrum broad, transversely-subquadrate, sulcate, the scrobes short, superior, the nasal plate limited behind by a v-shaped ridge; eyes very widely separated, not strictly lateral; elytra 10-striate, the outer striæ coalescent from the basal third; posterior tibiæ narrowly laminate at the apex, the articular surface terminal, not cavernous; tarsal claws connate; body oblong or elongate, densely squamose, winged *.

1. **Aphrastus angularis,** sp. n. (Tab. XIV. figg. 3, 3 *a*, ♂.)

Elongate, moderately convex, rather narrow, black or piceous; densely clothed with whitish, cinereous, or brownish-cinereous scales, the legs also set with short decumbent hairs. Head and rostrum slightly hollowed and finely canaliculate down the middle, the head somewhat exserted, the rostrum broader than long, the scrobes slightly converging posteriorly; antennæ stout, short, about reaching the centre of the prothorax, the scape extending to the middle of the eyes, joint 2 of the funiculus shorter than 1, the club comparatively small; eyes large, moderately prominent. Prothorax cylindrical, as long as broad, flattened along the middle, feebly bisinuate at the base, obsoletely canaliculate and finely punctate. Scutellum oval. Elytra elongate, subparallel in their basal half, sinuate at the base, the humeri obliquely truncated laterally and angularly produced in front; conspicuously punctate-striate, the interstices feebly convex. Legs stout, short.

Length $5\frac{1}{2}$–$7\frac{1}{2}$, breadth $1\frac{4}{5}$–$2\frac{2}{5}$ millim. (♂ ♀.)

Hab. Mexico (*Mus. Brit.; coll. Solari, ex Jekel*), Iguala in Guerrero (*Höge*), Mescala in Guerrero (*H. H. Smith*).

Fifteen specimens, the two in the Solari collection labelled with misleading MS. specific names of Jekel † (one of them marked "envoyé à Boheman"); the short series from Mescala in fresh condition. This species may be recognized by its exserted head, rather large eyes, short antennæ, cylindrical prothorax, angularly, anteriorly projecting humeri (which are continued forwards beyond the hind angles of the prothorax), and uniform whitish or cinereous vestiture. The short intermixed setæ are almost wanting on the upper surface.

2. **Aphrastus submarginatus,** sp. n. (Tab. XIV. figg. 4, 4 *a*, ♂.)

Moderately elongate, somewhat flattened above, narrow, piceous or ferruginous; variegated above with a dense clothing of cinereous and brown scales, the latter usually condensed into a median vitta on the prothorax and small indeterminate confluent spots on the elytra, the markings sometimes almost obsolete, the scales on the under surface cinereous or whitish; the surface also set with minute scattered

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* Horn in his Table of the Cyphina, group Aphrasti (*t. c.* p. 87), states that the body is apterous; but this must be due to an error of observation.

† *coarcticollis* and *impressicollis*.

decumbent setæ. Head and rostrum finely canaliculate, the rostrum broad, transverse, the scrobes short and converging posteriorly; antennæ stout, barely reaching the base of the prothorax, the scape not extending beyond the eyes, joint 2 of the funiculus shorter than 1, the club rather small; eyes comparatively small, depressed. Prothorax about as long as broad, obliquely narrowed anteriorly, subtruncate at the base, obsoletely canaliculate, sloping and somewhat hollowed towards the sides (appearing fairly margined posteriorly), finely punctate. Scutellum transverse. Elytra subparallel in their basal half in ♂, gradually widened to the middle in ♀, subtruncate at the base, the humeri rather prominent; finely punctate-striate, the interstices feebly convex. Legs moderately stout.

Length $4\frac{4}{5}$–$6\frac{3}{4}$, breadth $1\frac{2}{3}$–$2\frac{2}{5}$ millim. (♂ ♀.)

Hab. MEXICO, Presidio and Milpas in Durango (*Forrer*), Lerdo (*Fenyes, ex coll. Bovie*), La Noria in Sinaloa (*Höge*), Matamoros Izucar and Tehuantepec (*U.S. Nat. Mus.*).

Numerous examples, varying in size and in the extent of the brown markings on the upper surface, these being almost obsolete in some specimens. The somewhat explanate sides of the prothorax, the subtruncate base of the elytra, and the smaller eyes separate *A. submarginatus* from *A. angularis*. The falciform deciduous portion of the mandible is acute at the tip.

Section II.—*Ocular lobes well developed* *.

Group **ENTIMINA.**

Entimides, Hypsonotides, and *Promécopides,* Lacordaire.
Promecopini, Horn.

Under this group are placed all the genera with broad, well-developed ocular lobes to the prothorax, laterally placed scrobes, and fully developed wings; these latter, however, are rudimentary or wanting in *Pseudhypoptus*. The "Entimides" and "Hypsonotides" are poorly, and the "Promecopides" very well, represented in Central America. The eight genera belonging to our region may be tabulated thus:—

a. Antennal club oblong or elongate; rostrum short, broad, strongly dilated anteriorly; elytra very broad, triangular. [ENTIMIDES, Lacord.]
  *a*¹. Tarsal claws free; eyes distant; humeri angularly projecting: species very large . . . . . ENTIMUS, Schönh.
  *b*¹. Tarsal claws connate at base; eyes subapproximate; humeri not projecting laterally: species smaller . . . . . CYDIANIRUS, Schönh.
b. Antennal club ovate or oblong-ovate; elytra narrower.
  *c*¹. Rostrum longer and narrower; tarsal claws free. [HYPSONOTIDES, Lacord.]
    *a*². Humeri prominent; scutellum larger; ocular lobes not extending inferiorly; wings fully developed . . . . . HYPOPTUS, Lacord.
    *b*². Humeri not prominent; scutellum very small; ocular lobes extending inferiorly; wings rudimentary or wanting . . . PSEUDHYPOPTUS, gen. nov.

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* *Cf.* p. 178, *anteà*.

d^1. Rostrum short and broad : species smaller (length $2\frac{4}{5}$–8 mm.). [Promécopides, Lacord.]

c^2. Scrobes meeting beneath the eyes; mesosternum protuberant.

a^3. Tarsal claws free; eyes distant above . . . . . Coleocerus, Schönh.

b^3. Tarsal claws connate; eyes subapproximate above . . . Eucoleocerus, gen. nov.

d^2. Scrobes not extending beneath the eyes.

c^3. Rostrum transverse, feebly dilated anteriorly; tarsal claws free; mesosternum not protuberant . . . . . Eudiagogus, Schönh.

d^3. Rostrum longer, subquadrate or oblong-subquadrate, dilated anteriorly; tarsal claws connate or free; mesosternum protuberant or flattened . . . . . Promecops, Schönh.

ENTIMUS.

Entimus, Schönherr, Curc. Disp. Meth. p. 83 (1826); Gen. Curc. i. p. 454, and v. p. 744; Lacordaire, Gen. Col. vi. p. 281.

A Tropical-American genus including some of the finest known weevils, one species extending northward to Nicaragua.

1. **Entimus arrogans.** (Tab. XIV. figg. 5, 5 *a*, *b*.)

Entimus arrogans, Pascoe, Journ. Linn. Soc., Zool. xi. p. 448 (1873) [1].

Entimus plebejus, Roelofs, Compt.-Rend. Soc. Ent. Belg. xviii. p. xxxviii (1875) [2].

Length 25–27, breadth (at shoulders) 13–$15\frac{1}{3}$ millim.

Hab. Nicaragua, Chontales (*Belt*, *Janson*); Costa Rica, Cariblanco (*Lankester*); Panama [1].—? Colombia [2].

I have seen seven specimens of this species. It may be known by its cinereous or whitish piliform vestiture; the deeply sulcate rostrum; the tuberculate, sulcate prothorax; and the very broad, triangular, interruptedly unifasciate, seriato-tuberculate elytra. The deciduous portion of the mandibles (fig. 5 *b*) is short, curved, broad, rounded at the tip.

CYDIANIRUS.

Cydianerus, Schönherr, Gen. Curc. v. p. 737 (1839); Lacordaire, Gen. Col. vi. p. 279.

Cydianirus, Gemminger et Harold, Gen. Col. viii. p. 2326.

The single Central-American representative of this genus has been recently referred by M. Bovie to *Polyteles* (*Polydius*, olim), Schönh., its depressed subapproximate eyes, prominent ocular lobes, and connate tarsal claws * notwithstanding; the type of the latter † (*P. steveni*=*Rhigus cœlestinus*, Perty), on the contrary, having the eyes very prominent and widely separated, the ocular lobes reduced to a minimum, and the tarsal claws free. *C. argenteus*, therefore, is better placed in *Cydianirus* till that genus is dismembered.

* They are incorrectly shown as widely divergent in this and the allied species on the Plate in Wytsman's 'Genera Insectorum.'

† *P. guerini*, Fähr., is the type of *Polytelidius*, Bovie.

1. **Cydianirus argenteus.** (Tab. XIV. figg. 6, 6 *a*.)

Cydianerus argenteus, Boh. in Schönh. Gen. Curc. v. p. 741 [1].

Polydius donceli (sic), Bovie, Ann. Soc. Ent. Belg. lii. p. 43 (1908) [2]; Wytsman's Gen. Ins., Entiminæ, p. 4, t. 1. fig. 6 [3].

Length $7\frac{2}{5}$–$11\frac{1}{2}$, breadth (at shoulders) $3\frac{2}{3}$–$5\frac{1}{2}$ millim.

Hab. Mexico (*coll. Chevrolat* [1]), Tehuantepec (*Sallé*), Rincon Antonio in Oaxaca (*Knab, in U.S. Nat. Mus.*); Honduras (*Mus. Brit.*); Costa Rica [2 3], Guanacaste (*Pittier*), Turubares, 500 metres, Pacific slope (*Biolley*), Piedras Negras (*U.S. Nat. Mus.*).

I have seen a dozen examples of this species, including M. Bovie's type of *P. donceli*, this latter scarcely differing from one of the Mexican specimens compared long ago by Dr. Sharp with the type of *C. argenteus*. When fresh the surface is densely clothed with silvery, whitish, or flavo-cinereous scales, the oblong seriate punctures on the elytra thus appearing smaller and narrower than in rubbed individuals. The Honduras specimen is figured.

HYPOPTUS.

Hypoptus (Jekel), Lacordaire, Gen. Col. vi. p. 271 (1863).

The principal characters of this genus (described by Lacordaire from females only) are as follows:—

Rostrum widened at the apex, emarginate at the tip, the nasal plate reduced to a very short v-shaped piece, the scrobes long, deep, obliquely descending to beneath the eyes, the latter large, depressed, transversely oval; mentum large, flat, filling the buccal cavity; mandibles with a large scar in front; antennal scape not extending beyond the anterior margin of the eyes; prothorax with large, rounded ocular lobes; scutellum well developed; elytra much broader than the prothorax, oblong-subtriangular in ♂, subparallel in their basal half in ♀, 10-striate, the outer striæ free, the humeri prominent; femora clavate, unarmed; tibiæ feebly serrulate, unguiculate in ♂, without visible uncus in ♀, the posterior pair broadly laminate and squamose at the apex, and with the glabrous articular surface rather large and moderately excavate; tarsal claws free; body oblong, squamose, fully winged.

Type, *H. macularis*, Lacord. (inedit.).

Hypoptus was based upon a very variable Central-American and Colombian insect, the three so-called species being varieties of one only; a second, however, is known to me from the Lesser Antilles *. They have much the facies of *Alophus*, a genus belonging to the true Curculioninæ and wanting the mandibular scar.

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* **Hypoptus insularis**, sp. n.— ♂. Broader than *H. macularis* (♂), the prothorax with two narrow sinuous lines on the disc, and the elytra each with two small, obliquely placed, sharply defined spots at about the middle, whitish, the scales on the rest of the upper surface coppery-brown, those along the sides, legs, and under surface intermixed with white, the femora subannulate; the rostrum faintly or obsoletely carinate to the oblong inter-ocular fovea, joint 2 of the funiculus longer than 1; prothorax much broader than long, densely, confluently punctate, granulate on the disc; elytra relatively shorter and broader, and with less prominent humeri than *H. macularis* (♂), coarsely punctate-striate, the

1. **Hypoptus macularis.** (Tab. XIV. figg. 7, 7 *a*, ♀; 8, ♂, var.)

♀. *Hypoptus macularis, lepyroides,* and *setosulus* (Jekel), Lacord. Gen. Col. vi. p. 272, nota (sine descr.) [1]; Gemm. & Harold, Cat. Col. viii. p. 2324 [2].

Hypsonotus mexicanus, Gory, in coll. Pascoe [3].

Oblong, rather convex, black or piceous, the legs often in part ferruginous; thickly clothed with small pale brown, cupreo-cinereous, or cinereous scales, the elytra with several cinereous or whitish (or, rarely, metallic) patches—one, triangular, rounded, or transverse, at about the middle of the disc, another in a line with it on the flanks (these two sometimes connected, or the outer one extending forward to the shoulder), an angulate curved subapical fascia (in some specimens very broad, in others divided into two spots), and (rarely) an oblong patch at the base of the suture,—the upper and under surfaces and the legs occasionally with additional intermixed smaller patches of green or cupreous scales; the surface also set with scattered, short, fine, pallid, decumbent setæ. Rostrum about as long as the prothorax, rugosely punctate and finely carinate; head with an oblong inter-ocular fovea, closely punctate; joints 1 and 2 of the funiculus subequal in length. Prothorax transverse, arcuately narrowed anteriorly, densely, confluently punctate and also granulate. Elytra much wider than the prothorax, acuminate at the apex, oblong-subtriangular in ♂, subparallel in their basal half in ♀, the humeri prominent, obliquely truncated in front; coarsely punctate-striate, the interstices rugulose and feebly convex. Beneath finely punctate and sparsely granulate; first ventral segment slightly hollowed down the middle in ♂. Tibiæ strongly unguiculate in ♂, unarmed in ♀.

Length 8–15, breadth $2\frac{2}{3}$–6 millim. (♂ ♀.)

Hab. Mexico [1 2 3] (*Mus. Brit., ex Jekel; Sturm, ex Sallé*), San Andres Tuxtla, Tehuantepec (*Sallé*), Almoloya in Oaxaca (*U.S. Nat. Mus.*); British Honduras, Belize, Rio Hondo, Rio Sarstoon (*Blancaneaux*); Guatemala, Panzos, Teleman, Chacoj, Cubilguitz, El Reposo, Las Mercedes, Cerro Zunil, El Tumbador (*Champion*), Trece Aguas, Champerico, Escuintla (*U.S. Nat. Mus.*); Salvador (*U.S. Nat. Mus.*); Nicaragua, Chontales (*Belt, Janson, Richardson*); Costa Rica (*Pittier, in Mus. Brit.*), San Carlos, Turrialba (*U.S. Nat. Mus.*).—Colombia (*Mus. Brit., ex Jekel* [1 2]).

A common insect in the warmer parts of Central America, ranging from the Mexican State of Vera Cruz to Colombia. It superficially resembles the Palæarctic *Alophus triguttatus.* The elytral markings vary greatly in development, sometimes becoming transversely or longitudinally confluent, and sometimes barely traceable, and occasionally (as in most of the examples from the Polochic Valley) (fig. 8) metallic. The specimens (♀) in the British Museum, standing under the above-quoted MS.

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interstices convex, here and there transversely confluent on the disc.—♀. Larger and broader than *H. macularis* (♀); clothed with brown and cinereous scales, the elytra much longer than in ♂, sometimes with the disc and apex mottled with brown and the scales on the rest of their surface cinereous, the two small obliquely placed spots more or less distinct. Length, ♂ 11, ♀ 14–18; breadth, ♂ $4\frac{1}{2}$, ♀ $5\frac{1}{4}$–$7\frac{1}{4}$ millim.

Hab. Antilles, Grenada and St. Vincent.

One male, from Grenada [type], and seven females, from St. Vincent, the latter mostly worn, presumably belonging to the same species, and evidently distinct from the variable *H. macularis.* In these insects there is no trace of a curved paler subapical fascia, and the two small whitish spots on the middle of each elytron are more obliquely placed than in *H. macularis.*

names of Jekel, appear to have been purchased from that author (the Mexican insect, *H. macularis*, is labelled as having been communicated to Lacordaire, the others being from Colombia); that from the Sturm collection is ticketed "*Geonemus agrestis*, Schönh.," but it is not the *G. agrestis*, Boh., of Schönherr's work, the type of which I have seen *.

PSEUDHYPOPTUS, gen. nov.

Ocular lobes of the prothorax extended inferiorly, more or less raised above, or separated from, the short ante-coxal portion of the prosternum, in *P. eurylobus* reaching as far as the anterior coxæ; scutellum very small; elytra subconnate and with the humeri obtuse, in ♂ very little wider than the prothorax; metasternum short; wings rudimentary or wanting †; body very sparsely squamose; the other characters as in *Hypoptus*.

Type, *Lordops parcus*, Fåhr.

The two species placed under this genus have the general facies of an *Otiorhynchus*. The apically widened rostrum separates them at once from *Lordops*. *P. eurylobus* has the ocular lobes so sharply separated from the prosternum beneath that the latter appears depressed between them. The metathoracic episterna are angularly dilated anteriorly and as broad as in the winged forms, and the genus cannot therfore be placed in the "Series Apteræ." No definite locality in Mexico is known for *P. parcus* ‡, but we have received an allied form from Michoacan.

1. **Pseudhypoptus parcus.** (Tab. XIV. figg. 9, 9 *a*, ♂.)

Lordops parcus, Fåhr. in Schönh. Gen. Curc. vi. 2, p. 183 [1]; Lacord. Gen. Col. vi. p. 263, nota [2].

Oblong-ovate (♀), narrow and subfusiform (♂), convex, black, the femora sometimes rufescent; sparsely cinereo-squamose beneath, the upper surface (abraded) almost bare, the elytra in one specimen (♀) with a common v-shaped patch of cinereous scales near the apex, the interstices each with a row of scattered setæ on the apical declivity. Head densely punctate, the rostrum coarsely longitudinally rugose, in one specimen feebly carinate down the middle. Prothorax transverse, arcuately narrowed anteriorly, feebly constricted towards the apex, the sides subparallel behind in ♂, the hind angles subrectangular, the base sharply margined; the surface closely impressed with rather coarse rounded punctures. Elytra in ♂ with the sides forming an almost continuous outline with those of the prothorax, in ♀ much broader, margined at the base; coarsely punctate-striate, the striæ becoming deep towards the apex, the interstices transversely rugose on the disc. Beneath rugosely punctate; ocular lobes of the prothorax continued round to near the anterior coxæ; first ventral segment deeply excavate down the middle, and the fifth slightly depressed along the centre posteriorly, in ♂. Tibiæ unguiculate and closely serrulate in ♂, serrulate and without apical uncus in ♀.

Length 7–10¼, breadth 2⅘–4½ millim. (♂ ♀.)

Hab. Mexico (*coll. Sommer* [1], *in Mus. Oxon.*).

The above description is taken from the types in the Sommer collection—three males and two females. The elytra in this species have the latero-inferior portion

* Cf. *Exophthalmus agrestis*, anteà, p. 258.

† Definitely ascertained in *P. eurylobus* only.

‡ Apparently omitted from the Munich Catalogue.

considerably developed below the base beneath, so that in the narrow males they appear to be rapidly narrowed from about the basal fifth.

2. **Pseudhypoptus eurylobus,** sp. n. (Tab. XIV. figg. 10, 10 *a*, ♂.)

Oblong-ovate, rather convex, black; very sparsely clothed with small cinereous scales, the elytra with some denser patches or streaks of white scales along the flanks and towards the apex, the surface also set with short, decumbent, scattered setæ. Head and rostrum densely, confluently punctate, the rostrum shorter than the prothorax and finely carinate along the sides. Prothorax transverse, narrowed and feebly constricted in front, the sides parallel at the base in ♂, the hind angles acute and extending outwards; the surface densely, uniformly impressed with small rounded punctures. Scutellum transverse. Elytra convex, a little wider than the prothorax in ♂, broader in ♀, acuminate at the apex, the humeri not prominent; coarsely punctate-striate, the striæ becoming deeper at the apex, the interstices feebly convex and rugulosely punctate. Beneath finely punctate; ocular lobes of the prothorax continued round to the anterior coxæ, and sharply separated from the prosternum; first ventral segment deeply excavate down the middle behind in ♂. Tibiæ sharply unguiculate in ♂, unarmed in ♀, the anterior and intermediate pairs obsoletely denticulate.

Length $10\frac{1}{3}$–$11\frac{1}{2}$, breadth $3\frac{7}{8}$–$4\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico (*ex coll. Solari*: ♂), Huetamo in Michoacan (*Höge*: ♀).

One male and two females. Separable from *P. parcus* by the still more extended inferior portion of the ocular lobes, the less rugose rostrum, the acute hind angles of the prothorax, and the less distinctly margined base of the prothorax and elytra, the elytra a little wider than the prothorax in the male. The posterior tibiæ are without definite teeth.

COLEOCERUS.

Colecerus, Schönherr, Gen. Curc. v. 2, p. 927 (1840); Lacordaire, Gen. Col. vi. p. 385.
Coleocerus, Gemminger et Harold, Cat. Col. viii. p. 2374; Horn, Proc. Am. Phil. Soc. xv. p. 108.

This genus includes a few small forms from the Southern United States, Mexico, and Guatemala *. It may be known by the deep, inferiorly confluent scrobes, the widely separated eyes, the prominent ocular lobes of the prothorax, the transverse, rather large scutellum, the protuberant mesosternum, and the free tarsal claws †. The males have all the tibiæ more or less distinctly unguiculate (the uncus being usually shorter in the females and sometimes wanting on the posterior pair), and the fifth ventral segment slightly hollowed down the middle. The deciduous portion of the mandibles is broad, somewhat cultriform, and vertical (fig. 14 *a*).

a. Mesosternal protuberance long, blunt or truncate at tip; rostrum deeply sulcate.
*a*¹. Prothorax sharply margined on each side at base.

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* Chevrolat (Bull. Soc. Ent. Fr. 1881, p. xxxviii) states that *Coleocerus* occurs also in Costa Rica, probably in error; his *C. albidus*, from Bogota, may belong to a different genus.

† The N.-American genus *Aracanthus* is an apterous form placed by Horn near *Coleocerus*; it has a very minute scutellum and oval elytra.

a^2. Prothorax gradually dilated from the apex to the acute hind angles, and there as wide as the elytra: upper surface usually fusco-variegate, sometimes uniformly cinereous . . . . . *setosus*, Boh.

b^2. Prothorax obtusely dilated at the sides before the base and obliquely narrowing thence to the hind angles: scales green and cinereous, the elytra fusco-variegate . . . . . *virescens*, sp. n.

c^2. Prothorax angularly dilated at the sides before the base and hollowed thence to the sharp hind angles: scales uniformly brownish-cinereous above . . . . . *denticollis*, sp. n.

b^1. Prothorax not or more feebly margined on each side at base, narrower than the elytra.

d^2. Prothorax gradually widened to the base, at least in ♀: upper surface variegate, the prothorax often fusco-bivittate on disc . . . *variegatus*, Boh.

e^2. Prothorax with the sides subparallel or slightly converging behind: upper surface variegate . . . . . *marmoratus*, Horn.

b. Mesosternal protuberance short, subconical; rostrum shallowly sulcate; upper surface variegate.

c^1. Prothorax with the sides subparallel behind . . . . . *crassipes*, sp. n.

d^1. Prothorax with the sides rounded from the base . . . . . *rotundicollis*, sp. n.

1. **Coleocerus setosus.** (Tab. XIV. figg. 11, 11 *a*, ♂.)

Colecerus setosus, Boh. in Schönh. Gen. Curc. v. p. 928 [1].

Colecerus minutus, Sturm, in litt.[2].

Var. The scales uniformly cinereous, sometimes with a faint cupreous or greenish tinge.

Megalostylus sulcirostris and *lepidotus*, Sturm, in litt.[3].

Length 4–7½, breadth 1¾–3½ millim.

Hab. Mexico [1] (*Sallé, ex coll. Sturm* [2 3]; *Truqui*; *Flohr*), Matamoros Izucar (*Sallé*, *Höge*), Colima City, Tacambaro, Huetamo (*Höge*), Puebla (*Sallé*), Puente de Ixtla (*Deam, in U.S. Nat. Mus.*), Tepetlapa (*H. H. Smith*).

This insect is more ovate than the allied forms, the sides of the prothorax (which are margined at the base) forming a continuous outline with those of the elytra, the acute hind angles of the former sometimes slightly projecting beyond the humeri. The upper surface in the typical form (fig. 11) is asymmetrically variegate with black and cinereous (or whitish) scales, the dark scales usually condensed on the disc of the prothorax into two strongly sinuate or curved stripes (which enclose a cruciform or transverse whitish patch), these markings being entirely obliterated in the cinereous variety. The setæ (often abraded) are so short and inconspicuous that they are hardly visible till the insect is viewed in profile. The two specimens sent me for examination by Dr. Sjöstedt differ greatly in size, and the long series received from Matamoros varies in the same way. The immaculate variety is represented by five examples from Colima City, two from the Sturm collection, and one in the British Museum.

2. **Coleocerus virescens,** sp. n. (Tab. XIV. figg. 12, 12 *a*.)

Oblong-ovate, piceous, densely clothed with intermixed pale green and cinereous scales, those on the under surface metallic, the elytra mottled with fuscous. Rostrum sulcate and deeply excavate. Antennæ rather slender, the joints of the funiculus becoming shorter and stouter outwards, 2 shorter than 1. Prothorax strongly transverse, explanate and sharply margined at the sides posteriorly, obliquely narrowed thence to the apex, and distinctly narrowed at the base, the base itself deeply bisinuate, the hind angles acute; densely finely punctate. Scutellum broad, strongly transverse. Elytra oblong, scarcely wider than the prothorax, punctate-striate, the interstices feebly convex. Mesosternal protuberance long, compressed. Legs stout.

Length $4\frac{1}{2}$, breadth $2\frac{1}{3}$ millim. (♀?)

Hab. Mexico (*Sallé*).

One specimen, without definite locality. This is the only species of the genus known to me with a large admixture of green scales and the prothorax sharply margined at the sides behind. The last-mentioned character brings *C. virescens* near the Texan *C. dispar* (Lec.), which has the prothorax more feebly sinuate at the base, &c.

3. **Coleocerus denticollis,** sp. n. (Tab. XIV. figg. 13, 13 *a*.)

Oblong-ovate, piceous; the prothorax and elytra densely clothed with brownish-cinereous, and the rest of the surface with whitish or cinereous, scales. Rostrum sulcate and deeply excavate. Prothorax strongly transverse, angularly dilated at the sides before the base and obliquely narrowing thence to the apex, the sides margined posteriorly and emarginate between the angular dilatation and the sharp hind angles, the base bisinuate; densely, finely punctate. Scutellum transverse. Elytra not wider than the prothorax, narrowing from the base, closely punctate-striate, the interstices feebly convex. Mesosternal protuberance long, slightly curved upwards, blunt at the tip. Legs very stout.

Length $4\frac{3}{4}$, breadth $2\frac{1}{10}$ millim. (♀?)

Hab. Mexico, Acapulco (*Höge*).

One specimen. Distinguishable by the angularly dilated, posteriorly margined sides of the prothorax and the uniform vestiture—brownish-cinereous above and whitish beneath.

4. **Coleocerus variegatus.** (Tab. XIV. figg. 14, 14 *a*, ♂; 15, ♀, var.)

Colecerus variegatus, Boh. in Schönh. Gen. Curc. viii. 2, p. 405 [1].

Length $3\frac{1}{2}$–8, breadth $1\frac{2}{3}$–$3\frac{1}{2}$ millim.

Hab. Mexico, Jalapa, Cerro de Palmas (*Höge*), San Andres Tuxtla, Juquila, Tepanistlahuaca (*Sallé*), Salina Cruz (*Knab, in U.S. Nat. Mus.*), Oaxaca [1]; Guatemala, Volcan de Atitlan, Tocoy (*Champion*).

The numerous specimens referred to this species (the only one from Oaxaca to which Boheman's description is applicable) differ from *C. setosus* in having the prothorax distinctly narrower than the elytra at the base, and the sides not or feebly margined posteriorly; the vestiture coppery-brown or brown variegated with cinereous or whitish, the light scales on the prothorax condensed into a narrow median line and

a space along the sides (the latter sometimes enclosing a small spot), and those on the elytra into two oblique or transverse fasciæ on the outer part of the disc and various asymmetrically distributed small scattered spots. The eight examples from Salina Cruz (fig. 15), all of comparatively small size, are in beautifully fresh condition and have the whitish markings very sharply defined. In two specimens (one from Tocoy and one from San Andres Tuxtla) the cinereous vestiture predominates, and in one of those from Juquila it is reduced, on the contrary, to a few small spots. An example from Tehuantepec (*Knab, in U.S. Nat. Mus.*) with the scales greenish-cinereous may belong here. In many of them, including those from Salina Cruz, the posterior margin of the buccal cavity is produced into a tooth-like projection at the middle in front, just behind the mentum. The males have the prothorax more rounded at the sides than the females.

5. **Coleocerus marmoratus.** (Tab. XIV. fig. 16.)

Coleocerus marmoratus, Horn, Proc. Am. Phil. Soc. xv. p. 109[1]; Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 364[2].

Hab. North America, Texas[1 2].—Mexico, Monterey in Nuevo Leon, Victoria in Tamaulipas (*Schwarz, in U.S. Nat. Mus.*).

I have seen six specimens of this species from within our limits agreeing with others before me from San Diego and Brownsville, Texas. The markings are variable, the cinereous scales sometimes predominating, but the blackish scales are never condensed into two uninterrupted broad vittæ on the disc of the prothorax as is often the case in *C. variegatus*, the latter also having the prothorax less distinctly narrowed at the base than in *C. marmoratus*, at least in the female.

6. **Coleocerus crassipes,** sp. n.

Subovate, convex, black; variegated with a dense clothing of rather large, imbricate, pale brown, fuscous, and whitish scales, the last-named condensed on the prothorax into a faint median line and a curved submarginal stripe, and those on the elytra into two transverse patches or fasciæ on the outer part of the disc and various irregular partly confluent smaller spots; the surface also set with minute, scattered, curled, decumbent setæ. Rostrum broad, depressed down the middle, and with a small bare fovea behind the nasal plate. Prothorax transverse, much broader at the base than at the apex, the hind angles subrectangular as seen from above and immarginate externally, the base bisinuate, the surface densely punctate. Scutellum small, transverse. Elytra oblong, not or very little wider than the prothorax; punctate-striate, the interstices feebly convex. Mesosternal protuberance small, conical. Legs stout.

Length $3\frac{9}{10}$–5, breadth 2–$2\frac{1}{3}$ millim.

Hab. Mexico, Acapulco (*Höge; Knab, in U.S. Nat. Mus.*).

Six specimens. Extremely like *C. rotundicollis*, and only differing from it in the much less rounded sides of the prothorax and the more oblong elytra. It is possible they are the sexual complements of the same species, but this is not likely to be the case. The less excavate, non-sulcate rostrum and the feebly protuberant mesosternum separate *C. crassipes* from all the varieties of *C. variegatus* and *C. setosus*.

7. **Coleocerus rotundicollis,** sp. n. (Tab. XIV. fig. 17.)

Ovate, convex, black; variegate with a dense clothing of rather large, imbricate, pale brown and whitish scales, the elytra also slightly mottled with fuscous, the whitish scales condensed on the prothorax into a faint median line and a curved submarginal stripe on each side, and those on the elytra into one or two transverse patches on the outer part of the disc and various irregular more or less confluent smaller spots, the scales on the under surface whitish; the surface also set with short, scattered, curled, decumbent setæ. Rostrum broad, depressed down the middle, and with a small bare fovea behind the nasal plate; joint 1 of the funiculus nearly twice as long as 2. Prothorax transverse, very little narrower at the apex than at the base, the base itself bisinuate, the sides rounded from the obtuse hind angles, the surface densely punctate. Scutellum small, transverse. Elytra convex, oval, the humeri rounded; punctate-striate, the interstices feebly convex. Mesosternal protuberance small, subconical. Legs stout.

Length 4–5, breadth 2–2½ millim.

Hab. Mexico, Acapulco (*Höge; Knab, in U.S. Nat. Mus.*).

Seven examples, varying a little in the intensity of the markings. The rotundate, immarginate prothorax and the feebly protuberant mesosternum are the chief characters of this species.

EUCOLEOCERUS, gen. nov.

Eyes narrowly separated above; mesosternal protuberance conical; tarsal claws connate; elytra much wider than the prothorax, the latter more or less conical; the other characters as in *Coleocerus*.

Type, *E. conicicollis*.

Three species from Mexico or Guatemala differ in the above-mentioned characters from *Coleocerus* and they must be separated from that genus. The scrobes in both genera are continued beneath the eyes and become coalescent on the under surface, this character separating *Eucoleocerus* and *Coleocerus* from *Promecops*.

1. **Eucoleocerus conicicollis,** sp. n. (Tab. XIV. figg. 18, 18 *a*, ♀.)

Oblong, subovate, convex, nigro-piceous or piceous; densely clothed with white scales, the prothorax with two brownish or fuscous spots or interrupted vittæ on the disc, and the elytra confluently, asymmetrically, fusco-variegate; the surface also set with scattered very short, curled, adpressed setæ, the ventral segments with intermixed suberect white hairs. Rostrum subquadrate, slightly hollowed down the middle anteriorly, and with a bare fovea behind the rather long, narrow, triangular nasal plate; joints 1 and 2 of the funiculus subequal in length. Prothorax transverse, rapidly, obliquely narrowed from the base, the base feebly bisinuate, the ocular lobes prominent; coarsely closely punctate. Scutellum large, transverse. Elytra oblong-subtriangular in ♂, subparallel in their basal half in ♀; strongly punctate-striate, the interstices feebly convex.

♂. First ventral segment slightly hollowed down the middle, the fifth convex and closely set with long, fine, erect brownish hairs; all the tibiæ unguiculate.

Var. The markings on the upper surface wanting, the scales on the elytra brownish-cinereous and the prothorax usually with intermixed pale brown scales on the disc, the others cinereous or whitish.

Length 3½–4⅔, breadth 1⅔–2¼ millim. (♂ ♀.)

Hab. Mexico, Acapulco, Chilpancingo (*Höge*), Dos Arroyos in Guerrero (*H. H. Smith*), Salina Cruz in Oaxaca (*Knab, in U.S. Nat. Mus.*).

The five Salina Cruz examples (all in beautifully fresh condition) are taken as the

types, the long series from the three localities in Guerrero belonging to the immaculate form. *Coleocerus setosus* varies in the same way in the colour of the scales.

2. **Eucoleocerus guttularius,** sp. n. (Tab. XIV. figg. 19, 19 *a*, ♂.)

♂. Oblong, subfusiform, convex, black, the tibiæ, tarsi, and base of the antennæ ferruginous in one example; variegated with a dense clothing of whitish and fuscous scales, the dark scales on the prothorax wholly condensed into two broad narrowly divided vittæ on the disc, and those on the elytra asymmetrically confluent, the scales on the scutellum, legs, and under surface whitish, with a faint cupreous tint, the ventral segments with intermixed decumbent white hairs; the upper surface also set with very short, curled, fine, semierect setæ. Rostrum and antennæ as in *E. conicicollis*. Prothorax transverse, gradually narrowing from the base, coarsely, closely punctate. Scutellum strongly transverse. Elytra longer than in *E. conicicollis*, and more developed at the sides inferiorly below the humeri (the lower margin appearing more strongly sinuate when the insect is viewed in profile); coarsely punctate-striate, the interstices convex (when the scales are removed). Ventral segments 1 and 2 very broadly hollowed down the middle. All the tibiæ unguiculate.

Length $4\frac{1}{2}$, breadth $1\frac{9}{10}$–2 millim.

Hab. Mexico, Yucatan (*Mus. Brit.*).

Two males: one, without definite locality, in very fresh condition, and labelled with the MS. name of Jekel's used above; the other, from Yucatan, completely abraded, and showing how different the sculpture really is when the scales are removed. This species differs from the maculate form of *E. conicicollis* in having the prothorax less widened towards the base and sharply fusco-vittate on the disc; the elytra more elongate, more developed inferiorly below the humeri, and with the lower margin strongly sinuate; and the first ventral segment more broadly excavate, and the fifth without numerous erect hairs, in the male.

3. **Eucoleocerus fuscovarius,** sp. n.

Oblong, subovate, narrow, convex, black, the tibiæ, tarsi, and base of the antennæ ferruginous; variegated with a dense clothing of whitish and fuscous scales, the dark scales on the prothorax condensed into two broad narrowly divided vittæ on the disc and a small spot on each side at about the middle, and those on the elytra into confluent asymmetrical markings, the scales on the legs and under surface uniformly whitish; the upper surface also set with very short, curled, decumbent, scattered setæ, the ventral segments 1–4 with adpressed white hairs down the middle. Rostrum as in *E. conicicollis*; joints 2 and 3 of the funiculus subequal in length, 1 longer and stouter than 2. Prothorax transverse, convex, gradually narrowing from the base, the sides subparallel behind; coarsely, closely punctate. Scutellum transverse. Elytra oblong-subtriangular in ♂, subparallel in their basal half in ♀; coarsely punctate-striate, the interstices (as seen with the scales removed) narrow, convex. First and second ventral segments hollowed down the middle, and the fifth closely set with short, erect, brownish hairs, in ♂. All the tibiæ in ♂ strongly, in ♀ more feebly unguiculate.

Length 3–4, breadth $1\frac{1}{2}$–$1\frac{3}{4}$ millim. (♂ ♀.)

Hab. Guatemala, El Jicaro in Baja Vera Paz (*Champion*).

One male and two females. Narrower than *E. conicicollis*; the prothorax more convex, less widened posteriorly, broadly fusco-vittate on the disc, and also with a brown spot on each side; the fifth ventral segment of the male clothed with shorter hairs.

EUDIAGOGUS.

Eudiagogus, Schönherr, Gen. Curc. vi. 1, p. 307 (1840); Lacordaire, Gen. Col. vi. p. 389; Horn, Proc. Am. Phil. Soc. xv. p. 110.

The three known species of this genus are very closely related, mainly differing in the markings of the upper surface. *E. rosenschoeldi*, Fåhr., from Louisiana, Texas, &c., probably extends into Northern Mexico; it may be known by its nigro-vittate prothorax and the irregularly extended cupreous or whitish elytral vittæ.

1. **Eudiagogus pulcher.** (Tab. XIV. fig. 20.)

Eudiagogus pulcher, Fåhr. in Schönh. Gen. Curc. vi. 1, p. 310[1]; Horn, Proc. Am. Phil. Soc. xv. p. 111[2]; Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 364 (1909)[3]; Mitchell and Pierce, Proc. Ent. Soc. Wash. xiii. p. 50 (1911)[4].

Hab. North America, Florida and Texas [2 3 4].—Mexico [1] (*Mus. Brit.; Sallé*), Jalapa (*Höge*).

Sent in numbers by Höge from Jalapa. This species seems only to differ from the Brazilian *E. episcopalis* in having the submarginal cupreous stripe on the elytra more sinuous and often connected before the middle with the stripe along the lower margin. Both species have the prothorax dilated anteriorly and marked with four large black spots. Found on senna (*Cassia occidentalis*) in Texas [4].

PROMECOPS.

Promecops, Schönherr, Curc. Disp. Meth. p. 135 (1826); Gen. Curc. ii. p. 164, vi. 1, p. 315; Lacordaire, Gen. Col. vi. pp. 385, 389.

A genus including a large number of closely allied Tropical American forms, several of which are so imperfectly characterized that they are not recognizable from the descriptions alone. Lacordaire has called attention to the fact that the species are divisible into two groups, one with connate and the other with free tarsal claws; he restricts *Promecops* (in his table of the genera of Promécopides) for the former.

Some of the members, again, of the second group have the mesosternum conically protuberant as in *Coleocerus* (*P. lepida*, *leucothyrea*, *rhombica*, *rhombifera*, *unidentata*, &c.); others (*P. viator*, *umbrata*, and several of the new forms here added) have the mesosternum flattened or simply convex. It is preferable to leave them all under one genus, *Promecops*, for the present, the species being often so much alike that they are only separable by the structure of the claws or mesosternum. In some of the new forms now added remarkable characters are to be found in the anterior tarsi or anterior tibiæ of the males. The various species, many of which are very variable in size and colour *, may be tabulated thus :—

* The extent of variation is well shown in a series of about 450 examples of *P. lunata*, Fåhr., obtained by Mr. H. H. Smith in the Windward Is. (St. Vincent, Grenada, Becquia, and Cannouan). This species has small, connate tarsal claws and a simply convex mesosternum.

a. Tarsal claws small, connate; elytra with two oblique pallid fasciæ; mesosternum not protuberant. [PROMECOPS, sensu stricto.]
  *a*¹. Elytral setæ abundant, long, erect . . . . . *viator*, Fåhr.
  *b*¹. Elytral setæ scattered, short, decumbent . . . . . *umbrata*, Fåhr.
b. Tarsal claws free. [Subgen. PROMECOPSIS, n. n.]
  *c*¹. Mesosternum conically protuberant; tarsal claws rather long.
    *a*². Anterior tibiæ in ♂ armed with a long, acute, oblique tooth near the tip, the intermediate pair also toothed and abruptly excavate near the apex in this sex . . . . . *unidentata*, sp. n.
    *b*². Anterior and intermediate tibiæ without subapical tooth in ♂ . . . *leucothyrea*, Fåhr.
  *d*¹. Mesosternum simply convex or flattened, not protuberant.
    *c*². Vestiture of the upper surface variegate: prothorax bi- or trivittate, the elytra with one or two more or less distinct oblique pallid fasciæ.
      *a*³. Third joint of anterior tarsi with a dentiform process on inner lobe above in ♂ . . . . . *dentimanus*, sp. n.
      *b*³. Third joint of anterior tarsi without process in ♂.
        *a*⁴. Anterior tibiæ armed with three long, projecting, hooked teeth in ♂, feebly tridentate in ♀ . . . . . *tridentata*, sp. n.
        *b*⁴. Anterior tibiæ not dentate along their inner edge.
          *a*⁵. Elytra with the alternate interstices raised and set with scattered, clubbed, setiform scales . . . . . *clavisetis*, sp. n.
          *b*⁵. Elytral interstices equal, moderately or feebly convex.
            *a*⁶. Elytra with scattered, long, suberect setæ on the alternate interstices . . . . . *alternans*, sp. n.
            *b*⁶. Elytra with numerous short, curled, decumbent setæ along each interstice . . . . . *brevisetis*, sp. n.
    *d*². Vestiture of the upper surface uniformly coloured, the elytra at most with a faint transverse post-median darker fascia; legs very stout in ♂ . . . . . *uniformis*, sp. n.

1. **Promecops viator.** (Tab. XIV. figg. 21, 21 *a*, ♂.)

Promecops viator, Fåhr. in Schönh. Gen. Curc. vi. 1, p. 332[1].

Length $3\frac{1}{5}$–5, breadth $1\frac{1}{3}$–$2\frac{1}{5}$ millim. (♂ ♀.)

Hab. MEXICO (*Dupont*[1], *Mus. Holm.*; *Mus. Brit.*; *Truqui*), Puebla, Orizaba, Toxpam (*Sallé*), Cordova (*Sallé*; *Höge*; *Knab, in U.S. Nat. Mus.*), Jalapa (*Höge*; *Smith, ex Wickham*), Cerro de Palmas, Oaxaca (*Höge*).

A common insect in Mexico. It is the only Mexican species of the genus with long, erect, stiff, seriately arranged setæ down each interstice of the elytra and small connate tarsal claws. The markings are very variable and sometimes indistinct. The elytra in well-marked examples have two oblique pallid or whitish fasciæ (one, before the middle, not reaching the suture, the other subapical and complete) and the rest of

their surface mottled with pale brown and black. The prothorax usually has a fine carina or groove down the posterior half of the disc. The specimens standing under *P. umbrata* in the Sallé collection and in the British Museum belong to *P. viator*, the type of which I have examined. The numerous examples from Cordova agree in having numerous long, erect setæ on the elytra, but amongst those from Jalapa both forms are represented.

2. **Promecops umbrata.**

Promecops umbratus, Fåhr. in Schönh. Gen. Curc. vi. 1, p. 324 [1].

Length $2\frac{4}{5}$–$4\frac{1}{2}$, breadth $1\frac{1}{5}$–2 millim. (♂ ♀.)

Hab. Mexico [1], Jalapa (*Höge*), Atoyac in Vera Cruz (*H. H. Smith*).

The numerous individuals referred to *P. umbrata* (the type of which cannot now be found in the Stockholm Museum) merely differ from *P. viator* in having the elytral setæ less numerous, short, curled, and decumbent, but often becoming longer and more erect towards the base. A long series from Atoyac agree in this respect, and I have therefore retained the two forms as distinct. The Mexican insect referred by Fåhræus to *P. nubifer*, Gyll., probably belongs here *.

3. **Promecops unidentata,** sp. n. (Tab. XIV. figg. 22, 22 *a*, *b*, ♂.)

♂. Oblong, robust, piceous; variegated with a dense clothing of brown, blackish, and whitish (or brownish-cinereous) scales, the last-named condensed into three lines on the prothorax, and two curved or oblique transverse fasciæ (one before the middle, the other subapical) on each elytron, the blackish scales clustered into a common transverse patch at the base and a large patch on each between the pallid fasciæ (these markings being sometimes coalescent along the suture); the surface also set with scattered, curled, decumbent setæ, those on the elytra seriately arranged down each interstice. Rostrum longer than broad, canaliculate, densely punctate; joints 1 and 2 of the funiculus subequal in length. Prothorax transverse, rather convex, rounded at the sides, constricted and narrowed in front, finely canaliculate or subcarinate down the middle from near the apex to the base, the surface with rather coarse scattered punctures. Elytra oblong, very gradually narrowing from the prominent humeri, much wider than the prothorax; punctate-striate, the interstices convex. Mesosternum protuberant. Legs stout; all the tibiæ strongly unguiculate, the anterior and intermediate pairs serrulate, the anterior pair armed with a long, acute, oblique tooth on the inner edge near the apex (fig. 22 *b*), the intermediate pair abruptly excavate near the tip, the excavation preceded by a sharp tooth; tarsal claws long, free.

♀. Elytra subparallel in their basal half; anterior tibiæ without subapical tooth, the intermediate pair simply hollowed at the apex within, the uncus of each less bowed inwards and not so stout.

Length 4–6, breadth $1\frac{3}{4}$–$2\frac{1}{2}$ millim. (♂ ♀.)

Hab. ? Costa Rica (*Mus. Brit.*: ♀); Panama, Bugaba, Volcan de Chiriqui, David, Caldera (*Champion*: ♂ ♀), Tabernilla, Canal Zone (*Busck, in U.S. Nat. Mus.*: ♀).

Numerous examples, females preponderating. Easily distinguishable from the allied forms by the structure of the anterior and intermediate tibiæ of the male,

* *P. nubifer* was said by Gyllenhal (Schönh. Gen. Curc. ii. p. 167) to be from "North America"; Fåhræus subsequently, on redescribing the species (*op. cit.* vi. 1, p. 325), gave Brazil and Mexico for it.

the long acute subapical tooth on the anterior pair reaching to near the tip of the inwardly directed uncus. The mesosternum is protuberant, as in *P. leucothyrea*.

4. **Promecops leucothyrea.** (Tab. XIV. figg. 23, ♂ ; 24, ♀ , var.)

Promecops leucothyreus, Fåhr. in Schönh. Gen. Curc. vi. 1, p. 328 [1].

Promecops quadrimaculatus, Jekel, in Mus Brit.[2].

Oblong, robust, piceous; variegated with a dense clothing of cinereous, brown, and blackish scales, the last-named usually clustered into two broad vittæ on the disc of the prothorax (sometimes more extended and coalescent, leaving only a basally abbreviated median line and two short streaks on each side cinereous), the cinereous scales on the elytra condensed into an interrupted oblique or transverse fascia before the middle and another near the apex; the scales at the apex of the rostrum, on the scutellum, humeri, elytral fasciæ, base of the femora, and tarsi often more or less green, those on the under surface varying in colour from cinereous to green; the upper surface also set with very short, scattered, curled, decumbent setæ. Head and rostrum densely punctate, the vertex with a transverse raised line separating the exposed portion from that covered by the prothorax, the rostrum moderately broad, canaliculate; eyes strongly transverse, narrow; joint 2 of the funiculus slightly shorter than 1. Prothorax transverse, convex, obsoletely canaliculate, rounded at the sides, the latter parallel at the base; with coarse punctures intermixed with a dense fine punctuation. Elytra subparallel in their basal half, rather convex, punctate-striate, the interstices feebly convex. Mesosternum protuberant. Legs stout; all the tibiæ strongly unguiculate in ♂, more feebly so in ♀ ; tarsal claws long, free.

Length $4\frac{3}{4}$–6, breadth 2–$2\frac{2}{3}$ millim. (♂ ♀.)

Hab. Mexico (*Höge, in coll. Solari*), Tampico (*Schwarz, in U.S. Nat. Mus.*), Salina Cruz (*Knab, in U.S. Nat. Mus.*), El Camaron (*Sallé*), Tapachula (*Höge*) ; Guatemala, Volcan de Atitlan (*Champion*) ; Salvador, Sonsonate, Acajutla (*Knab, in U.S. Nat. Mus.*) ; Nicaragua, Granada (*Sallé*).—Colombia (*Mus. Brit.*), Bogota [1], Carthagena [2].

I have seen seventeen specimens of this species, including the type and two others from Colombia in the British Museum. It is extremely variable in regard to the markings of the upper surface, according to the predominance of the dark or light scales, and the elytral fasciæ are often broken up into spots, which are sometimes green. The Tampico example is like the type. The Salina Cruz specimen (♀) (fig. 24) and one of those from Colombia are cinereous variegated with fuscous. The Mexican male figured (fig. 23) has been lent me by Signor A. Solari.

5. **Promecops dentimanus,** sp. n. (Tab. XIV. figg. 25, 25 *a*, ♂ .)

Oblong, robust, piceous; variegated with a dense clothing of brown, blackish, and cinereous scales, the blackish scales on the prothorax clustered into a curved line on each side of the disc and those on the elytra into a common, broad, irregular, post-median fascia, which extends up the suture to the base and is limited anteriorly by a transverse row of confluent cinereous spots; the elytra also set with long, scattered, suberect setæ along each interstice, the rest of the surface with short, curled, decumbent, bristly hairs. Rostrum broad, somewhat concave, canaliculate, densely punctate; eyes strongly transverse, narrow; antennæ comparatively short, the scape much widened towards the tip, joint 2 of the funiculus shorter than 1, 5–7 transverse. Prothorax transverse, obliquely narrowed towards the base and apex, as wide in front as behind, finely punctate, carinate or obsoletely canaliculate down the middle from near the apex to the base. Elytra oblong-subtriangular, punctate-striate, the interstices feebly convex. Mesosternum not protuberant. Legs stout; all the tibiæ strongly unguiculate in both sexes, the intermediate pair hollowed near the apex within in ♂, more feebly so in ♀ ; anterior

tarsi (fig. 25 *a*) with a stout dentiform process on the upper surface of the inner portion of the bilobed third joint in ♂ ; tarsal claws free.

Length $4\frac{1}{3}$–$5\frac{1}{2}$, breadth $1\frac{2}{3}$–$2\frac{1}{4}$ millim. (♂ ♀.)

Hab. PANAMA, Caldera and David in Chiriqui (*Champion*).

Two males and two females, the single example from David being a very large female with the rostrum concave above. The toothed inner lobe of the third joint of the anterior tarsi of the male is a remarkable character. The female is very like that of *P. unidentata*, from which it may be known by its shorter antennæ, the broader rostrum, the less convex, more finely punctured prothorax, which is as wide at the apex as at the base, the suberect long elytral setæ, and the non-protuberant mesosternum.

6. **Promecops tridentata,** sp. n. (Tab. XIV. figg. 26, 26 *a*, ♂.)

Oblong, robust, piceous; variegated with a dense clothing of cinereous, brown, and blackish scales, the cinereous scales condensed into a curved stripe on each side of the prothorax, a spot on the scutellum, and two curved transverse fasciæ on each elytron (one, before the middle, sometimes interrupted, not reaching the suture, widening outwards, and connected exteriorly with a transverse humeral patch, the other subapical); the elytra also set with long, suberect, rigid setæ down each interstice, and the rest of the upper surface with short, curled, decumbent, bristly hairs; the legs annulate, the scales on the under surface of the body uniformly cinereous. Rostrum broad, depressed, and canaliculate down the middle; joints 1 and 2 of the funiculus subequal in length. Prothorax strongly transverse, rounded at the sides, slightly constricted in front, finely carinate or obsoletely canaliculate down the middle from near the apex to the base, the surface finely, closely punctate. Elytra oblong-subtriangular in ♂, subparallel in their basal half in ♀, punctate-striate, the interstices feebly convex. Mesosternum simple. Legs stout; all the tibiæ strongly unguiculate, the anterior pair in ♂ (fig. 26 *a*) armed on the inner edge with three long, projecting, truncated or slightly hooked teeth, and usually with a smaller additional tooth near the tip, in ♀ with three small teeth only; tarsal claws free.

Length $3\frac{3}{4}$–6, breadth $1\frac{1}{2}$–$2\frac{1}{3}$ millim. (♂ ♀.)

Hab. GUATEMALA (*Mus. Brit.*), Capetillo, Zapote (*Champion*).

Numerous examples, the sexes about equal in number. The three long, projecting, more or less hooked teeth on the anterior tibiæ of the male characterize this species, a female of which was acquired by the British Museum in 1855.

7. **Promecops clavisetis,** sp. n. (Tab. XIV. figg. 27, 27 *a*, ♀.)

Oblong, convex, robust, piceous; variegated with a dense clothing of blackish, brown, and cinereous scales, the darker scales on the elytra condensed into a broad post-median fascia, and the cinereous scales into an irregular fascia below the base and a narrower and straighter one towards the apex; the alternate elytral interstices also set with scattered, stout, clubbed, setiform, light and dark scales, and the rest of the surface with short, curled, decumbent setæ. Rostrum broad, canaliculate; joint 2 of the funiculus longer than 1. Prothorax convex, transverse, rounded at the sides, closely punctate. Elytra subparallel in their basal half, somewhat gibbous, transversely depressed below the base; punctate-striate, the alternate interstices raised, the others feebly convex. Mesosternum not protuberant. Legs very stout; the tibiæ feebly unguiculate; tarsal claws free.

Length $5\frac{1}{4}$, breadth $2\frac{1}{4}$ millim. (♀ ?)

Hab. MEXICO, Toxpam in Vera Cruz (*Sallé*).

One example, somewhat injured by pinning. A robust, convex form, with somewhat

gibbous, cinereo-bifasciate elytra, the alternate interstices of which are raised and set with short, stout, clubbed, light and dark, setiform scales. The tibial claw is feebly developed, and the specimen therefore (its very stout legs notwithstanding) is probably a female. *P. cincta*, Fåhr., from Brazil, must be an allied form.

8. **Promecops alternans**, sp. n. (Tab. XIV. fig. 28, ♂.)

Oblong, piceous or obscure ferruginous; variegated with a dense clothing of cinereous, brown, and blackish scales, the cinereous scales on the prothorax condensed into three vittæ (the median stripe sometimes wanting) and those on the elytra into two oblique fasciæ, which are sometimes broken up into spots; the elytra also set with scattered, rather long, curled, semierect setæ, which (except on the apical declivity) are mostly confined to the alternate interstices, the rest of the upper surface with short, curled, decumbent hairs, the scales on the under surface cinereous. Rostrum broad, hollowed and canaliculate; joint 2 of the funiculus shorter than 1; eyes large, transverse. Prothorax broader than long, obliquely narrowed in front and behind, closely punctate. Elytra convex, oblong-subtriangular in ♂, subparallel in their basal half in ♀; punctate-striate, the interstices feebly convex. Mesosternum not protuberant. All the tibiæ unguiculate in both sexes, the anterior pair without teeth; tarsal claws small, free.

Length 4–5$\frac{1}{8}$, breadth 1$\frac{3}{5}$–2$\frac{1}{8}$ millim. (♂ ♀.)

Hab. British Honduras, Rio Hondo (*Blancaneaux*); Guatemala, Teleman and San Juan in the Polochic Valley (*Champion*).

Eleven specimens, all but two from Guatemala. This insect differs from most of the similarly-coloured forms in having the long, scattered setæ on the basal half of the elytra confined to the alternate interstices. The male is robust and oblong, resembling *P. dentimanus* in shape.

9. **Promecops brevisetis**, sp. n. (Tab. XIV. fig. 29.)

Oblong, subovate, piceous or obscure ferruginous; variegated with a dense clothing of cinereous, brown, and blackish scales, the cinereous scales condensed on the prothorax into a sinuous vitta on each side (sometimes extending inwards and leaving only a narrow brown median stripe) and those on the elytra into two oblique fasciæ (the anterior one not reaching the suture) and various small scattered spots; the upper surface also somewhat closely set with short, curved, decumbent setæ, those on the elytra seriately arranged down each interstice, the scales on the lower surface cinereous. Rostrum broad, hollowed and canaliculate; joint 2 of the funiculus shorter than 1. Prothorax transverse, somewhat angularly dilated at the sides just beyond the middle, about equal in width at the base and apex; closely, finely punctate, and finely carinate or obsoletely canaliculate down the middle of the posterior half. Elytra convex, punctate-striate, the interstices raised. Mesosternum simple. Anterior tibiæ without teeth. Tarsal claws free.

Length 2$\frac{4}{5}$–5, breadth 1$\frac{1}{3}$–2$\frac{1}{4}$ millim.

Hab. Mexico, Tampico in Tamaulipas (*Schwarz, in U.S. Nat. Mus.*), San Rafael Jicaltepec (*Townsend, in U.S. Nat. Mus.*); Guatemala, Las Mercedes, Pacific slope (*Champion*).

Two specimens from Guatemala (taken as the types) and a series from each of the Mexican localities. This insect is so like *P. umbrata* that it can only be separated therefrom by the free tarsal claws; and the very short curved setæ along each elytral interstice distinguish *P. brevisetis* from *P. alternans*. The sexes are scarcely distinguishable by external characters.

10. **Promecops uniformis,** sp. n. (Tab. XIV. fig. 30, ♂.)

Oblong, robust, piceous; densely, uniformly clothed with brown or greyish-brown scales, the elytra sometimes with a faint, darker, interrupted, transverse fascia beyond the middle, the surface also set with rather long, scattered, decumbent setæ, those on the elytra seriately arranged down each interstice; the scales on the under surface cinereous or greenish-cinereous. Rostrum broad, slightly hollowed, and canaliculate; joint 2 of the funiculus a little longer than 1; eyes large, transverse, oval. Prothorax transverse, obliquely narrowed towards the base and apex, about as wide in front as behind, closely, finely punctate. Elytra oblong-subtriangular in ♂, subparallel or slightly widened to the middle in ♀, punctate-striate, the interstices feebly convex. Metasternum and first ventral segment broadly hollowed down the middle in ♂. Mesosternum simple. Legs very stout in ♂, more slender in ♀, the tibiæ moderately unguiculate in the two sexes; tarsal claws long, free.

Length 5–6$\frac{1}{3}$, breadth 2$\frac{1}{10}$–2$\frac{1}{2}$ millim. (♂ ♀.)

Hab. GUATEMALA, Capetillo, Dueñas, Cerro Zunil (*Champion*), Chimaltenango (*Conradt*).

Seven males and four females. In this insect there is no trace of the usual pallid elytral fasciæ, but there is sometimes an interrupted, blackish, somewhat denuded band visible beyond the middle, especially in the female. The males sometimes have the legs excessively stout. The tarsal claws are long, as in *P. unidentata*.

SUPPLEMENT

TO THE

THECESTERNINÆ AND OTIORHYNCHINÆ*.

THIS Supplement to the subfamilies Thecesterninæ and Otiorhynchinæ† includes the additional material received since 1891, a few species left by Dr. Sharp for further study, and some other forms that had been overlooked in our own or in the British Museum collections. A few corrections in the synonymy have become necessary, mainly owing to the discovery of various Mexican types in the "Sommer" collection, kindly lent by Mr. O. E. Janson and Prof. Poulton.

* By G. C. CHAMPION.

† The Supplementary Apioninæ have been handed over to the specialist Herr Hans Wagner for determination, and his descriptions of the new forms will be published elsewhere. The specific names of three species of the genus *Apion* described in the present Volume were preoccupied, and they have been changed by Wagner (Deutsche ent. Zeitschr. 1909, p. 766) thus: *longimanum*, Sharp (nec Rey) (p. 62)—**macropus**; *longicolle*, Sharp (nec Gerst.) (p. 80)—**macrothorax**; *gibbosum*, Sharp (nec Herbst) (p. 82)—**peculiare**. Of the three other subfamilies dealt with by Dr. Sharp, the Attelabinæ, Pterocolinæ, and Allocoryninæ, but little has since come to hand, and no Supplement is therefore required. It may be observed, however, that a species of the genus *Allocorynus* (*A. slossoni*, Schaeff.) has recently been described from the United States.

THECESTERNINÆ.

THECESTERNUS (p. 86).

Thecesternus humeralis (p. 86).

Mr. Pierce, in his recent revision of this genus [Proc. U.S. Nat. Mus. xxxvii. pp. 334–339 (1909)], recognizes several of Leconte's species (previously sunk as synonyms of *T. humeralis*) as distinct, and describes four others as new. The two specimens from Tamaulipas referred by Dr. Sharp to *T. humeralis*, and another since received from Sabinas in Nuevo Leon (*Flohr*), seem to belong to *T. affinis*, Lec. We are indebted to Mr. Wickham for a series of *T. humeralis*, Say, from Cañon City, Colorado, and to the U.S. Nat. Museum for co-types of *T. maculosus*, *albidus*, and *foveolatus*, Pierce. *T. affinis* differs from *T. humeralis* in having less prominent humeri and the elytra more rounded at the sides, in this respect approaching *T. maculosus*.

OTIORHYNCHINÆ.

OTIORHYNCHINÆ APTERÆ.

OPHRYASTINA.

OPHRYASTES * (p. 88).

Ophryastes bituberosus (p. 90).

The species recorded by Mr. Pierce [Proc. U.S. Nat. Mus. xxxvii. p. 344 (1909)] from Texas and New Mexico (a specimen of which, from San Diego, is now before me) under the above name is *O. ovipennis*, Sharp. *O. tuberosus*, Lec., from New Mexico, may be known from *O. bituberosus* by the feebly, transversely depressed base of the rostrum, and the rather more convex, oval elytra, without trace of humeri.

4 (A). **Ophryastes tetralobus,** sp. n. (Tab. XV. figg. 1, 1 *a*.)

Moderately elongate, black, clothed with intermixed whitish and fuscous scales, and also set with minute, scattered, short, decumbent hairs. Rostrum very broad, faintly transversely depressed at the base, deeply trisulcate, the sulci separated by two posteriorly converging ridges, the median groove extending backward along the flattened, laterally sulcate, inter-ocular portion of the head, the lateral grooves also long. Prothorax strongly transverse, laterally bilobato-dilatate, constricted just before the base, the groove in front of the basal ridge deeply impressed laterally, obsolete in the centre, the depressed narrow basal portion feebly produced in the middle behind; the surface obliquely wrinkled and sparsely, coarsely punctate. Elytra moderately convex, oblong-oval, not wider than the dilated portion of the prothorax, with a short, abrupt, neck-like constriction at the base; coarsely punctate-striate, the interstices convex.

Length $13\frac{1}{2}$, breadth $5\frac{1}{5}$ millim. (♂?)

Hab. MEXICO, Sabinas in Nuevo Leon (*ex Flohr*).

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* *O. wickhami*, Sharp, from Winslow, Arizona, described in a footnote on p. 88, belongs to *Eupagoderes* (and is indeed so labelled in the Sharp collection), the male having the third tarsal joint dilated and the lobes clothed with adhesive pubescence beneath [*cf.* Fall, Trans. Am. Ent. Soc. xxxvi. p. 189 (1910)]. A specimen of it from Arizona has been sent me by the U.S. Nat. Museum (det. Pierce) as *E. argentatus*, Lec.

One worn example, probably a male. Very like *O. bituberosus*, but with a short neck-like constriction to the elytra at the base (somewhat as in *Eupagoderes constrictus*), the frons and rostrum deeply trisulcate, and the inter-ocular portion of the head flattened. The sides of the prothorax are explanate and strongly bilobate. Fresh specimens would doubtless be more definitely albo-squamose.

4 (B). **Ophryastes collaris,** sp. n. (Tab. XV. figg. 2, 2, ♂; 3, 3 *a*, ♀.)

Moderately elongate, black; densely clothed with chalky-white or pale brownish scales, the head with a small patch on each side above the eyes, the prothorax with three spots at the apex, and the elytra with various irregular scattered patches, infuscate, the intermediate and posterior femora also fusco-annulate in front; the surface also set with minute, short, scattered hairs. Rostrum very broad, without definite transverse depression at the base, deeply trisulcate, the lateral grooves converging posteriorly, the flattened inter-ocular portion of the head also shallowly trisulcate. Prothorax strongly transverse, laterally bilobato-dilatate (the posterior lobe prominent and the prothorax here nearly or quite as wide as the elytra), constricted just before the base, the groove in front of the basal ridge deeply impressed laterally and obsolete in the middle, the depressed narrow basal portion angularly produced backwards in the middle; the surface uneven, sparsely, coarsely punctate. Elytra convex, oblong-oval, with a short neck-like constriction at the base; coarsely punctate-striate, the interstices convex.

Length 9–12$\frac{4}{5}$, breadth 3$\frac{2}{3}$–5$\frac{1}{2}$ millim.

Hab. NORTH AMERICA, Texas (*coll. Fry*).—MEXICO, Nuevo Laredo in Tamaulipas (*Höge*).

Two specimens, assumed to be male and female, the Texan example (♀) being much broader than the other. Near *O. tetralobus*, but with the median groove of the rostrum obsoletely extending on to the inter-ocular portion of the head, the latero-anterior lobe of the prothorax less prominent, and the depressed basal portion of the prothorax more produced in the middle behind. The neck-like constriction to the base of the elytra separates *O. collaris* from *O. tuberosus*, *bituberosus*, and *basalis*, the last-mentioned insect, moreover, having the median sulcus of the rostrum extending upwards. The dark markings may be partly due to abrasion or discoloration. Both examples are figured.

TOSASTES (p. 91).

Mr. Pierce [Proc. U.S. Nat. Mus. xxxvii. pp. 344, 345 (1909)] has recently added two species to this genus, from Texas and New Mexico respectively, and another from Coahuila has recently been sent us by the U.S. Nat. Mus., to whom we are also indebted for co-types of the N.-American forms.

1 (A). **Tosastes coarctatus,** sp. n. (Tab. XV. figg. 4, 4 *a*, ♀.)

Oblong-ovate (♂), subovate (♀), black, densely clothed with small, imbricate, chalky-white scales, and also set with very short, curled, decumbent, scattered, setiform hairs. Rostrum very stout, transversely depressed at the base (arcuate above, as seen in profile), trisulcate, the sulci separated by two posteriorly converging ridges. Prothorax strongly transverse, uneven, sparsely, coarsely punctate; the sides dilated at about the middle, crenate, and deeply, abruptly constricted just before the base; the ocular lobes prominent, the vibrissæ short. Elytra oval, broader and less constricted at the base in the ♀ than in the ♂, with laterally prominent dentiform humeri; punctate-striate, the interstices feebly convex.

Anterior tarsi of ♂ distinctly broader than in ♀, the relatively larger third joint without adhesive pubescence beneath. Posterior tibiæ with a single row of spinules at the apex externally.

Length $5\frac{4}{5}$–$8\frac{4}{5}$, breadth $2\frac{3}{5}$–$4\frac{1}{3}$ millim. (♂ ♀.)

Hab. MEXICO, Monclova in Coahuila (*Schwarz, in U.S. Nat. Mus.*).

A long series, labelled as taken on Nov. 23rd. Near *T. humeralis*, Sharp, from Chihuahua, but differing from it in the abruptly constricted sides of the prothorax and the still more prominent humeri.

EUPAGODERES (p. 93).

The N.-American species of this genus, two at least of which extend southward into our region, have been recently revised by Mr. Fall [Trans. Am. Ent. Soc. xxxvi. pp. 189–194 (1910)]. Eleven were recorded by Dr. Sharp from Mexico, and three others are now added. The following additional localities may be noted for the known Mexican forms: *E. mexicanus*—Mescala in Guerrero (*H. H. Smith*); *E. cinereus*—Saltillo in Coahuila and Durango * (*Wickham*); *E. squalidus*—Durango (*Wickham*), also found by Truqui; *E. cretaceus* (? = *sordidus*, Lec.)—Arizona (*Linell, ex U.S. Nat. Mus.*); *E. decipiens*—Monterey (*Schwarz, in U.S. Nat. Mus.*); *E. gracilis*—Tlaltizapan (? in Morelos) (*ex coll. Flohr*), Mescala (*H. H. Smith*).

1 (A). **Eupagoderes rotundatus,** sp. n. (Tab. XV. figg. 5, 5 *a*.)

Obovate, black, thinly squamose above, the scales pale brown on the elytra and whitish on the rest of the surface, the intermixed scattered setæ minute and extremely short. Rostrum transversely depressed at the base, trisulcate, the lateral sulci deep and rather short; head flattened between the eyes; joint 2 of the funiculus a little longer than 3. Prothorax strongly transverse, feebly rounded at the sides, slightly broader at the base than at the apex, the basal and apical grooves deeply impressed laterally, the apical groove obsolete on the disc, the vibrissæ rather short; the surface impressed with coarse scattered punctures, and interruptedly sulcate down the middle. Elytra very convex, broad, rotundate-ovate, widest at the middle, acuminate at the tip; rather coarsely punctate-striate, the interstices moderately convex. Anterior tibiæ obsoletely denticulate. Tarsal joints 1–3 with a patch of adhesive pubescence on each side beneath.

Length $9\frac{3}{4}$, breadth $4\frac{1}{3}$ millim.

Hab. MEXICO, Saltillo in Coahuila (*Wickham*).

One specimen, partly abraded above, recently presented to us by Mr. Wickham; it was captured on July 4th. Near *E. constrictus*, Sharp, from San Isidro †, but wanting the neck-like constriction at the base of the elytra (the elytra being rounded from the base and without trace of subhumeral prominence in the present species); the prothorax less rounded at the sides and equally constricted just before the base and apex.

5 (A). **Eupagoderes turbinatus,** sp. n. (Tab. XV. figg. 6, 6 *a*, ♂.)

Elongate, black; cinereo-squamose, the elytra and legs irregularly maculate with blackish or fuscous, the prothorax slightly infuscate along the sides; the surface also set with fine, scattered, curled, decumbent

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* The Durango specimens, like the one from the Alvarez Mts. quoted by Dr. Sharp (*anteà*, p. 95), are comparatively short, and have the elytra truncate at the base and the humeri more prominent; they will probably have to be separated from *E. cinereus*.

† ? In Chihuahua or San Luis Potosi.

setæ. Rostrum not sulcate, depressed down the middle towards the apex, and with a small fovea between the points of insertion of the antennæ; head convex; joint 2 of the funiculus a little longer than 3. Prothorax slightly broader than long, widest before the middle, narrower at the base than at the apex, the sides rounded anteriorly and obliquely converging behind, the basal groove very shallow, the vibrissæ long; the surface impressed with scattered coarse and finer punctures. Elytra convex, widened to beyond the middle, the base truncate and about as wide as the base of the prothorax; finely striate, the striæ with scattered punctures, the interstices broad and almost flat. Tibiæ without denticles on their inner edge. Tarsal joints 1–3 with a patch of adhesive pubescence on each side beneath, joint 3 of the anterior pair much wider than 2.

Length $8\frac{1}{2}$–9, breadth $3\frac{1}{10}$–$3\frac{1}{2}$ millim. (♂.)

Hab. MEXICO, Lampazos in Nuevo Leon (*C. C. Deam, in U.S. Nat. Mus.*).

Two specimens, one (the type) labelled as having been captured at Lampazos in 1890, the other (numbered 93) presumably from the same locality, the latter being retained for the British Museum. In Mr. Fall's Table of the N.-American species [Trans. Am. Ent. Soc. xxxvi. pp. 193, 194 (1910)], *E. turbinatus* comes near *E. dunnianus*, Casey, and *E. decipiens*, Lec., from both of which, and from the allied *E. durangoensis*, Sharp, also, it may be distinguished by the anteriorly widened prothorax. The elytra are maculate as in the last-mentioned insects.

Eupagoderes cretaceus (p. 96).

Two specimens of a *Eupagoderes* have been sent us under the name *E. sordidus*, Lec. (det. Pierce), by the U.S. Nat. Museum: one of these, from Arizona, does not differ from *E. cretaceus*, Sharp; the other, from San Bernardino, California, is probably a form of *E. aridus*, Fall. If the Arizona insect is correctly named, the name *E. cretaceus*, Sharp (the types of which are from Villa Lerdo in Durango), will fall as a synonym of *E. sordidus*.

12. **Eupagoderes depressirostris,** sp. n.

Obovate, black, clothed with intermixed brownish-cinereous and white scales, and also set with fine scattered setæ, which become longer, suberect, and more crowded on the apical declivity. Rostrum flattened and somewhat abruptly separated from the head, without trace of median groove, the oblique lateral sulci faintly indicated; joint 2 of the funiculus about half the length of 3. Prothorax strongly transverse, comparatively small, somewhat rounded at the sides, feebly constricted just before the base, the basal groove almost obsolete on the disc, the vibrissæ extremely short; sparsely, coarsely punctate and obsoletely canaliculate. Elytra convex, rotundate-ovate, abruptly declivous behind, the apices obtuse; rather coarsely punctate-striate, the interstices broad and almost flat. Legs not very stout; third tarsal joint with a small patch of adhesive pubescence on each side beneath.

Length $7\frac{1}{2}$, breadth $3\frac{1}{2}$ millim.

Hab. MEXICO, Villa Lerdo in Durango (*Höge*).

One specimen, somewhat abraded, and for that reason left unnamed by Dr. Sharp. This species approaches *E. gracilis* *, but it has the elytra almost as globose as in

* Additional specimens of *E. gracilis* have been received from Matamoros Izucar and Tlaltizapan (*Flohr*), some of these showing a distinct narrow median sulcus on the rostrum.

E. rotundatus. The rostrum is flattened and without trace of median sulcus, the prothorax very short, the elytra closely setose on the apical declivity, and the legs rather slender.

AMPHIDEES (p. 97).

The additional material of this genus now to hand includes various specimens of *A. macer* from Tres Marias in Morelos (*Wickham*) and others collected by Truqui. *Deamphus puncticollis* (anteà, p. 104), of which a second example has been found amongst Truqui's captures, is so nearly related to *A. macer* that it must be included in the same genus, the ocular lobes (and conspicuous vibrissæ) being as distinctly traceable as they are in *A. pilosus.* *D. latifrons* also has rather long vibrissæ and sufficient sinuation of the anterior margin of the prothorax to indicate a rudimentary ocular lobe; it would therefore be better placed in *Amphidees*, near *A. macer* and *A. puncticollis.* In the two other species referred to *Deamphus*—*D. brevipennis* (type of genus) and *D. deceptor*—the vibrissæ are altogether wanting and there is no trace of an ocular lobe.

6 (A). **Amphidees acuminatus,** sp. n. (Tab. XV. figg. 7, 7 *a*.)

Oblong-ovate, acuminate, piceous, the antennæ and tarsi obscure ferruginous; thickly clothed with cupreo-cinereous and brownish scales, the elytra indefinitely fusco-variegate, the surface also set with long scattered, suberect, stout setæ. Rostrum short, stout, depressed at the base, shallowly bisulcate on each side of the somewhat raised median portion, the inter-ocular portion of the head flattened. Prothorax transverse, subtruncate at the base, with feebly developed ocular lobes; impressed with scattered, rather coarse, confluent punctures intermixed with a close fine interstitial punctuation, and also canaliculate down the middle. Elytra acuminate-ovate, constricted immediately below the base, the humeri thus appearing prominent, the base itself truncate; with rows of scattered moderately coarse punctures, the interstices flat on the disc, becoming feebly convex outwards. Second ventral segment at the middle nearly as long as the next two united.

Length $7\frac{1}{2}$, breadth 3 millim. (♀?)

Hab. MEXICO (*Truqui*).

One specimen. Distinguishable by the short, basally depressed, feebly quadrisulcate rostrum, and the acuminate, basally constricted, strongly setose elytra. The scrobes are less extended backward and the humeri more prominent than in the allied *A. alternans*, Sharp.

SYNOSOMUS (to follow the genus *Amphidees*, p. 101).

Synosomus, Jekel, Ann. Nat. Hist. (3) ii. p. 358 (1858).

The type of this genus * (unlike those of the other forms described by Jekel in the same paper) cannot now be found in the British Museum. The presence of ocular lobes to the prothorax, the posteriorly widened, evanescent scrobes, the absence of scutellum, the exhumerate elytra, &c., seem to bring *Synosomus* near the Mexican genus *Amphidees.*

* Not identified by Lacordaire.

1. **Synosomus geonomoides.**

Synosomus geonomoides, Jekel, loc. cit. p. 359[1].

Hab. Pacific Shore of Central America[1]?

EPICÆRINA.

EPICÆRUS (p. 104).

Epicærus cognatus (p. 105).

To the Mexican localities given, add:—Toluca (*Wickham*), Parada, Puebla (*Sallé*), Pachuca (*Höge*).

Epicærus sulcirostris (p. 106).

This insect, the types of which are from Esperanza, seems to be an extreme form of *E. vilis*; both occur at Parada.

Epicærus niger (p. 106).

The types of this species were from Orizaba: the male is narrower and more elongate than the female, and it has the elytra strongly constricted at the sides below the humeri, so that the latter become very prominent. There is a similar male in the collection of Signor Solari, from that of Jekel, labelled "*Diorynotus alternans*, J."

Epicærus costatus (p. 109).

Var. The depressed portions of the upper surface sparsely clothed with intermixed cinereous and bluish-green scales; the elytral interstices 1 (sutural), 3, 5, and 7 broadly, and the others narrowly and feebly, costate.

Hab. Mexico, "Sierra de Durango" (*ex Flohr*).

One worn pair.

Epicærus mexicanus (p. 110).

Epicærus mexicanus, Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 339 (1909)[6]; Journ. Econ. Ent. iii. p. 360 (1910)[7].

To the localities given, add:—North America, Brownsville in Texas[6 7].—Mexico, Tampico in Tamaulipas (*Schwarz, in U.S. Nat. Mus.*), Tehuantepec (*coll. Fry*).

The females of this very variable species are often much less elongate than the males. Texan examples do not differ from some of those before me from Oaxaca.

Epicærus fallax (p. 110).

To the locality Mexico, add:—Tampico in Tamaulipas (*Schwarz, in U.S. Nat. Mus.*).

No definite locality in Mexico was known for *E. fallax*, but it is not likely that all the examples of it in collections came from so far north as Tamaulipas, whence I have recently seen a good series belonging to the U.S. National Museum. This species

is readily separable, in both sexes, from *E. mexicanus* by the characters given by Dr. Sharp. The insect labelled *E. fallax* in the Sommer collection is a large female of *Pseudhypoptus parcus*, Fåhr.

Epicærus nebulosus (p. 111).

? *Epicærus neglectus*, Boh. in Schönh. Gen. Curc. ii. p. 325 [2].

We have now seen a long series of this species and there can be little doubt that it was correctly identified by Dr. Sharp, the convex, prominent eyes and the subconstricted head separating *E. nebulosus* from both *E. mexicanus* and *E. fallax*. The type of *E. neglectus* (an insect omitted from the list of species, *anteà*, pp. 105–128), also from Mexico [2], cannot now be found in the Hope collection at Oxford: it is probably a female of *E. nebulosus*. The British Museum has recently received examples of the latter from Vera Cruz which were captured by Mr. Crawford.

15 (A). Epicærus macropus, sp. n. (Tab. XV. figg. 8, 8 *a*, ♂.)

Very elongate, narrow (♂), broader (♀), black; thickly clothed with coppery-brown scales, the scales often becoming cinereous towards the sides of the elytra, at the base of the femora, and on part of the body beneath, the surface also set with short, decumbent, intermixed setæ, which become more conspicuous on the apical declivity. Rostrum stout, a little longer than the head with the eyes, broadly hollowed down the middle, canaliculate from the small inter-ocular fovea, finely punctate, the eyes large, oval, depressed; antennæ slender, joint 2 of the funiculus much longer than 1. Prothorax longer than broad, obliquely narrowed anteriorly and subcylindrical in ♂, gradually narrowing forwards in ♀, truncate at the base; irregularly, confluently foveolate and with a fine interstitial punctuation, the disc obsoletely sulcate down the middle. Elytra elongate, not or very little wider than the prothorax in ♂, broader in ♀, constricted at the base, the apical declivity (viewed in profile) rounded in both sexes, the humeri rather prominent; with rows of moderately coarse scattered punctures, the interstices transversely wrinkled. Legs very elongate; anterior tibiæ obsoletely denticulate.

Length $12\frac{1}{3}$–$15\frac{1}{2}$, breadth $3\frac{1}{2}$–5 millim. (♂ ♀.)

Hab. MEXICO, "Sierra de Durango" (*Höge*).

Five males and one female. An elongate form nearly related to *E. cultripennis*, but differing from it in the simply rounded (not abruptly perpendicular) apical declivity of the elytra, this being particularly noticeable in the female (*cf.* Tab. V. figg. 3 *a*, 4 *a*).

Epicærus reversus (p. 113).

To the Mexican localities given, add:—Oaxaca (*Mus. Brit.*), Chiapas (*coll. Fry*).

The types (♂ ♀) were from San Andres Tuxtla in Vera Cruz, the female, as usual, being much broader than the male.

21 (A). Epicærus macropterus, sp. n. (Tab. XV. fig. 9, ♂.)

Very elongate, narrow, black; thickly clothed with greyish-brown scales, which become paler and somewhat cupreous on the under surface, the elytra also set with very short, scattered, curled, decumbent setæ. Rostrum longer than broad, deeply sulcate down the middle, the sulcus narrowing upwards and nearly reaching the conspicuous inter-ocular fovea, and also with a shallow groove on each side before the eyes, the latter large and moderately prominent. Prothorax about as long as broad, truncate at the base, somewhat rounded at the sides, the latter obliquely converging anteriorly and abruptly constricted before the hind angles; shallowly sulcate down the middle, transversely confluently foveolate, and also closely,

finely punctate. Elytra very elongate, at the basal third slightly wider than the prothorax, constricted just behind the prominent humeri, convex on the apical declivity; the seriate punctures fine and scattered, the interstices feebly transversely undulate. Anterior tibiæ with several short setigerous denticles scattered along their inner edge.

Length $10\frac{1}{2}$, breadth nearly 3 millim. (♂.)

Hab. MEXICO, Zacualtipan in Hidalgo (*Höge*).

One specimen, labelled by Dr. Sharp "sp. n. near *championi*," from which it differs in its much more elongate shape, longer rostrum, obsoletely denticulate anterior tibiæ, transversely rugose prothorax, and less undulate elytra. Seventeen specimens of the Guatemalan insect were captured and there is nothing intermediate. The small denticles on the anterior tibiæ are wanting in the latter.

21 (B). **Epicærus depilis.**

Epicærus depilis, Boh. in Schönh. Gen. Curc. vi. 2, p. 279[1].

Very like *E. macropterus*, but with the rostrum shorter (not longer than the exposed portion of the head) and more narrowly sulcate; the antennæ shorter and stouter, with the outer joints of the funiculus as broad as long; the prothorax less rugose, the coarse punctures mostly separate one from another; the elytra more convex at the base, rounded on the apical declivity, the humeri not prominent, the seriate punctures very coarse and deep.

Length 10, breadth 3 millim. (♀ ?)

Hab. MEXICO (*coll. Sommer* [1]).

E. depilis was sunk as a synonym of *E. cultripennis* by Dr. Sharp (*anteà*, p. 111), but an inspection of the abraded type shows that this is not the case. It is just possible that *E. macropterus* may prove to be the male of the same species.

Epicærus capetillensis (p. 115).

To the localities given, add:—BRITISH HONDURAS, Rio Sarstoon (*Blancaneaux*).

Epicærus griseus (p. 117).

I am unable to distinguish *E. sphæroides* from *E. griseus*, Boh., doubtfully retained as distinct by Dr. Sharp, and the two forms would be better treated as one, for which the name *griseus* should be used.

Epicærus monclovæ (p. 118). (Tab. XV. figg. 10, 10 *a*, ♂.)

The type of this insect (length 7, breadth $3\frac{1}{10}$ mm.) is a large, almost immaculate female. The male is smaller, narrower, and so distinctly maculate that I should have hesitated to treat it as the sexual complement of the same species, were it not from the same locality, Monclova in Coahuila. It may be described thus:—

♂. Oblong, densely albo-squamose; the prothorax with two very broad greyish-brown vittæ on the disc (leaving a submarginal line on each side and a narrow median stripe white), the elytra also greyish-brown, with the following white markings:—a transverse patch at the base, an oblique fascia on the outer part of the disc before the middle, extending forwards along the margin to the shoulder, a transverse interrupted subapical fascia (formed by two subconfluent spots), and a common apical patch. Length 5, breadth $2\frac{1}{10}$ millim.

Epicærus durangoensis (p. 119).

This insect was described from four good specimens from Durango city. Mr. Wickham has sent us two somewhat worn females from Tepehuanes, Durango, that seem to belong to the same species :—

Var.? Prothorax densely clothed above with brown scales, a cruciform patch on the disc and a stripe on each flank white, the elytra obsoletely, interruptedly fasciate with brown, the scales on the rest of the surface whitish ; the rostrum somewhat deeply furrowed; the prothorax (as seen with the vestiture intact) comparatively smooth, the intermixed coarser punctures inconspicuous ; the elytral interstices flat, the seriate punctures appearing fine till the scales are removed.

32 (A). **Epicærus elegantulus,** sp. n. (Tab. XV. figg. 11, 11 *a*, ♀.)

Epicærus elegantulus, Dupont, in litt.

Pyriform, convex, black ; variegated with a dense clothing of whitish, pale brown, and fuscous scales, the brown scales on the prothorax more or less condensed into a broad space on each side of the disc (leaving a cruciform median vitta and a stripe along each flank white) ; the elytra with some irregular spots at the base, two angulate common fasciæ (the anterior one extending forward along the outer margin to the shoulder, and both sometimes broken up into spots), and a patch at the apex, white, these markings usually edged with fuscous (thus appearing very sharply defined) ; the femora in some examples fusco-maculate beneath. Rostrum subquadrate, not longer than broad, grooved down the middle, the inter-ocular portion of the head flattened, the eyes convex and prominent, especially in ♂. Prothorax slightly broader than long, somewhat rounded at the sides in ♂, gradually narrowing from the base in ♀, the anterior margin sinuate ; finely punctate and feebly canaliculate. Elytra at the base a little wider than the prothorax, acuminate at the tip ; the seriate punctures showing conspicuously through the dense vestiture, the interstices almost flat. Legs short.

Length 6–8½, breadth 2½–3½ millim. (♂ ♀.)

Hab. MEXICO (*Mus. Brit. ; coll. Pascoe ; coll. Solari, ex Jekel*), Tampico in Tamaulipas (*Schwarz, in U.S. Nat. Mus.*).

Six females (four of which are from Tampico) and two males, one of these latter wanting the fuscous markings on the elytra. Labelled "*Epagrius nubilosus*, var.?" in the Solari collection, but more convex than that insect, the tarsi broader, the antennal club longer, &c. *E. elegantulus* approaches *E. durangoensis* and *monclovæ*, Sharp.

32 (B). **Epicærus imbricatus.**

Liparus imbricatus, Say, Journ. Acad. Phil. iii. p. 317[1].

Hypsonotus imbricatus, Germ. in Schönh. Gen. Curc. ii. p. 267[2].

Epicærus imbricatus, Boh. op. cit. vi. 2, p. 280[3] ; Horn, Proc. Am. Phil. Soc. xv. p. 20[4] ; Casey, Ann. N. York Acad. Sci. iv. p. 234[5] ; Pierce, Journ. Econ. Ent. iii. p. 360[6].

Hab. NORTH AMERICA [1–6].—MEXICO, Durango (*Wickham*).

Mr. Wickham has sent us a specimen (♀) of this destructive common N.-American insect from Durango nearly agreeing with others of the same sex before me determined by Dr. Horn. The males have the prothorax narrower at the base and are very like *E. texanus*. Mr. Pierce [6] recognises six N.-American species of *Epicærus*, the one described by him, *E. lepidotus* (an example of which has been presented to us by the U.S. National Museum), occurring as far south as Brownsville in Texas, and must enter our region.

Epicærus decoratus (p. 121).

The types (♂ ♀) of this species are worn, one only of them showing the oblique whitish post-median fascia on the elytra. There is a specimen in much better condition in the British Museum. This insect, a large female, is more rugose than the type (♀), the seriate punctures on the elytra are each placed in a shallow, subquadrate fovea, the depressed portions of the surface are clothed with intermixed white and greenish scales, and the oblique sinuous fascia is not widened towards the suture. It is labelled "Mexico."

Epicærus squamosus (p. 122).

It may be noted that the apical declivity of the elytra in this species is rounded in the male and abruptly perpendicular in the female.

Epicærus marginatus (p. 122).

There can be little doubt that *E. insolitus* (anteà, p. 123) is the female of *E. marginatus*, the type of which is a male. They each have the anterior tibiæ armed with three or four conspicuous teeth along their inner edge. The localities Pachuca (♂) and Zacualtipan (♀) are not very far distant, and both in Hidalgo.

40 (A). **Epicærus truquianus,** sp. n.

Oblong, narrow and convex (♂), much broader (♀), black; above sparsely clothed with blackish scales, which become cinereous towards the sides and apex, and are here intermixed with short, scattered, decumbent, whitish setæ, the legs and ventral surface also albo-setose. Rostrum short, broad, widened outwards, closely punctate, with an elongate-triangular depression extending upwards to near the small inter-ocular fovea, the depression limited on each side by an oblique ridge and subcarinate down the middle, the eyes not prominent. Prothorax broader than long, margined at the base, gradually narrowing from near the hind angles in ♀, somewhat rounded at the sides and constricted behind in ♂; with irregularly distributed, large, scattered, foveiform punctures intermixed with a close fine interstitial punctuation, and shallowly, interruptedly sulcate down the middle. Scutellum not visible. Elytra oblong-oval, moderately convex and narrow in ♂, broad in ♀, the humeri distinct in this sex; with rows of coarse punctures, the punctures somewhat widely separated in ♀, the interstices almost flat, the alternate ones slightly raised towards the sides and apex in one ♀.

Length 8–11, breadth $2\frac{4}{5}$–$4\frac{1}{2}$ millim. (♂ ♀ .)

Hab. MEXICO (*Truqui, in coll. Fry*).

One male and two females. Near *E. marginatus* (=*insolitus*), Sharp, the elytra more rounded at the sides anteriorly in the male and with distinct humeri in the female; the prothorax with more numerous foveiform depressions on the disc and the median sulcus shallow or almost wanting; the upper surface (? abraded) more sparsely squamose.

40 (B). **Epicærus foveifrons,** sp. n. (Tab. XV. fig. 12, ♂ .)

Oblong, convex, narrow (♂), broader (♀), shining, black; above very sparsely, the under surface more densely, cinereo-squamose. Rostrum short, widening outwards, with an elongate-triangular excavation

extending upwards to near the large inter-ocular fovea, the depression limited on each side by an oblique ridge. Prothorax transverse, convex, sharply margined at the base, rounded at the sides, narrowed and constricted in front and also constricted behind; with a few large foveiform punctures intermixed with a close, fine, interstitial punctuation, and also very deeply sulcate down the middle. Scutellum not visible. Elytra oblong-oval, convex and narrow in ♂, broader in ♀; the seriate punctures coarse and closely placed, transverse in ♀, the interstices more or less convex throughout. Anterior tibiæ strongly curved in ♂. Length $8\frac{1}{10}$–9, breadth 3–$3\frac{3}{4}$ millim. (♂ ♀.)

Hab. MEXICO (*Boucard, ex coll. Solari*: ♀), Salazar (*Wickham*: ♂, type).

Very near *E. truquianus*, from which it differs in having the frontal fovea much larger; the prothorax more convex, deeply sulcate, and with fewer foveæ; the elytra more convex in both sexes, the seriate punctures closely placed, and the interstices raised throughout. The male (type), recently sent us by Mr. Wickham, is rather worn and almost glabrous above, the female is squamose on the apical declivity. *E. hoegei*, from Salazar, based upon a single female example, is a more elongate, less convex form, with a feebly impressed rostrum, an obsoletely grooved prothorax, and flat elytral interstices.

Epicærus godmani (p. 124).

The types of this species (two examples from Popocatepetl) are certainly males, and we have also another agreeing with them from Flohr's duplicates, with a dealer's label "Sierra de Durango" attached. The scattered denticles on the anterior tibiæ are almost obsolete in *E. godmani* and the allied *E. scutellaris*.

Epicærus sexcostatus (p. 125).

The male of this species is narrower than the female, and it has the metasternum and first ventral segment broadly hollowed down the middle. The British Museum has recently received a female of it from Vera Cruz, found by Mr. Crawford. Both sexes were obtained at Cinco Señores.

EPAGRIOPSIS, nomen nov.

Epagrius, Sharp, anteà, p. 128 (nec Schönherr).

Dr. Sharp in his remarks on Schönherr's genus *Epagrius* says that his application of this name may possibly prove to be erroneous, as he had not been able to see a specimen of the type, *E. nubilosus*. This is actually the case, the type from the Sommer collection (kindly lent by Prof. Poulton) proving to be a *Bradyrhynchus* and synonymous with *B. tolucæ*, Sharp. The twenty-one species provisionally placed under *Epagrius* in this work therefore require a new generic name, for which *Epagriopsis* is suggested; *Bradyrhynchus*, Sharp, becomes a synonym of *Epagrius*, Schönh. In the enumeration of the members of the present genus (*anteà*, pp. 129–140) both *Epagrius nubilosus* (the type) and *metallescens* were by some oversight

omitted; the last-mentioned insect, however, is merely a large rubbed female of *E. nubilosus*. *Synthlibonotus*, Schönh., type *S. rufipes*, Lacord., from Colombia, is very nearly related to *Epagriopsis*, but differs from it in having the femora strongly pedunculate, and the scrobes * shallower and broader towards the eyes.

1. **Epagriopsis operculatus.**

Epagrius operculatus, anteà, p. 129.

To the Mexican localities given, add:—Mixcoac, Salazar (*Wickham*), Tultenango, Mineral del Oro, Tlalpam (*Hay, in U.S. Nat. Mus.*), Cholula (*U.S. Nat. Mus.*).

With the additional material before me I am unable to distinguish *E. gravidus* and *E. morosus* (anteà, pp. 130, 131) from *E. operculatus*, the first two being based upon worn examples. The seriate punctures on the elytra vary in size.

19. **Epagriopsis inæqualis.**

Epagrius inæqualis, anteà, p. 139.

To the localities given, add:—Costa Rica, San José, Rancho Redondo (*Biolley*), Irazu (*U.S. Nat. Mus.*).

Found on Labiatæ, according to Biolley.

20. **Epagriopsis samson.**

Epagrius samson, anteà, p. 139.

To the localities given, add:—Costa Rica, Pozo Azul (*Underwood*).

EPAGRIUS.

Epagrius, Schönherr, Gen. Curc. vi. 1, p. 119 (1840) (nec Sharp, anteà, p. 128).
Bradyrhynchus, Sharp, anteà, p. 140.

This change in the synonymy has already been alluded to under *Epagriopsis*, anteà, p. 328. *Epagrius* comes very near the N.-American genus *Graphorhinus*, Schönh. (type *G. vadosus*), but the latter has much broader elytra, with prominent humeri, longer tarsi, &c.; it will include *B. brevirostris*, Sharp, and the three forms noted below.

2. **Epagrius nubilosus.** (Tab. XV. fig. 13.)

Epagrius nubilosus, Boh. in Schönh. Gen. Curc. vi. 1, p. 121 [1].
Graphorhinus nubilosus, Lacord. Gen. Col. vi. p. 133 [2]; Gemm. et Harold, Cat. Col. viii. p. 2241 [3].
Epagrius metallescens, Boh. loc. cit. p. 122 [4].
Graphorhinus metallescens, Gemm. et Harold, loc. cit. [5].
Bradyrhynchus tolucæ, Sharp, anteà, p. 141 [6].

Hab. Mexico [2 3 5] (*Truqui, in coll. Fry*), Toluca (*Sallé* [6]), Real del Monte [1 4] (*coll. Sommer, in Mus. Oxon.*).

* Lacordaire's figure of the rostrum is misleading.

In addition to the two specimens from Toluca mentioned by Dr. Sharp, I have seen three others found by Truqui and the types of the insects described by Boheman, *E. metallescens* being a large, somewhat abraded, submetallic example of the same species. The common, **Y**-shaped, fuscous-edged, white mark on the apical declivity of the elytra and the white oblique fascia on the outer part of the disc before the middle are conspicuous in all of them. Length 6–7½, breadth 2¾–3½ mm.

3. **Epagrius rugicollis.** (Tab. XV. fig. 14, ♀.)

Bradyrhynchus rugicollis, anteà p. 142.

Epicærus notatus (♀) and *punctaticollis* (♂), E. Dugès, in litt.

There are two examples of this species (described from an abraded female) in the U.S. National Museum, doubtless from the same locality as the type, Guanajuato. One of these additional specimens, the female figured, is in fairly good condition; it has two sinuous vittæ on the disc and a stripe on each side of the prothorax, and a patch at the sides and a common broad, angulate, subapical fascia on the elytra, cinereous.

4. **Epagrius retrorsus,** sp. n. (Tab. XV. figg. 15, 15 *a*.)

Oblong-obovate, black, the antennæ (the club excepted) and tarsi more or less ferruginous; densely clothed with pale brown and white scales, the white scales on the prothorax condensed into a narrow, faint, curved stripe on each side, and those on the elytra into two sharply defined, rather broad, angulate fasciæ—the anterior one not reaching the suture and extending forward along the outer margin to the shoulder, the subapical one extending for some distance down the suture; the surface also somewhat thickly set with short, stout, curved setæ. Head transversely depressed between the eyes (appearing sharply separated from the rostrum), the rostrum short, the eyes prominent, the antennal club ovate and rather short. Prothorax transverse, rounded at the sides; coarsely, somewhat closely punctate, and faintly canaliculate. Elytra at the base a little wider than the prothorax, retuse or perpendicular on the apical declivity (as seen in profile), the seriate punctures scattered and very conspicuous, the interstices rather convex.

Length 5–6, breadth 2⅓–2⅔ millim.

Hab. Mexico (*Mus. Brit.; Truqui, in coll. Fry*).

Five specimens, sex not ascertained. Not unlike *E. nubilosus* (=*tolucæ*, Sharp), but strongly setose, and with the apical declivity perpendicular, the prothorax more closely punctured, and the head transversely depressed between the eyes. *E. rugicollis* (Sharp) has very short, fine, inconspicuous setæ and the apical declivity rounded, though agreeing with *E. retrorsus* in the form of the head. The Guatemalan *Epicærus minor*, too, is not unlike the present species, but it has depressed eyes, erect setæ, and an unimpressed head.

CLEISTOLOPHUS (p. 143).

Cleistolophus subfasciatus (p. 143).

To the localities given, add:—Mexico, Oaxaca (*Mus. Brit.*).

The Guatemalan example referred to this species seems to belong to *C. similis.*

1 (A). **Cleistolophus viridimargo,** sp. n. (Tab. XV. figg. 16, 16 *a*.)

Elongate, subconical, black; densely clothed with brown scales, the prothorax and elytra with a sharply-defined, broad, greenish-white stripe along the flanks, which extends obliquely and interruptedly inwards across the disc towards the apex, the head beneath, the basal margin of the prothorax, a common cordiform apical patch on the elytra, the legs, and the under surface in great part, also viridi-squamose. Rostrum subquadrate, slightly hollowed down the middle, the upper portion narrowing towards the apex; eyes large, depressed; joints 1 and 2 of the funiculus equal in length. Prothorax transverse, obliquely narrowed in front, subparallel at the base, the base sharply margined; finely punctate. Elytra elongate, acuminate at the apex, of the same width as the prothorax at the base, and constricted immediately behind the prominent humeri, the sutural region tumid on the apical declivity, the scattered seriate punctures showing conspicuously through the dense vestiture. Anterior and intermediate femora dentate.

Length 11½, breadth 5 millim.

Hab. British Honduras (*Dyson, in Mus. Brit.*).

One specimen. Larger and much more elongate than *C. subfasciatus*, the eyes larger, the rostrum with more prominent alæ, the prothorax and elytra with a sharply-defined, broad, pale greenish stripe along the flanks, the stripe turning obliquely inwards across the disc towards the apex.

Cleistolophus similis (p. 144).

To the localities given, add:—Mexico, Chiapas (*Mus. Brit.*); Costa Rica, San José, Escazu (*Biolley*), Savanillas de Pirris, Azahar de Cartago (*Underwood*), Tucurrique (*U.S. Nat. Mus.*).

A common insect in Costa Rica and labelled by Biolley as having been found on a *Croton* at Escazu. Some of its varieties are scarcely separable from *C. instabilis*, which is apparently restricted to the Atlantic slope of Guatemala, whence I have also seen specimens found by Messrs. Barber and Schwarz at Cacao, near Trece Aguas *.

BOTHYNODONTES (to follow the genus *Epitosus*, p. 151).

Bothinodontes, Kirsch, Berl. ent. Zeitschr. 1867, p. 24.
Bothynodontes, Scudder, Nomencl. Zool. ii. p. 42 (1882).

In the British Museum collection there are two broken pinned examples of an insect clearly belonging to this genus, the unique type of which, *B. squalidus*, Kirsch, from Colombia, has been kindly communicated by Dr. Heller. *Erepsimus*, Schönh., type *E. setiferus*, Boh., from Brazil, superficially resembles *Bothynodontes*, differing from the latter in having ocular lobes to the prothorax and the anterior femora simply clavate. Following Dr. Sharp's system of classification (*anteà*, pp. 101, 102), *Bothynodontes* would perhaps be best placed near *Epitosus* and *Eumestorus*; the free tarsal claws, &c., exclude it from the Sciaphilina. The Mexican habitat requires confirmation.

* Jekel's MS. name for this species, *Epicærus mopanus*, was incorrectly given as *E. mopsurus* on p. 144.

1. **Bothynodontes gibbipennis,** sp. n. (Tab. XV. figg. 17, 17 *a*.)

Obovate, ferruginous, shining; variegated with a dense clothing of pale brown and whitish scales, the elytra with a spot on the third interstice before the middle and an irregular oblique median fascia black, the latter followed by an oblique indeterminate whitish band; the upper surface also set with scattered, erect, stout, clubbed setæ, these becoming black and clustered into a small tuft on the tumid portion of the third elytral interstice. Rostrum feebly curved, parallel-sided as seen from above, longer than the head and separated from it by a transverse groove, the scrobes long, deep, and sinuously descending, the head finely canaliculate between the eyes, the latter separated by much less than the width of the rostrum; antennæ long, slender, joints 1 and 2 of the funiculus subequal in length, the club long and abruptly acuminate. Prothorax nearly as long as broad, obliquely narrowed in front and behind, truncate at the base; uneven, densely, finely punctate, and obsoletely canaliculate. Scutellum not visible. Elytra short, ovate, transversely gibbous; 9-striate, the striæ coarsely punctured, the interstices convex, the third tumid at about one-fourth from the base. Anterior femora very strongly clavate and also angulato-dilatate, the intermediate and posterior pairs stout. Anterior tibiæ curved, unguiculate. Third tarsal joint broadly bilobed, the claws free.

Length $3\frac{1}{2}$, breadth (of elytra) $1\frac{3}{4}$ millim.

Hab. MEXICO (*Mus. Brit.*).—COLOMBIA (*Mus. Brit.*).

Separable at once from *B. squalidus* by the more inflated, maculate elytra and the distinctly curved rostrum. The setigerous prominence on the third elytral interstice is also characteristic.

MINYOMERUS.

Minyomerus, Horn, Proc. Am. Phil. Soc. xv. p. 17 (1876); Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 359 (1909).

Pseudelissa, Casey, Ann. N. York Acad. Sci. iv. p. 273 (1888); Sharp, anteà, p. 151.

1. **Minyomerus caseyi.**

Pseudelissa caseyi, anteà, p. 151, t. 6. fig. 16.

ELISSA (to precede the genus *Pantomorus*, p. 152).

Elissa, Casey, Ann. N. York Acad. Sci. iv. p. 271 (1888); Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 359 (1909).

1. **Elissa laticeps.** (Tab. XV. figg. 18, 18 *a*.)

Elissa laticeps, Casey, loc. cit. p. 272 [1]; Pierce, loc. cit. p. 359 [2].

Hab. NORTH AMERICA, Texas [1 2], Arizona [2].—MEXICO, Monclova in Coahuila (*Schwarz, in U.S. Nat. Mus.*).

The two specimens before me from Coahuila are larger than a cotype of *E. laticeps* from Arizona sent to Dr. Sharp by Capt. Casey, and have the prothorax a little more constricted before the middle, one of them, too, has longer erect scales than the other. *E. constricta* seems to be a form of the same species, both occurring in Arizona. In this genus the vibrissæ are strongly developed, but the ocular lobes are wanting.

PANTOMORUS (p. 152).

Aramigus and *Phacepholis*, Horn, Proc. Am. Phil. Soc. xv. pp. 93, 95 (1875).

Amongst the thirty-two Central-American species placed by Dr. Sharp under *Pantomorus* (type *P. albosignatus*, Boh.) some, *P. longulus*, *P. distans*, &c., have the tips of the hind tibiæ furnished with, at most, a double row of fimbriæ (= *Aramigus*, Horn); others, nos. 25–30, &c., have the tips of the hind tibiæ dilated into an oval enclosed scaly space (= *Pantomorus*, Schönh., sensu stricto, and *Phacepholis*, Horn); others again are intermediate in this respect, and Horn's genus *Aramigus* would therefore be better sunk under *Pantomorus* *. *P. globicollis*, the type of *Athetetes*, Pascoe, has the tips of the hind tibiæ squamose as in *Phacepholis*, and the second ventral segment of the male armed with two or three small transversely placed tubercles †. The males of *Phacepholis elegans* and *P. candida*, Horn (if the insects sent me under these names by the U.S. National Museum are correctly named), have similar tubercles on the second ventral segment (*elegans*, 5, and *candida*, 2), though this character is not mentioned by the American author; Pierce, too, in his recent revision of the genus *Phacepholis* [Journ. Econ. Ent. iii. p. 363 (1910)] appears to have also overlooked them.

Pantomorus albosignatus (p. 153).

To the Mexican localities given, add:—Chihuahua city, Guadalupe, Distrito Federal (*Wickham*), Hidalgo (*Barrett, in U.S. Nat. Mus.*), Mescala (*H. H. Smith*), Oaxaca (*Mus. Brit.*), Cordova (*Höge*).

Mr. Wickham has recently sent us numerous fresh examples of this insect from Chihuahua, Durango, and Guadalupe. There is no record of it as yet from north of the Mexican frontier.

4 (A). **Pantomorus fulleri.** (Tab. XV. fig. 19.)

Aramigus fulleri, Horn, Proc. Am. Phil. Soc. xv. p. 94 [1]; Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 361 [2].

Pantomorus olindæ, Perkins, Fauna Hawaiiensis, Coleopt. i. p. 130 (1900) [3].

Hab. NORTH AMERICA, New Jersey [1], Montana [1], Georgia [3], California [2], &c.—MEXICO, Guanajuato (*Dugès, in Mus. Brit.; U.S. Nat. Mus.*).

Specimens of this destructive insect were sent by Dr. Dugès, of Guanajuato, to the British Museum in 1901, and its real home may be in Mexico, the species having perhaps been introduced into the United States, as well as into the Hawaiian Islands [3].

* Faust has referred a Venezuelan insect to *Phacepholis*, *P. albaria*.

† The other Central-American forms (of which the males are known) possessing this character are *P. brevipes*, *annectens*, *albicans*, and *viridicans*, Sharp, and a new species described below.

P. fulleri is closely allied to the Mexican *P. longulus*, Sharp (which is also an *Aramigus*, sensu Horn), but differs from it in having a few stout, pallid, squamiform, decumbent setæ on the elytra (instead of numerous long erect bristly hairs), these becoming conspicuous on the apical declivity. The Hawaiian insect has already been identified by Prof. Chittenden [Bull. U.S. Dept. Agric., Ent. no. 27, pp. 88–96 (1901)]. In the United States the species attacks roses, *Azalea*, &c., and it is often found in greenhouses. The habits of *P. fulleri* have been described by Chittenden, Schwarz, Koebele, and Pierce. The Mexican examples agree perfectly with others before me from Iowa, &c. I am unable to certainly identify the sexes, though both are apparently represented in the series before me.

Pantomorus crinitus (p. 157).

Pantomorus affinis, anteà, p. 157.

To the localities given, add:—MEXICO, Santa Lucrecia in Vera Cruz (*Knab, in U.S. Nat. Mus.*); GUATEMALA (*Mus. Brit.*), San Isidro (*Champion*); SALVADOR, San Salvador, Izalco (*Knab, in U.S. Nat. Mus.*).

The very long series of this insect now available for examination connects *P. affinis*, Sharp, with the variable *P. crinitus*, Boh., the feeble submarginal carinæ of the rostrum in *P. affinis* proving to be evanescent, and sometimes present on one side and wanting on the other. In one of the fusco-maculate males amongst the Tapachula series referred by Dr. Sharp to *P. crinitus* the middle tibiæ are distinctly unguiculate, showing that this character also (used by him for grouping the species) is inconstant. *P. nobilis*, Boh., cannot be certainly identified from the fresh material.

13 (A). **Pantomorus horridus**, sp. n. (Tab. XV. figg. 20, 20 *a*, ♀.)

Oblong (♂), subpyriform (♀), convex, black; densely clothed with pale bluish-grey scales, in the ♂ with intermixed green scales on the elytra, and also thickly set with long, erect, bristly, whitish hairs. Rostrum slightly hollowed down the middle anteriorly, canaliculate; eyes not very prominent; antennæ comparatively stout, joint 2 of the funiculus less than twice as long as 1. Prothorax strongly transverse, subtruncate at the base, moderately rounded at the sides; densely, finely punctate. Elytra convex, oval, very little wider than the prothorax in ♂, broader and more rounded at the sides in ♀, the seriate punctures (as seen through the vestiture) fine and scattered, the interstices flat. Anterior tibiæ denticulate; intermediate tibiæ unguiculate in ♂, and with a very short uncus in ♀; posterior tibiæ without definite enclosed space at the tip.

Length $4\frac{3}{4}$–$6\frac{1}{4}$, breadth 2–$2\frac{1}{2}$ millim. (♂ ♀.)

Hab. MEXICO (*Höge, ex coll. Solari*: ♂), Mazatlan (*Höge*: ♀).

Two specimens, assumed to be sexes, both having the eyes less prominent than usual, a peculiarity separating *P. horridus* from all the varieties of *P. crinitus*, the latter also having longer and more slender antennæ, and the middle tibiæ of the male not or feebly unguiculate. The characters used by Dr. Sharp would require to be modified to include *P. horridus* in his Group 1. The rather worn male, taken as the

type, has a more distinctly visible scutellum than the female, but too much importance need not be attached to this; the female is in very fresh condition.

Pantomorus faber (p. 159).

To the Costa Rican locality given, add:—San José (*Biolley*), Monte Retondo (*Underwood*).

This insect, to judge from a specimen incorrectly labelled "Guat." in the British Museum, appears to be the *P. subcinctus* of Jekel's collection, and not the one identified under that name by Dr. Sharp.

Pantomorus picturatus (p. 160).

To the localities given, add:—Salvador, San Salvador (*Knab, in U.S. Nat. Mus.*).

A single fresh example (♀), with the suture and a broad curved stripe down the outer part of the disc of each elytron, and a narrower stripe along each flank of the prothorax, densely clothed with pale greenish scales, which are almost covered by an ochreous powdery exudation.

Pantomorus stupidus (p. 161).

To the Mexican localities given, add:—Salina Cruz and Tehuantepec in Oaxaca (*Knab, in U.S. Nat. Mus.*), Chiapas (*Sallé*).

Some of these additional specimens are sharply lineate with a sulphur-yellow exudation. They were found with *Naupactus sulfuratus* at the same localities in Oaxaca, and it has been suggested (*anteà*, p. 232) that the latter prove to be a winged form of *P. stupidus*.

Pantomorus uniformis (p. 161).

To the Mexican locality given, add:—Rincon Antonio and Almoloya in Oaxaca (*Knab, in U.S. Nat. Mus.*).

A long series, some with the alternate elytral interstices blue or green and the others golden, this appearance being in part due to the arrangement of the yellow exudation. See remarks under *Naupactus virescens*, anteà, p. 233. Both *P. stupidus* and *P. uniformis* belong to *Phacepholis*, Horn.

Pantomorus rufipes (p. 161).

The types (2) of this insect are males and we have another specimen of the same sex from Jalapa. A worn female from Cordova, with the scales cupreo-cinereous (instead of green), seems to belong to the same species. All four examples have the intermediate and posterior tibiæ feebly denticulate towards the apex, the anterior pair with more distinct scattered teeth.

Pantomorus distans (p. 162).

To the localities given, add:—Costa Rica, Monte Retondo (*Underwood*: ♂ ♀), Piedras Negras (*U.S. Nat. Mus.*: ♂ ♀).

Described from two males. The Costa Rican examples (and the Bugaba specimen figured to a less extent) have the sutural region of the elytra more or less thickly clothed with green or golden-green scales. The second ventral segment of the male is without tubercles and the first depressed down the middle. The hind tibiæ are narrowly laminate and bifimbriate at the tip, instead of having an oval squamose space as in all the other species placed by Dr. Sharp in his Group 2 of the genus.

Pantomorus globicollis (p. 163). (Tab. XV. figg. 21, 21 *a*, *b*, ♂, var.)

To the localities given, add:—Mexico, Tehuantepec and Almoloya in Oaxaca (*Knab, in U.S. Nat. Mus.*: ♂ ♀); Costa Rica, Guanacaste (*Pittier*: ♂).

The numerous specimens seen from Tehuantepec (fig. 21) have the scales on the upper surface brown, and the flanks of the prothorax and the interrupted fasciæ or spots on the elytra cinereous. The three females from Almoloya are as large as *P. robustus*, and have the light scales on the prothorax and elytra metallic green. The hind tibiæ have an oval squamose space at the tip as in *Phacepholis*. The second ventral segment of the male has two (larger) or three (smaller) tubercles (fig. 21 *b*).

Pantomorus albicans (p. 164). (Tab. XV. fig. 22, ♂, abdomen.)

In one of the specimens found at Acapulco by Mr. Knab (in the U.S. National Museum) the prothorax and elytra are conspicuously brunneo-vittate, others from the same locality being uniformly cinereous. *P. albicans* is a *Phacepholis*, sensu Horn. The ventral teeth of the male (fig. 22) are very conspicuous.

29 (A). **Pantomorus viridis.** (Tab. XV. figg. 23, 23 *a*, ♀.)

Phacepholis viridis, Chittenden, in U.S. Nat. Mus.[1] *; Pierce, Proc. U.S. Nat. Mus. xxxvii. p. 361 (1909) [2].

Epicærus viridis, Dugès in litt.[3].

Hab. North America, San Antonio, Texas [2].—Mexico, Guanajuato [3] (*Dugès, in U.S. Nat. Mus.; Sallé*), "Sierra de Durango" (*Höge, in coll. Solari*).

We have received from the U.S. National Museum a male of *Phacepholis elegans*, Horn (with a transverse series of five small tubercles on the second ventral segment and the intermediate tibiæ strongly unguiculate), from San Diego, Texas, and a female "co-type" of *P. viridis*, Chittenden, labelled San Antonio, Texas. According to Pierce [2], these insects are synonymous; but in this I cannot agree with him, the female (*viridis*) having much more prominent eyes than the male (*elegans*) and the elytra very convex

* Prof. Chittenden informs us that he will shortly publish a description of this insect.

and acuminate-ovate in shape. I have seen three other females, from Mexico, agreeing exactly with the one from San Antonio; the male will doubtless prove to be nearly related to that of *P. elegans*. The last-mentioned insect is said to live on cotton (*Gossypium*).

29 (B). **Pantomorus trituberculatus,** sp. n.

Oblong, narrow (♂), broader (♀), black; thickly clothed with greyish-brown scales, the prothorax with indications of two faint vittæ on the disc and a stripe on each flank, and the elytra with the sides, base, and in one specimen several faint oblique or oblong streaks on the disc, indeterminately whitish or cinereous, the intermixed scattered setæ very short and inconspicuous. Rostrum flattened above, the narrow median sulcus extending upwards to the feeble, transverse, post-ocular depression of the head; eyes very prominent; antennæ long and slender, joint 2 of the funiculus elongate, much longer than 1. Prothorax convex, transverse, relatively narrower and longer in ♂, rounded at the sides, subtruncate at the base, densely, finely punctate and canaliculate. Elytra a little broader than the prothorax in ♂, wider in ♀, suboval, truncate at the base, the humeri distinct; punctate-striate. Tibiæ and tarsi comparatively slender; anterior tibiæ closely denticulate; posterior tibiæ feebly lamellate at the tip.

♂. Intermediate tibiæ strongly unguiculate; second ventral segment armed with three, transversely placed, small black tubercles.

Length $5\frac{1}{2}$–$8\frac{1}{2}$, breadth 2–3 millim. (♂ ♀.)

Hab. MEXICO, Tehuantepec in Oaxaca (*Knab, in U.S. Nat. Mus.*).

Three males and two females, all somewhat worn, one of each sex retained for the British Museum. A small narrow form (at least in male), with comparatively slender tibiæ and tarsi, the prothorax and elytra subtruncate at the base, the second ventral segment trituberculate in the male, &c.

Pantomorus femoratus (p. 165).

To the localities given, add:—NICARAGUA, San Marcos and Chinandega (*Baker*); COSTA RICA, Guanacaste (*Pittier*), Escazu (*Biolley*), Atenas, Piedras Negras, Las Loras near Puntarenas (*U.S. Nat. Mus.*).

The type (♂) of this species is immature. We have now received a long series of it from Costa Rica. They have the vestiture uniformly whitish or cinereous, often with a greenish, cupreous, or brownish tinge. The male has the second ventral segment unarmed and the first segment hollowed down the middle. The under surface is thickly clothed with long erect white hairs. The hind tibiæ have an oval squamose space at the tip.

Pantomorus robustus (p. 166).

Two abraded females from Momotombo, Nicaragua, sent us by Mr. Wickham, may belong to this species. It is not at all improbable that *P. robustus*, described from two females from Chontales*, is the sexual complement of *P. strabo*, described from a single male from the same locality, the great difference in size and in the colour of the scales notwithstanding, *P. globicollis* varying in a similar way. The eyes are feebly convex in both *P. strabo* and *P. robustus*, but less depressed than in *P. sulfureus*.

* There is also another female of it from Nicaragua in Signor A. Solari's collection.

33. **Pantomorus sulfureus,** sp. n. (Tab. XV. figg. 24, 24 *a*, ♂.)

Moderately elongate, convex, black, the tarsi sometimes obscure ferruginous; densely, uniformly clothed with pale green scales and when fresh covered with a yellow exudation, the elytra also set with rather long fine erect hairs, the ventral surface pilose. Rostrum flattened, canaliculate, the upper portion slightly narrowing forwards; eyes oval, depressed; antennæ moderately slender, joint 2 of the funiculus one-half longer than 1. Prothorax transversely convex, strongly so and as wide as the elytra in ♂, much broader than long, rounded at the sides, the base bisinuate (appearing obliquely truncate on each side); densely, finely punctate and obsoletely canaliculate. Elytra convex, oval, the base (as seen from above) conjointly hollowed in the middle and obliquely cut off on each side; finely punctate-striate, the interstices almost flat. Anterior tibiæ denticulate; intermediate tibiæ feebly unguiculate in ♂; posterior tibiæ with an oval squamose area at the tip.

Length $6\frac{1}{2}$–$11\frac{1}{2}$, breadth $2\frac{1}{3}$–$4\frac{1}{2}$ millim. (♂ ♀.)

Hab. Mexico, Salina Cruz in Oaxaca, Pacific slope (*Knab, in U.S. Nat. Mus.*).

Twelve specimens, mostly in beautifully fresh condition. Amongst the described Mexican species of the genus this insect can only be compared with *P.* (*Phacepholis*) *uniformis*, from which it is at once separated by the depressed eyes, and the more strongly sinuate base of both the prothorax and the elytra. *P. sulfureus* has the prothorax globose in the male, as in *P.* (*Athetetes*) *globicollis*; but the middle tibiæ are much more feebly unguiculate in this sex. The second ventral segment of the male is without tubercles.

PSEUDOPANTOMORUS, gen. nov. (to follow *Pantomorus*, p. 166).

Head very broad, short, together with the eyes as wide as the widest part of the prothorax; eyes very prominent, convex, strictly lateral; rostrum short, subquadrate, narrowing a little towards the apex, the scrobes narrow, deep, sinuous, descending to slightly below the eyes; prothorax transverse, truncate at the base; scutellum minute or invisible; elytra oval, truncate at the base, the humeri distinct; ventral segment 2 about as long as 3 and 4 united; legs short, stout; femora unarmed, the anterior pair subangulate; anterior and intermediate tibiæ unguiculate, the anterior pair obsoletely denticulate; posterior tibiæ with a narrow squamose area at the tip, the glabrous articular area extending upward; tarsal claws connate at the base; body oblong, robust, densely squamose and setose, apterous.

Type, *P. latifrons*.

The single species belonging to this genus may be briefly described as a small *Pantomorus* with a very broad head, short rostrum, prominent eyes, short, stout legs, and basally connate tarsal claws. It bears a superficial resemblance to *Caulostrophus* and various elongate species of *Strophosomus* (*S. ebenista*, &c.).

1. **Pseudopantomorus latifrons,** sp. n. (Tab. XV. figg. 25, 25 *a*, ♂.)

Convex, black; variegated above with a dense clothing of light and dark brown scales, the dark brown scales on the elytra condensed into a transverse or curved mark below the base, extending forward along the third interstice to the anterior margin, an angulate median fascia (not reaching the suture), and a small triangular patch on the disc towards the apex, the scales along the exposed basal margin of the head, at the base of the femora above, and on the under surface paler or whitish; the elytra also thickly set with long, stiff, erect setæ, and the rest of the surface with short setiform scales. Head and rostrum finely canaliculate, the rostrum hollowed towards the apex; joint 2 of the funiculus nearly twice as long as 1. Prothorax much broader than long, rounded at the sides, in the ♂ not narrower at the apex than at the base, densely, finely punctate. Elytra oval, convex, rather short, constricted immediately below the base,

the base itself not or very little wider than that of the prothorax; coarsely punctate-striate (when seen abraded), the interstices feebly convex.

Length $4\frac{1}{2}$–$5\frac{1}{2}$, breadth $2\frac{1}{10}$–$2\frac{1}{2}$ millim. (♂ ♀.)

Hab. PANAMA, Caldera in Chiriqui (*Champion*).

Five specimens.

SCIAPHILINA.

DEROSOMUS (p. 168).

4. **Derosomus glaucus,** sp. n. (Tab. XV. figg. 26, 26 *a*.)

♀. Elongate, narrow, shining, black, the antennæ (the club and apex of scape excepted) rufo-testaceous; thickly clothed (except on the small smooth spots along the elytral interstices) with pale bluish-grey scales, the elytral interstices also each set with about two rows of closely placed, stiff, erect, moderately long, dark setæ. Head as long as the rostrum, the eyes large; antennæ very slender, long, joint 1 of the funiculus much longer than 2, about equalling 3 and 4 united, the scape extending to considerably beyond the eyes. Prothorax transverse, somewhat rounded at the sides, densely finely punctate. Scutellum small, transverse, squamose. Elytra elongate, convex, ovate, at the base very little wider than the prothorax, strongly sinuate along their lower edge; punctate-striate, the interstices almost flat.

Length $5\frac{1}{2}$, breadth 2 millim.

Hab. MEXICO, Iguala in Guerrero (*Höge*).

One female. Near *D. setosus* and *D. scutellaris*, but with shorter and more abundant erect setosity on the elytra, the scales uniformly glaucous, the prothorax as finely punctured as in *D. scutellaris*.

CAUTODERUS (p. 169).

2. **Cautoderus nigrocinctus,** sp. n. (Tab. XV. fig. 27.)

Elongate, narrow, shining, black; thickly clothed with metallic golden-green scales, except on the following parts, which are bare or very sparsely clad with small blackish scales—a space behind each eye, a submarginal vitta on each side of the prothorax, and the suture and three transverse fasciæ on the elytra (the second and third connected along the fourth interstice, as well as along the suture); the upper surface also set with numerous erect setæ, those on the elytra long and closely placed down each interstice, the others short. Head a little longer than the rostrum; [antennal scape long, extending beyond the eyes, joints 1 and 2 of the funiculus subequal in length, 1 a little longer than 2, conical, the others short and subconical *]. Prothorax broader than long, bisinuate at the base, narrowed anteriorly, densely, finely punctate. Scutellum minute, acuminate. Elytra elongate, moderately convex, considerably wider than the prothorax, subparallel in their basal half, the humeri tumid and somewhat prominent; coarsely punctate-striate, the interstices feebly convex and each with a row of very small smooth spots indicating the position of the setæ. Anterior femora strongly, the others more feebly, clavate,

Length $5\frac{1}{2}$, breadth 2 millim. (♂?)

Hab. MEXICO (*ex coll. Jekel*).

One specimen, kindly presented to us by Signor A. Solari. Larger and more robust than *C. mexicanus*, Sharp, the femora especially stouter, the scales golden-green, the setæ much longer, the humeri more prominent, &c. The black markings may be partly, but not entirely, due to abrasion. The second ventral segment is comparatively short.

* Taken from Jekel's note on the specimen, the antennæ being broken off.

MITOSTYLUS (to follow the genus *Cautoderus*, p. 170).

Mitostylus, Horn, Proc. Am. Phil. Soc. xv. p. 107 (1876).

Two species of *Mitostylus* have been described by Horn—*M. tenuis* from Texas and *M. gracilis* from Lower California,—the genus, as anticipated (*anteà*, p. 208), extending into Mexico, the first-mentioned insect having been taken in Coahuila by Dr. Palmer. *Chætopantus*, Sharp, scarcely differs from *Mitostylus*, except by the more strongly setose body, a character of no value in *Derosomus*.

1. **Mitostylus tenuis.**

Mitostylus tenuis, Horn, Proc. Am. Phil. Soc. xv. p. 107 [1]; Mitchell and Pierce, Proc. Ent. Soc. Wash. xiii. p. 48 (1911) [2].

Hab. North America, Texas [1 2].—Mexico, Monclova in Coahuila (*Dr. Palmer*).

A single worn specimen, agreeing with one before me from Beeville. It has been found in large numbers on *Amphiachyris dracunculoides* in Victoria County, Texas [2].

PYTHIS, gen. nov. (to follow *Sciadrusus*, p. 172).

Rostrum very short and broad, not longer than the exposed part of the head, the upper portion obliquely narrowing from the eyes to the points of insertion of the antennæ, the scrobes lateral, narrow, abruptly angulate, and descending; head broad, the eyes prominent and rather large; antennæ very slender, the scape abruptly clavate at the tip and reaching the front of the prothorax, joint 1 of the funiculus twice as long as 2, 3–7 short and obconic, the club long and acuminate; mentum almost filling the buccal cavity, tumid down the middle; prothorax ample, transverse; scutellum minute; elytra oval, short, the humeri distinct, the lower margin feebly sinuate; ventral segments 2 and 5 subequal in length, 3 and 4 short, the first suture arcuate; legs slender; anterior tibiæ unguiculate; articular surface of posterior tibiæ terminal; tarsal claws subconnate at the base; body convex, apterous, squamose and setose.

Type, *P. amplicollis*.

This genus belongs to the Sciaphilina as defined by Dr. Sharp (*anteà*, p. 167). The relatively broader head and prothorax and the short oval elytra distinguish it from *Mitostylus*, *Chætopantus*, *Sciadrusus*, &c. The distinctly developed humeri and the broad head and prothorax separate *Pythis* from *Sciomias*.

1. **Pythis amplicollis,** sp. n. (Tab. XV. figg. 28, 28 *a*.)

Ovate, shining, piceous, the antennæ (the tip of the club excepted) and tarsi rufo-testaceous; variegated with pale brown, fuscous, and whitish scales, the whitish scales condensed into a stripe along each side of the head and prothorax, and a streak at the base of the fifth and seventh elytral interstices, the prothorax with three faint darker brown vittæ on the disc; the upper surface also set with numerous short, erect, fine, pallid setæ, those on the elytra uniseriately arranged down each interstice. Head (with the prominent eyes) nearly as wide as the prothorax, the rostrum flattened, obsoletely carinate down the middle anteriorly, both densely, rugulosely punctate. Prothorax constricted just before the middle, narrowed in front and behind, punctured like the head. Elytra considerably wider than the prothorax, convex, punctate-striate, the punctures very fine (as seen with the vestiture intact, but when the scales are removed appearing coarse and closely placed), the interstices convex.

Length 4, breadth $1\frac{2}{3}$–$1\frac{3}{4}$ millim. (♀.)

Hab. Mexico (*Truqui*), Sierra de Durango (*Höge, in coll. Solari*).

Two specimens, precisely similar, one certainly a female, the example found by Höge in very fresh condition.

ISODACRYS (p. 175).

3 (A). **Isodacrys schwarzi,** sp. n. (Tab. XV. figg. 29, 29 *a*.)

Oblong, black; variegated with a dense clothing of rather large, white, pale brown, and blackish scales, the white scales condensed into two vittæ on the disc of the prothorax, and an oblique irregular or interrupted subapical fascia and various spots or streaks on the elytra (the prothoracic vittæ extending for a short distance down the base of the latter); the scales on the under surface and legs whitish; the surface also set with extremely minute, curled, scattered, setiform hairs. Eyes very small. Prothorax elongate, constricted towards the apex. Elytra oval, short, much wider than the prothorax, abruptly narrowed posteriorly, the sutural region tumid and obtusely projecting near the tip, the seriate punctures almost hidden by the dense vestiture. Anterior tibiæ sharply unguiculate, the denticles along the inner edge wanting.

Length $2\frac{4}{5}$-$2\frac{7}{8}$, breadth $1\frac{1}{5}$ millim.

Hab. MEXICO, Monterey in Nuevo Leon (*Schwarz, in U.S. Nat. Mus.*).

Two specimens, one of which has been presented to us by the U.S. National Museum. They are labelled as having been captured by Mr. E. A. Schwarz on Jan. 1st. This species differs from all those described by Dr. Sharp in its non-denticulate anterior tibiæ and very small eyes. It approaches *I. mexicanus*, but has much broader elytra and the sutural region more produced towards the apex.

PERITELINA.

EUPERITELUS, gen. nov.

Rostrum short, stout, alate, separated from the head by a transverse groove, the scrobes superior, short, curving inwards behind; eyes superior, rounded, convex, rather small, the head dilated on each side beneath them; antennæ with a very stout, long, cylindrical, curved scape, extending to beyond the anterior margin of the prothorax, joints 1 and 2 of the funiculus subequal in length, 3–7 transverse; mentum rounded, rather small; prothorax short, truncate and feebly margined at the base; scutellum wanting; elytra broad-ovate; metasternum short, the episterna exposed; ventral segment 2 much shorter than 3 and 4 united, the suture between 1 and 2 sinuous; legs stout; femora unarmed; tibiæ feebly unguiculate, the posterior pair denticulate along their inner edge towards the apex, the glabrous articular surface terminal, the corbels open; tarsi broad, the claws connate; body apterous, obovate, squamose.

Type, *E. albovarius*.

Amongst the N.-American forms this remarkable Peritelid can only be compared with *Thricolepis* and *Peritelopsis*, following Horn's system of arrangement. The superior, convergent scrobes, the prominent, superiorly placed eyes, the transversely grooved base of the rostrum, and the denticulate posterior tibiæ are its chief characters. *Euperitelus* has wholly the facies of an *Otiorhynchus*.

1. **Euperitelus albovarius,** sp. n. (Tab. XV. figg. 30, 30 *a*.)

Broad, black; variegate with a dense clothing of brown and white scales, the white scales clustered into an irregular, incomplete sinuous submarginal stripe on each side of the prothorax and into numerous small scattered subconfluent patches on the depressed portions of the elytra, the granules bare; the antennæ (the fuscous club excepted), legs, and under surface setulose and densely squamose. Head and rostrum densely, finely punctate, the head longitudinally grooved between the eyes, the rostrum slightly

hollowed down the middle. Prothorax transverse, rounded at the sides, nearly as wide at the apex as at the base; feebly granulate and densely finely punctate. Elytra at the middle nearly twice as wide as the prothorax, convex, rounded at the sides; with ten rows of scattered rather coarse punctures placed upon almost obsolete striæ, the punctures separated one from another by a smooth transverse or rounded tubercle.

Length $10\frac{1}{5}$, breadth $4\frac{1}{2}$ millim. (♀?)

Hab. MEXICO, Sierra de Durango (*Höge, ex coll. Solari*).

One specimen, from the last collection made by Höge, and given to us for description by Signor A. Solari.

TRACHYPHLŒINA.

TRACHYPHLŒOMIMUS, gen. nov.

Rostrum short, stout, the scrobes lateral, deep, descending direct to the lower anterior margin of the eyes; eyes coarsely facetted, not prominent, moderately large; antennæ with a gradually widened scape, reaching the front of the prothorax, the funiculus rather slender, joints 1 and 2 equal in length, 3–7 short and moniliform, the club stout and ovate; mentum small; prothorax transversely oval; scutellum very minute or not visible; elytra short, oval; metasternum short, the episterna very narrowly exposed; ventral segment 2 as long as 3 and 4 united, the first suture feebly arcuate; femora clavate, unarmed; tibiæ sinuate within, strongly unguiculate, and each armed with a row of closely placed stiff bristles at the apex (fig. 31 *b*); tarsal claws long, divergent; body densely squamose and setose, and also coated with an earthy incrustation, apterous.

Type, *T. spurcus*.

This genus also includes *Trachyphlœus solitarius*, Sharp, both species differing from *Trachyphlœus* in having the tibiæ closely ciliate with short stiff bristles at the apex (in *Trachyphlœus* they are armed with from three to five tooth-like spines along the apical margin *), the funiculus more slender, and the prothorax more developed. *Hypsometopus*, type *H. inquinatus*, Kirsch (the type of which I have seen), from Colombia, comes near these Mexican insects; but it has the scrobes descending at some distance before the eyes, the antennal club longer, the legs more elongate, &c. The N.-American *Phyxelis*, Schönh., has superiorly placed scrobes, &c.

1. **Trachyphlœomimus spurcus**, sp. n. (Tab. XV. figg. 31, 31 *a*, *b*.)

Oblong-ovate, black, the antennæ (the scape excepted) and tarsi ferruginous; densely clothed with brown scales, which are partly hidden beneath an earthy incrustation, the entire surface (antennæ and legs included) also set with rigid, scattered, stout setæ, those on the elytra long, clubbed, and uniseriately arranged down each interstice. Rostrum subquadrate, feebly transversely depressed at the base, obsoletely canaliculate, the head also feebly depressed behind the eyes. Prothorax transverse, strongly rounded at the sides, a little wider at the base than at the apex; uneven, closely punctured and subgranulate, obsoletely canaliculate. Elytra somewhat flattened on the disc, coarsely punctate-striate, the alternate interstices costate.

Length (excl. rostr.) 4, breadth 2 millim.

Hab. MEXICO (*Truqui*).

Two examples. Larger than *T. solitarius*, the rostrum shorter and broader, the

* A character given by Horn for the single N.-American species, *T. asperatus*, Boh., and doubtless indicative of their fossorial habits.

eyes larger, the prothorax more uneven and shallowly sulcate, the alternate elytral interstices costate, the setæ much longer.

2. **Trachyphlœomimus solitarius** (p. 177).

Trachyphlæus solitarius, Sharp, anteà, p. 177.

THAMIRAS, gen. nov.

Rostrum widened outwards, short, longer than the exposed portion of the head, the scrobes lateral, descending to the lower anterior margin of the eyes; eyes rather large, rounded, coarsely facetted, deeply inserted, extending for some distance inwards above; antennæ with a gradually widened scape, reaching the tubulate anterior portion of the prothorax, joint 2 of the funiculus shorter than 1, 3–7 short and moniliform, the club stout and ovate; mandibular scar rather large; mentum small, incompletely covering the maxillæ; prothorax constricted towards the apex, the short anterior portion tubulate; scutellum minute, narrow; elytra broad, subtriangular, hollowed at the base, the humeri arcuate and prominent in front; metasternum short, the episterna very narrowly exposed; ventral segment 2 about as long as 3 and 4 united, the sutures straight; legs short; femora clavate, unarmed; tibiæ strongly unguiculate, closely ciliate at the apex; tarsi with the lobes of the third joint narrow, the claws free; body densely squamose, strongly setose throughout, apterous.

Type, *T. undulatus*.

This genus is based upon a single species from the Los Altos region of Guatemala. It is related to *Trachyphlœomimus*. The somewhat flattened, subcordate, nodulose elytra and the subtubulate anterior portion of the prothorax give the insect a peculiar facies.

1. **Thamiras undulatus,** sp. n. (Tab. XV. figg. 32, 32 *a*.)

Broad, somewhat flattened above, black, the funiculus and tarsi obscure ferruginous; densely clothed with dark brown scales (those on the elytral prominences slightly paler), which are partly hidden by an earthy incrustation, the entire surface (the antennæ included) also set with rather long, scattered, blunt, semierect, curved, stout setæ. Rostrum slightly depressed at the base (appearing feebly curved when seen in profile). Prothorax broader than long, gradually, arcuately dilated from the base to the narrower tubulate apical portion; uneven, densely, finely punctate. Elytra much wider than the prothorax, somewhat cordate, broadly flattened on the disc anteriorly; punctate-striate, the interstices towards the sides and apex convex, and here and there nodose or undulate, the eighth with an oblong prominence below the shoulder. Fifth ventral segment slightly hollowed down the middle towards the apex. Anterior tibiæ abruptly bowed inwards towards the apex.

Length (excl. rostr.) $4\frac{2}{3}$, breadth $2\frac{1}{4}$ millim. (♂?)

Hab. Guatemala, Totonicapam between 8500 and 10,500 feet (*Champion*).

One specimen, found in August 1880.

OTIORHYNCHINÆ ALATÆ.

TANYMECINA.

PANDELETEIUS (p. 185).

Since the remarks on the species of this genus were published (*anteà*, p. 186), Mr. Schaeffer has kindly given us specimens of his *P. cavirostris* and *ovipennis*, from Brownsville, Texas, and *P. robustus* from the Huachuca Mts., Arizona, and also *P. rotundicollis*, Fall, from Cloudcroft, New Mexico. *P. cavirostris* (as already stated)

=*Polydacrys depressifrons*, Boh.; *P. robustus* * is related to *P. hirtipes*; *P. ovipennis* has the elytra very little wider than the prothorax at the base, and comes near *P. inflatus*, though very much smaller than that insect; *P. rotundicollis* has a 6-jointed funiculus, but otherwise generally resembles *P. vitticollis*. According to Mitchell and Pierce [Proc. Ent. Soc. Wash. xiii. p. 49 (1911)], *P. cavirostris* is found on *Ehretia elliptica* (Boragineæ) and *Cratægus* (Rosaceæ).

ENTIMINA.

HYPOPTUS (p. 302).

2. **Hypoptus jekeli**, sp. n.

Oblong-ovate, shining, black, the legs and antennæ piceous or rufo-piceous; the elytra with several scattered spots (the two on the fourth interstice—one at the base and the other towards the apex—and the one at the end of the eighth oblong or elongate) and a marginal stripe, which extends forwards along the flanks of the prothorax, densely clothed with pale metallic-green scales, the head around the eyes, the base and apex of the femora, and the under surface in great part, clothed with similarly coloured scales, the rest of the elytral surface with inconspicuous small dark brown scales. Head with a deep inter-ocular fovea; rostrum moderately stout, about as long as the prothorax, curved at the tip, closely punctate and laterally sulcate, without trace of a median carina. Prothorax broader than long, convex, arcuately dilated at the sides anteriorly, obliquely narrowing in front and behind, feebly constricted near the apex; densely, finely, uniformly punctate. Scutellum small. Elytra much wider than the prothorax, convex, acuminate at the apex, with a common, deep, transverse excavation at the base, the humeri not prominent; coarsely punctate-striate, the interstices feebly convex. Femora strongly clavate. Tibiæ set with long bristly hairs.

Length (excl. rostr.) $8\frac{1}{2}$, breadth $3\frac{1}{2}$ millim. (♂.)

Hab. Mexico (*coll. Sommer, in Mus. Oxon.*).

One specimen, doing duty for *Hypoptus macularis*, Jekel, in the Sommer collection, but very different from the Mexican insect identified under that name by Lacordaire. The more slender rostrum, the convex, posteriorly narrowed, finely punctured prothorax, and the deep transverse excavation at the base of the elytra readily separate *H. jekeli* from the insect here figured under the name *H. macularis*. The metallic spots, too, are differently placed and very sharply defined, the rest of the vestiture being inconspicuous.

PSEUDHYPOPTUS (p. 304).

Pseudhypoptus parcus (p. 304).

Since my remarks on the abraded types of this Mexican species were published, a good specimen of it (a large female) has been detected in the Sommer collection, placed under the name *Epicærus fallax*, Boh. This example is somewhat thickly clothed with brownish-cinereous scales, which are condensed into a faint spot on each elytron near the middle and an indeterminate oblique fascia on the outer part of the disc towards the apex; it has the rostrum sharply carinate.

* The insect sent me by the U.S. Nat. Museum under this name (det. Pierce) (mentioned under *P. vitticollis* on p. 202, *anteà*) was wrongly identified. It has a 6-jointed funiculus and comes near *P. rotundicollis*.

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[Names in small capitals refer to Families, &c.; those in roman type to the chief reference to each species included in the work; those in italics to species incidentally mentioned, synonyms, &c.]

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Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

1,1a ATTELABUS VIRIDANUS
2♂ " SPLENDENS
3♂ " KLUGI
4♀ " AXILLARIS
5,5a♂ " LÆSICOLLIS
6♂ " CALLOSUS
7♀ " CONICOLLIS
8 " ATER, *v.* SALLÆI

W. Purkiss lith.

9♂ ATTELABUS AURATUS
10 " BREVICEPS
11 " BINOTATUS
12 " FENESTRATUS
13♂ " CURRALIS
14♀ " INÆQUALIS
15 RHYNCHITES MEXICANUS
16 " ZUNILENSIS
17,17a♂ " ABNORMALIS

18 RHYNCHITES PUSILLUS
19 " CENTRALIS
20 " ADDENDUS
21 RHYNCHITOBIUS LONGICOLLIS
22 HEMILYPUS LATIPES
23 " (?) OBLITERATUS, *var.*
24 ESSODIUS UNICOLOR
25 EUGNAMPTUS VALIDUS

Hanhart imp.

516

Coleoptera. Pl. IV. Fig. 1

Gust. Bentr. fec.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
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Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

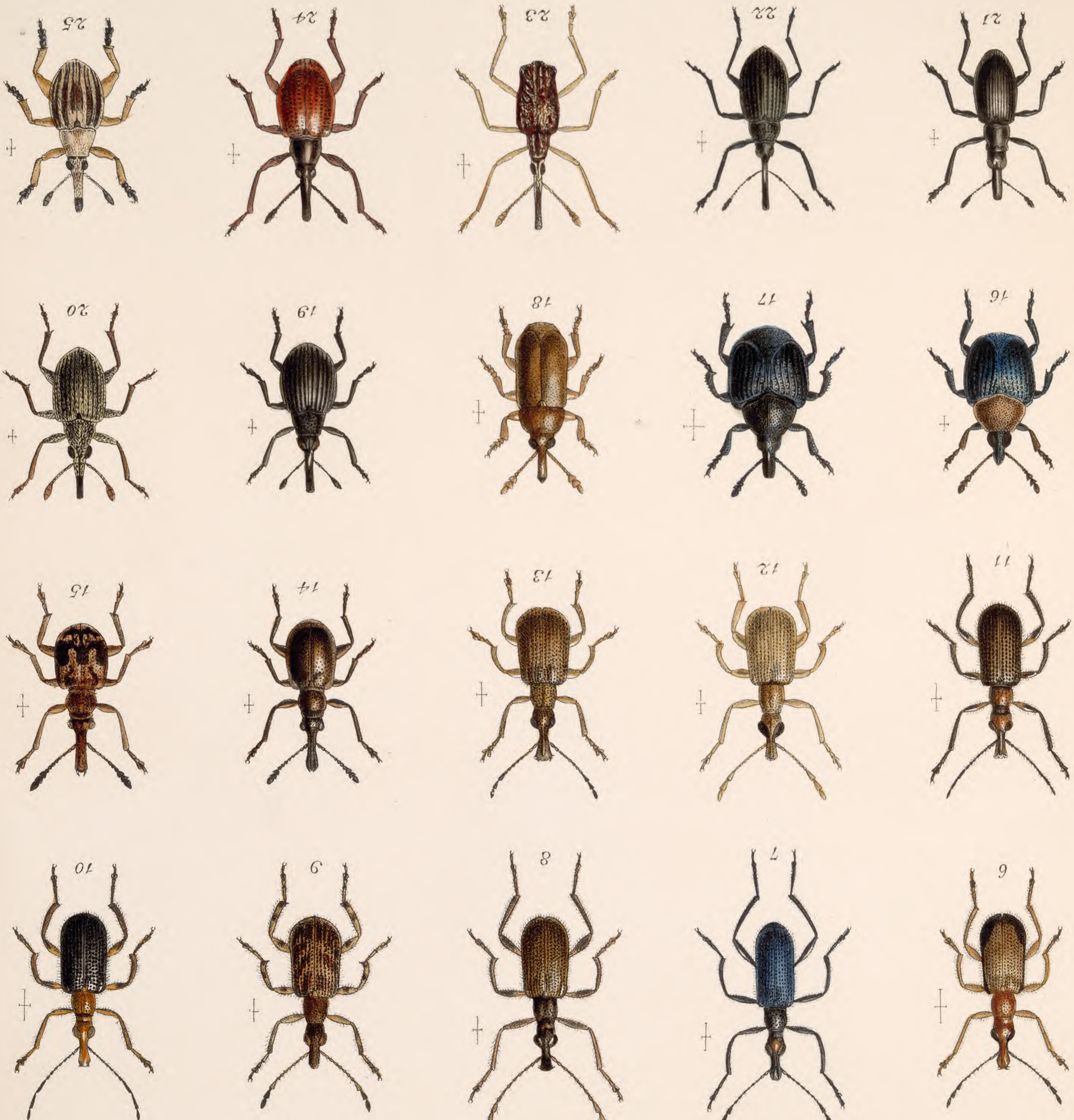
1 EUGNAMPTUS DIVISUS.
2♂ " DIABROTICUS.
3 " MACULATUS.
4 " GODMANI.
5♂,6♀ " CINCTUS.
7 " RUFIFRONS.
8 " OBSCURUS.
9 " VARIUS.

W. Purkiss lith.

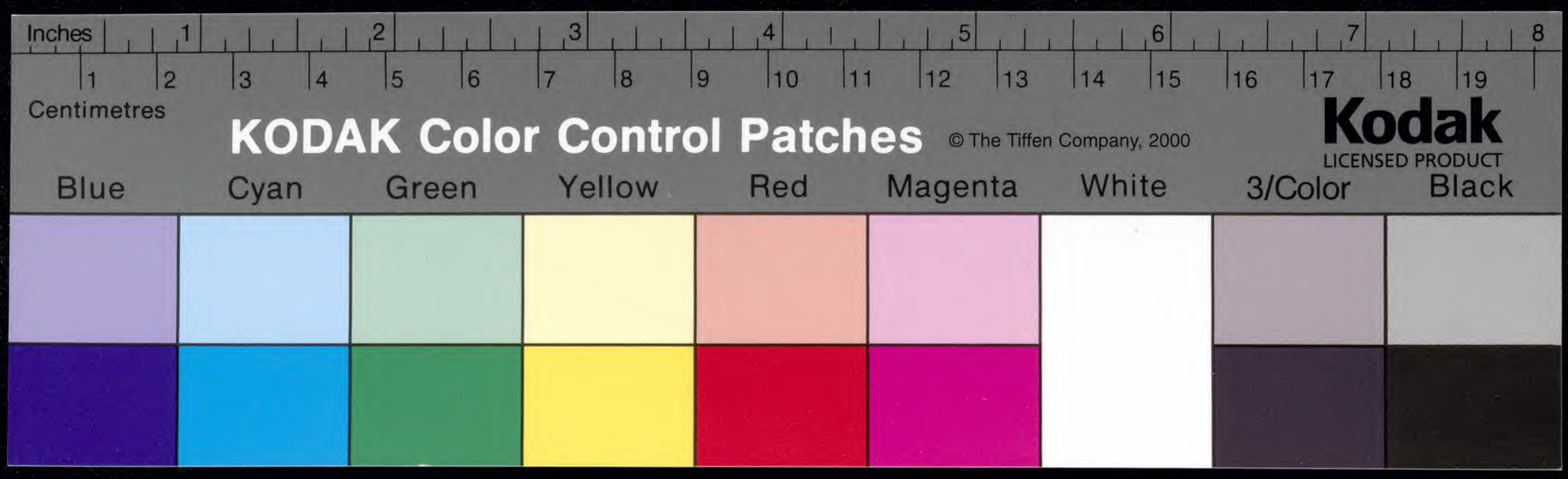
10 EUGNAMPTUS NIGRIPENNIS
11 " BREVICOLLIS.
12 " SALVINI.
13 " LATIFRONS.
14 AULETOBIUS ROSTRALIS.
15 " OPIATUS.
16 PTEROCOLUS AURICOLLIS.
17♂ APTEROCOLUS GRAVIDUS.

18♂ ALLOCORYNUS MOLLIS.
19 APION SANCTI-FELICIS.
20♂ " CALCARATUM.
21 " CONSTRICTICOLLE.
22 " GRACILIROSTRE.
23 " GRALLARIUM.
24 " RUFINULUM.
25 " CRETACEICOLLE.

Hanhart imp.



Biol. Centr. Am. *Coleoptera. Vol. IV. Pt. 3. Tab. 2.*



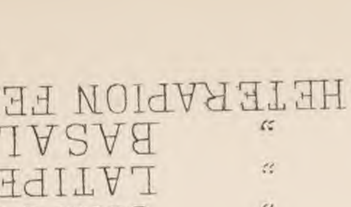
1 EUGNAMPTUS CORNUTUS .
2 APION ERYTHROPTERUM .
3♀ „ AGROTUM .
4 „ CHAMPIONI .
5 „ COLON .
6,6a „ LAMINATUM .
7 „ HETEROGENEUM .
8 „ SERIATUM
9 „ LONGIMANUM .

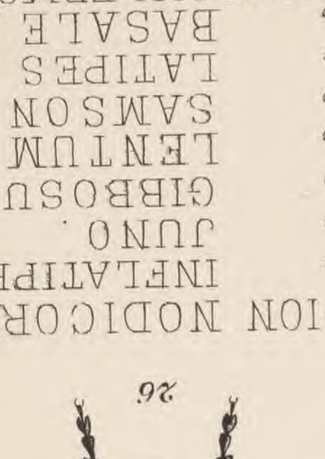
W. Purkiss lith.

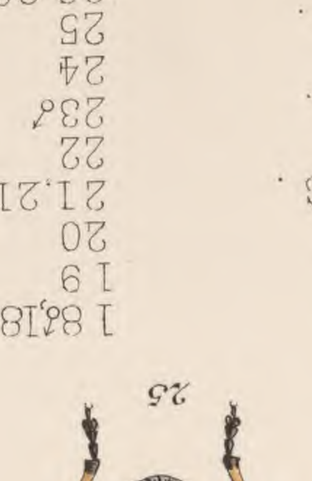
10 APION PARADOXUM .
11 „ PICTURATUM .
12 „ BASIROSTRE .
13 „ SCYDMÆNOIDES .
14♂ „ POETICUM .
15 „ PLEURITICUM .
16 „ PALLITARSE .
17♂,17a♀ „ SUBAURATUM .

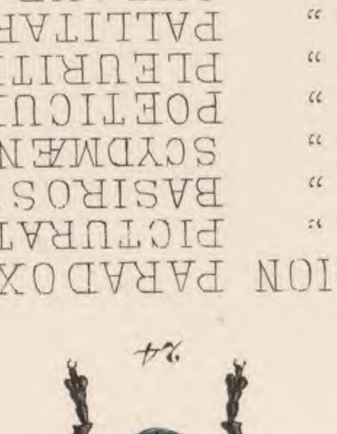
18♂,18a♀ APION NODICORNE .
19 „ INFLATIPENNE .
20 „ JUNO .
21,21a „ GIBBOSUM .
22 „ LENTUM .
23♂ „ SAMSON .
24 „ LATIPES .
25 „ BASALE .
26,26a HETERAPION FEMORATUM .

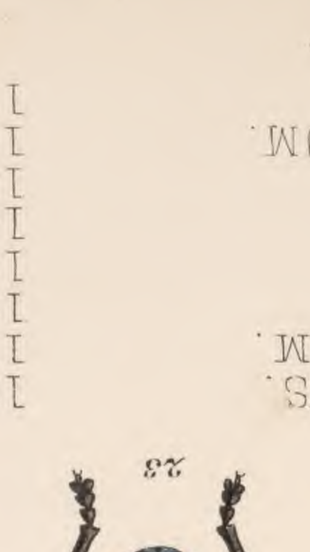
Hanhart imp.
558.

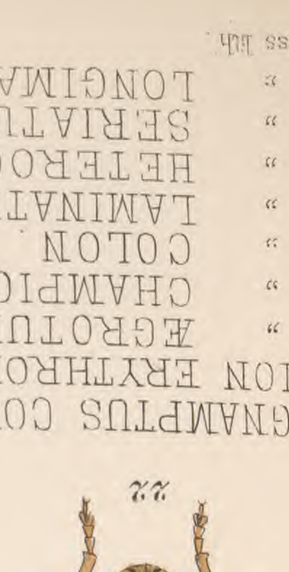


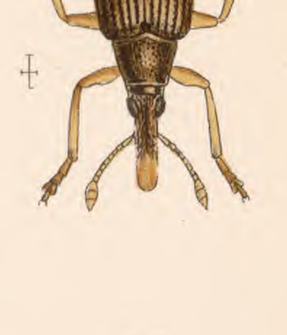






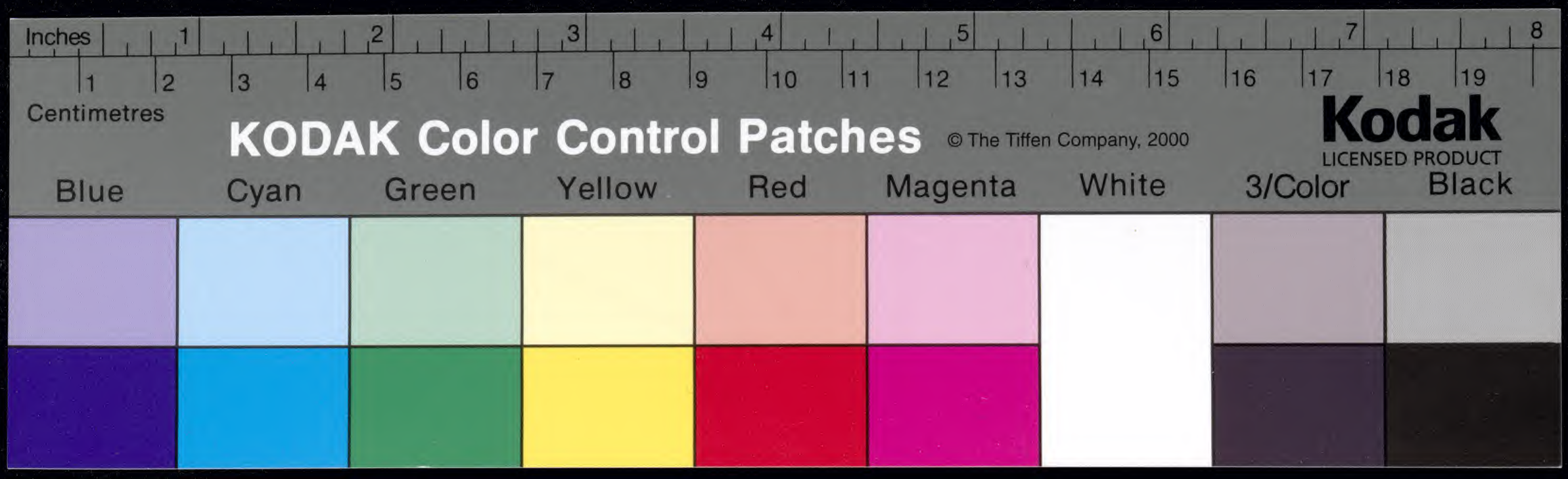






Gal. d. Centr.-Thm.

Coleoptera. Pl. IV Fig. 2 Tab. 3.



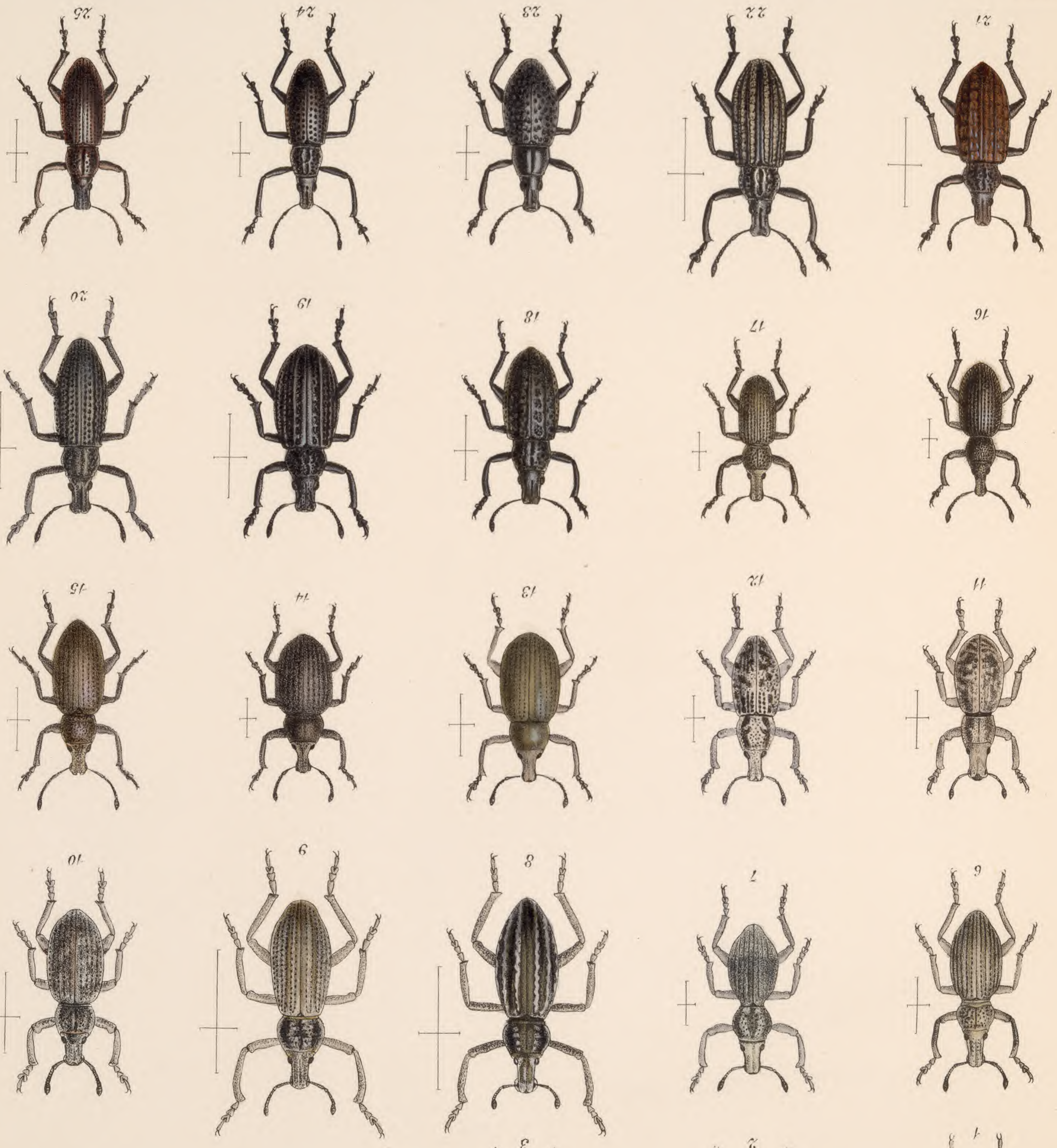
1 OPHRYASTES BITUBEROSUS .
2 " LATIPENNIS .
3 " OVIPENNIS .
4 TOSASTES HUMERALIS .
5 " GLOBIPENNIS .
6 CACCOPHRYASTES LINEATUS .
7 EUPAGODERES CONSTRICTUS .
8 " SPECIOSUS .

9 EUPAGODERES PROLATUS .
10 " MEXICANUS .
11 " SALLÆI .
12 " GRACILIS .
13 AMPHIDEES MAJOR .
14 " CURTUS .
15 " MACER .
16 " PILOSUS .
17 " LONGULUS .

18 EPICÆRUS VILIS .
19 " CALVUS .
20 " ÆQUALIS .
21 " COXALIS .
22 " COSTATUS .
23 " PYRIFORMIS .
24 " GODMANI .
25 " SCUTELLARIS .

W. Purkiss lith.

Hanhart imp.
567.



Biol. Centr. Am.

Coleoptera. Pl. IV Pl. 3 Tab. 4

1 DEAMPHUS BREVIPENNIS.
2 " LATIFRONS.
3,3a ♂ EPICÆRUS CULTRIPENNIS.
4,4a ♀ " "
5 " INFLATUS.
6 " FRONTERÆ.
7 " CHAMPIONI.
8 " OSCILLATOR.

9 EPICÆRUS MINOR.
10 " MONCLOVÆ
11 " DURANGOENSIS.
12 " PLANIROSTRIS.
13 " LATERALIS.
14 ♂ " OCULATUS.
15 " INSOLITUS.
16 " SEXCOSTATUS.
17 ♀ " BIFORMIS.

18 EPAGRIUS OPERCULATUS.
19 " CURVIPES.
20 " PARADÆ.
21 " HISPIDUS.
22 ♂ " CONSTANS.
23 " JUGICOLA.
24 " FOVEICOLLIS.
25 " SMITHI.

W. Purkiss lith.

Hanhart imp.
578.

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Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black
Centimeters Inches

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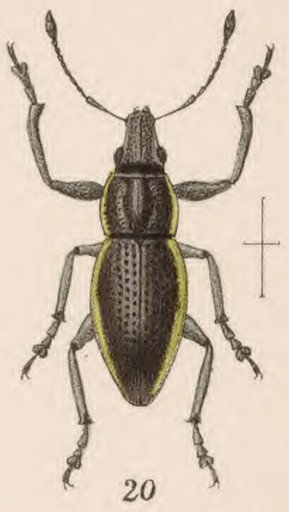
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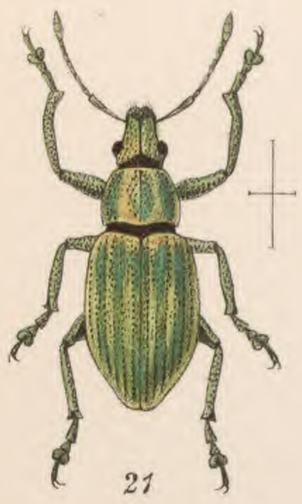
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22

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24

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1 EPAGRIUS PRÆTERITUS.
2♀ " SAMSON.
3♀ " PUMILUS.
4 " GRANDIS.
5 " INÆQUALIS.
6 CACOCHROMUS CARTERI.
7 BRADYRHYNCHUS BREVIROSTRIS.
8 SCIORHINUS PICTUS.

W. Purkiss lith.

9 CLEISTOLOPHUS INSTABILIS.
10 BUFOMICRUS SQUAMOSUS.
11 " CRISTATUS.
12♀ MASEORHYNCHUS HONDURENSIS.
13 MESTORUS CRINITUS.
14 EUMESTORUS LUCTUOSUS.
15 EPITOSUS BOOPS.
16 PSEUDELISSA CASEYI.
17 PANTOMORUS SALVINI.

18 PANTOMORUS SOBRINUS.
19♂ " PICTURATUS.
20 " CIRCUMCINCTUS.
21 " UNIFORMIS.
22 " RUDIS.
23 " DISTANS.
24♀ " BREVIPES.
25 " ALBICANS.

Hanhart imp.
583.

Inches 1 2 3 4 5 6 7 8
Centimeters 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
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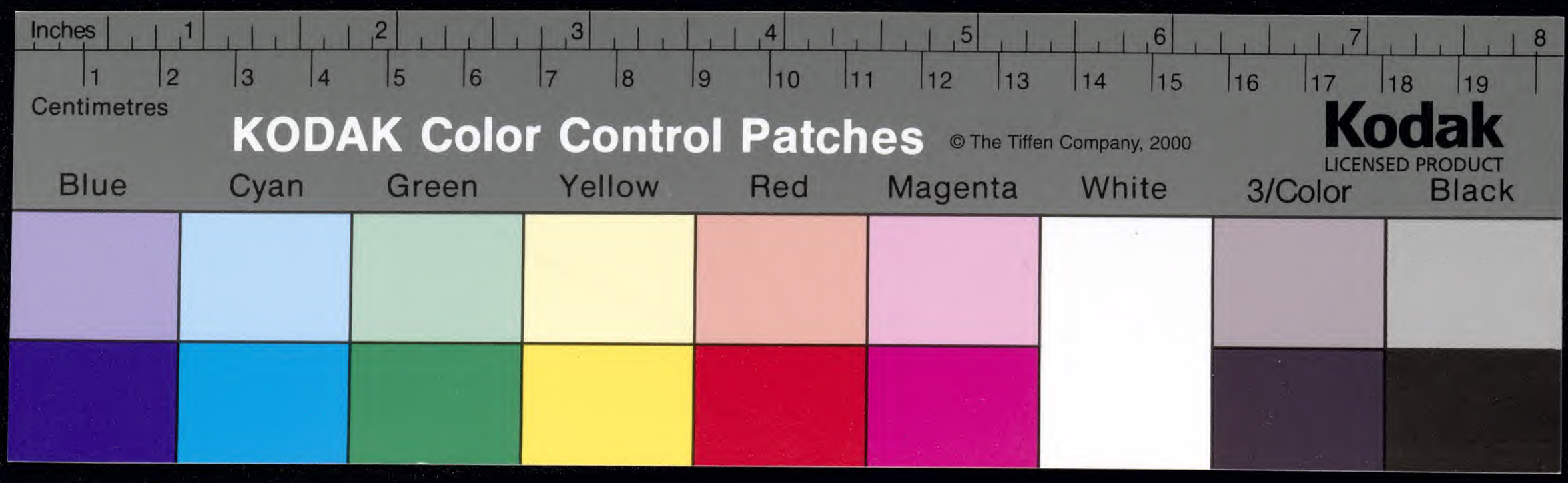

1♂ PANTOMORUS STRABO.
2♂ " FEMORATUS.
3♀ " ROBUSTUS.
4 PYNONOPHILUS PIOEUS.
5,5a♂ DEROSOMUS FRAGILIS.
6♂ CAUTODERUS MEXICANUS.
7 CHÆTOPANTUS ILLUSTRIS.
8 AMELADUS INORNATUS.
9♀ SCIADRUSUS PROPHETICUS.
10 SCIOMIAS ELEGANS.
11 " SUBTILIS.
12 SCIOMIAS LATIPENNIS.
13♂ PARASOMUS JANSONI.
14 ISODACRYS GUATEMALENUS.
15 " ORIZABÆ.
16 " MEXICANUS.
17 " MINUTUS.
18 THRICOLEPIS INORNATA.
19 TRACHYPHLŒUS SOLITARIUS.
20,20a♂ TANYMECUS CONFERTUS.
21,21a♂ " HIRSUTUS.
22,22a♂ EXOPHTHALMODES ALBOFASCIATUS.
23,23♀ " "
24,24a PACHNÆUS LITUS.
25♂,26♀ HADROMERUS SCINTILLANS.
27♀ " DEJEANI.
28,28a♀ " MICANS.
29♂ " OPALINUS.
30♀ " ,*var*.
31♀ " CRETATUS.
32♂ " FULGENS.
33♀ " ,*var*.
34,34a♀ " RUFIPES.
35♂ PANDELETEIUS ERUBESCENS.

E. Wilson, Cambridge.

Biol. Centr.-Am.

Coleoptera. Vol. IV. Pt. 3. Tab. 7.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
KODAK Color Control Patches © The Tiffen Company, 2000
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LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

1,1a,b♂ PANDELETEIUS BOOPS.
2,2a,b♀ " HIEROGLYPHICUS.
3 " EPHIPPIATUS.
4,4a " CLAVISETIS.
5,5a " FLEXILIS.
6,6a♂ " CRISPUS.
7,7a♀ " CUNEATUS.
8,8a,b " OBLIQUUS.
9♂ " VARICOLOR.
10,10a " HISPIDUS.
11 " BREVIPES.

12,12a PANDELETEIUS CONSPERSUS.
13,13a♂ " TIBIALIS.
14,14a♂ " HIRTIPES.
15,15a " INFLATUS.
16,16a♂ " LATICEPS.
17,17a,b♀ " ARMATUS.
18,18a " ORNATIFRONS.
19 " VIRIDIVENTRIS.
20,20a " BREVINASUS.
21,21a,b♀ " MACULICOLLIS.

22,22a PANDELETEIUS FASCIATUS.
23♀ " UNDATUS.
24 " VITTICOLLIS.
25,25a♀ " SUBLINEATUS.
26,26a " SINUATIPES.
27,27a♀ " CILIATIPENNIS.
28,28a♂ " ALBISOUAMIS.
29,29a,b♀ " NODIFER.
30,30a " LONGICOLLIS.
31,31a PANDELETEINUS SUBMETALLICUS.
32,32a,b ISODRUSUS DEBILIS.

E. Wilson, Cambridge.

Plate Centu. 4m.

Coleoptera. Vol. IV. Pl. 3. Tab. 8.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
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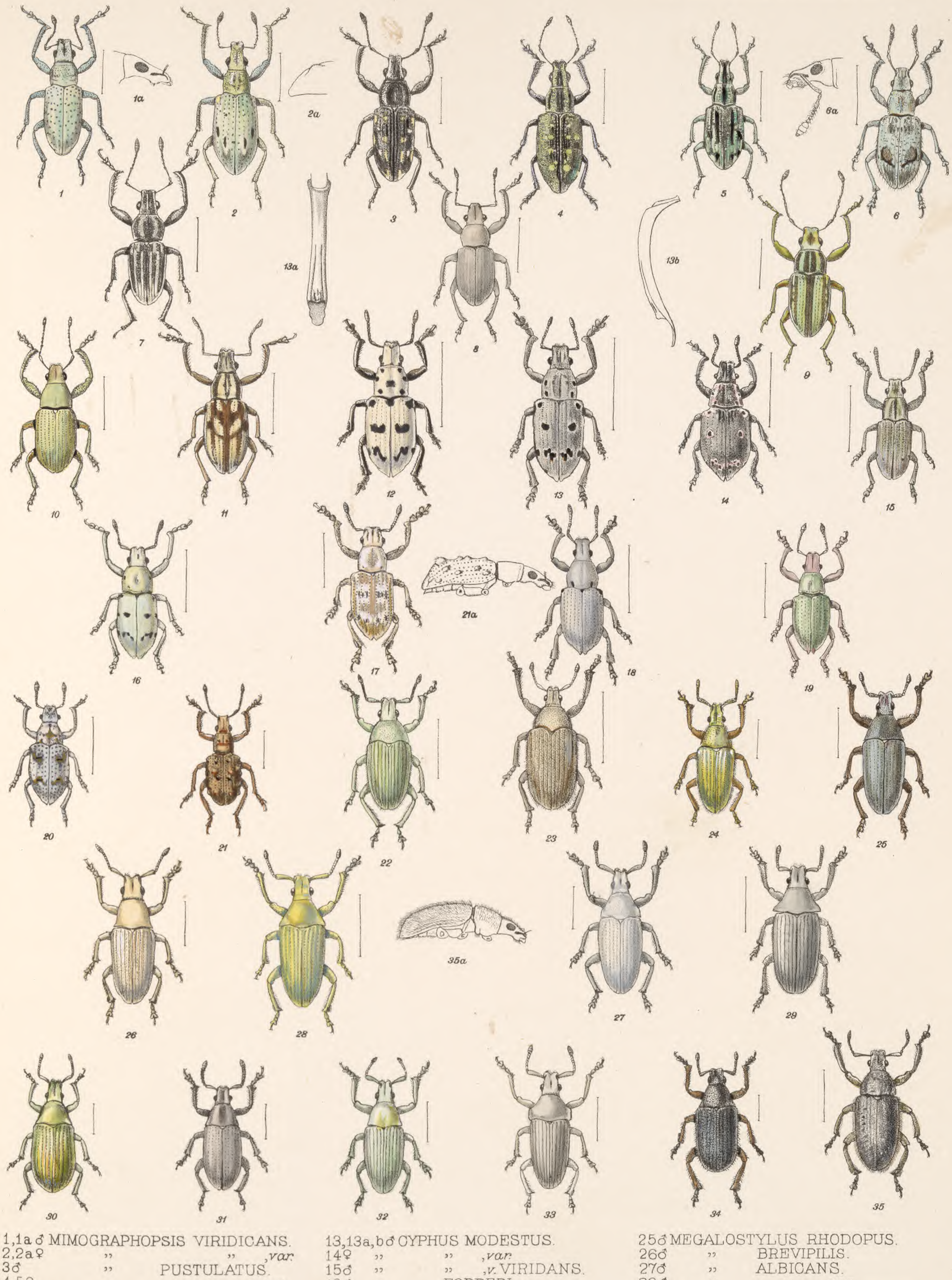
Blue Cyan Green Yellow Red Magenta White 3/Color Black

1,1a POLYDROSUS FUSCOFASCIATUS. 12,12a POLYDROSUS PALLIDISETIS. 23,23a,b STEIRARRHINUS CONICOLLIS.
2,2a " FLAVONOTATUS. 13,13a POLYDROSODES CONICUS 24♀ " " INFUCATUS.
3,3a♂ " LONGICORNIS. 14,14a♀ ANYPOTACTUS BICAUDATUS. 25♀ " " NEBULOSUS
4♂ " MUTABILIS. 15♂ " " 26♂ " " ,var.
5♀ " " ,var. 16 " EXILIS 27,28♀,29♂ " " ,vars.
6♀ " PARTITUS. 17,17a♀ POLYDACRYS DEPRESSIFRONS 30♀ " " SERRIPES.
7,7a♀ " IMMACULATUS. 18♀ " SERIEGRANOSUS. 31♂ " " TENUICORNIS.
8,8a♂ " MACROCEPHALUS 19,19a♀ " MUCRONATUS. 32♂ " " CUPREOTINCTUS.
9,9a♀ " AMPLIPENNIS. 20 " NIGROFASCIATUS. 33♀ " " BICINCTUS.
10,10a♀ " CHLOROGASTER. 21,21a♀ PREPODELLUS VIRIDISQUAMIS. 34♀ " " CINEREOGUTTATUS.
11,11a♂ " ACUMINATUS. 22♂ " " 35♀ " " CINCTIPENNIS.

E.Wilson, Cambridge

Plate Curculionidae.

Coleoptera. Pl. IV. Fig. 1. Plate 9.



1,1a ♂ MIMOGRAPHOPSIS VIRIDICANS.
2,2a ♀ " " ,*var.*
3 ♂ " PUSTULATUS.
4,5 ♀ " " ,*vars.*
6,6a ♀ MIMOGRAPHUS MEXICANUS.
7 ♂ NAUPACTUS SULFURATUS.
8 ♀ " " ,*var.*
9 ♂ " VIRESCENS.
10 ♀ " " ,*var.*
11 ♀ " LATICEPS.
12 ♀ CYPHUS MODESTUS ,*v.* 20-PUNCTATUS.

13,13a,b ♂ CYPHUS MODESTUS.
14 ♀ " " ,*var.*
15 ♂ " " ,*v.* VIRIDANS.
16 ♂ " FORRERI.
17 ♂ " LAUTUS.
18 ♂ " 4-PUNCTATUS.
19 ♂ " ROSEIVENTRIS.
20 ♀ " YUCATANUS.
21,21a TETRAGONOMUS TUBEROSUS.
22 ♂ MEGALOSTYLUS STURMI.
23 ♀ " " ,*v.* VILLOSUS.
24 ♂ " TOMENTOSUS.

25 ♂ MEGALOSTYLUS RHODOPUS.
26 ♂ " BREVIPILIS.
27 ♂ " ALBICANS.
28 ♂ " " ,*var.*
29 ♀ " " ,*v.* EXPANSUS.
30 ♀ " SPLENDIDUS.
31 ♂ " " ,*var.*
32 ♂ " FUSIFORMIS.
33 ♂ " DILATICOLLIS.
34 ♀ " MACROPHTHALMUS.
35,35a ♂ MEGALOSTYLODES HIRSUTUS.

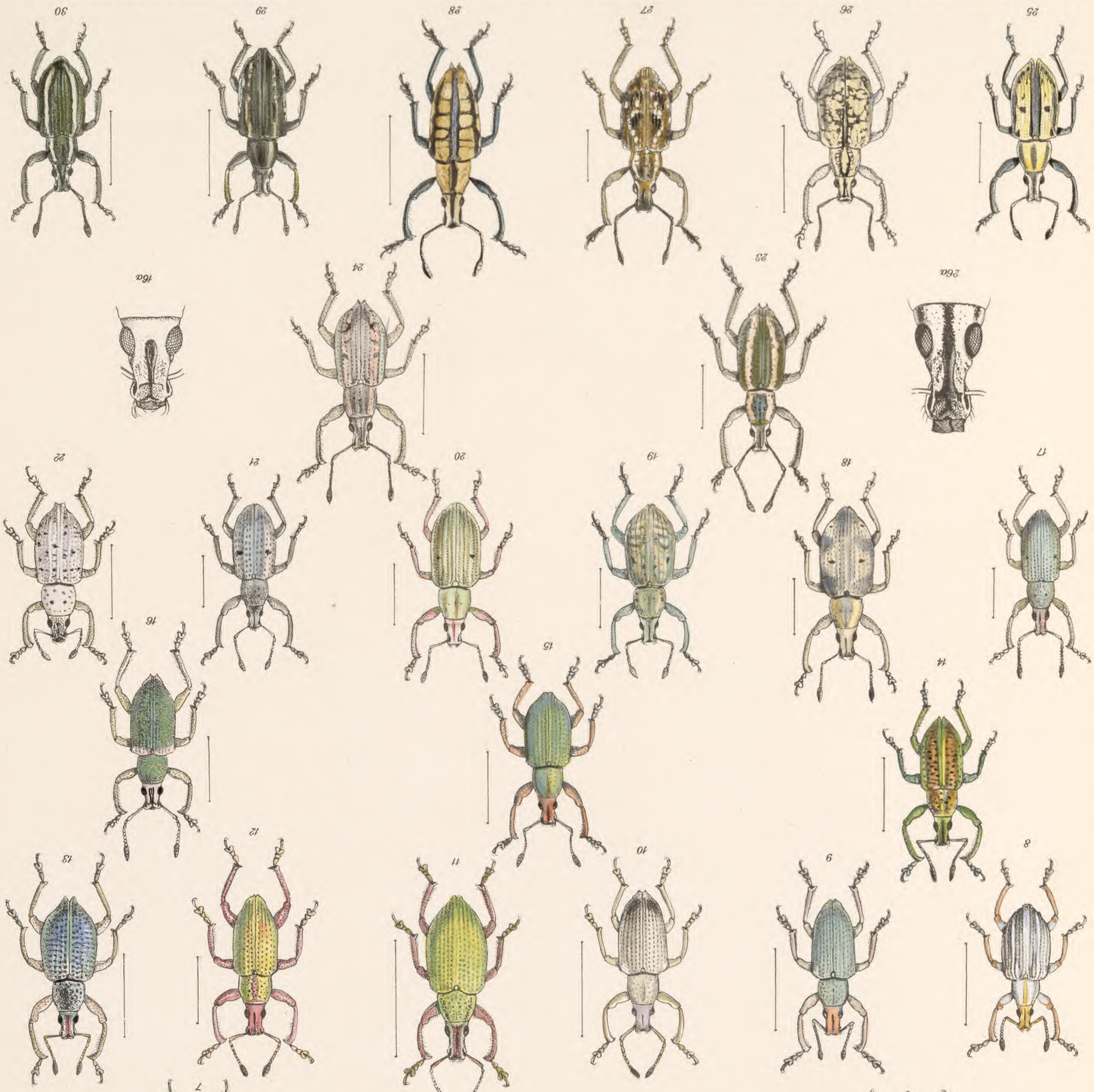
E. Wilson, Cambridge.

Inches 1 2 3 4 5 6 7 8
Centimeters 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

1,1a♂ RHINOSPATHE ALBOMARGINATA. 11♀ EXOPHTHALMUS OPULENTUS. 21♂ EXOPHTHALMUS DISTIGMA.
2,2a♀ " V-ALBUM 12♂ " VITTICOLLIS. 22♀ " SCALPTUS.
3,3a♀ EXOPHTHALMUS NICARAGUENSIS. 13♀ " ,, CERULESCENS. 23♂ " NUBILUS.
4♂ " FASCIATUS. 14♂ " ,, MUTATUS. 24♀ " "
5♀ " ORNATUS. 15♀ " CUPREIPES. 25♂ " SCALARIS.
6,6a " INTERPOSITUS. 16,16a♂ " CARNEIPES. 26,26a♀ " IMPOSITUS.
7♂ " VERECUNDUS. 17♂ " AGRESTIS, *var?* 27♂ " TRIANGULIFER.
8,8a♀ " CARINIROSTRIS 18♀ " ,, FARINOLENTUS. 28♂ " TESSELLATUS.
9♂ " MARGARITACEUS. 19♀ " " ,, *var?* 29♀ " ALBOLINEATUS.
10,10a♂ " ALBIDUS. 20♀ " " ,, *var?* 30♀ " ALBOVITTATUS.

E.Wilson,Cambridge.



Coleoptera Vol IV Pl 3 Tab 11

Stark Centr. chm.

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

13 ♀ EXOPHTHALMUS DUPLICATUS.
2 ♀ " CLATHRATUS.
3 ♂ " VERMICULATUS.
4 ♀ " CÆRULEOVITTATUS.
5 ♀ " BILINEATUS.
6 ♀ " SULCIPENNIS.
7 ♂ " LUNARIS.
8, 8a ♀ " "
9 ♀ " VIRIDILINEATUS.
10 ♀ " JEKELIANUS.

11 ♀ EXOPHTHALMUS PLICATUS.
12 ♂ " SULCICRUS.
13 ♀ " " , *var.*
14 ♂ " " , *var.*
15 ♀ " " , *var.*
16 ♂ " BORALIS.
17, 17a ♂ CHAULIOPLEURUS ADIPATUS.
18, 18a ♀ " RUFOVITTATUS.
19, 19a ♀ " 4-FOVEATUS.
20, 20a, b ♂ EUSTALES CURVIMANUS.

21 ♀ DECASTICHA SUBOCELLATA.
22 ♀ " QUADRIPLAGIATA.
23 ♀ " TETRASTIGMA.
24 ♂ " 10-GUTTATA.
25, 25a, b ♀ CLÆOTEGES VIROSUS.
26, 26a ♂ " GRANULOSUS.
27, 27a ♀ " TUBERCULOSUS.
28, 28a ♂ " OBLITERATUS.
29 ♂ NAUPACTOPSIS DELUMBIS.
30 ♀ " "

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Biol. Centr. Amer.

Coleoptera. Vol. IV. Pt. 3. Tab. 12.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
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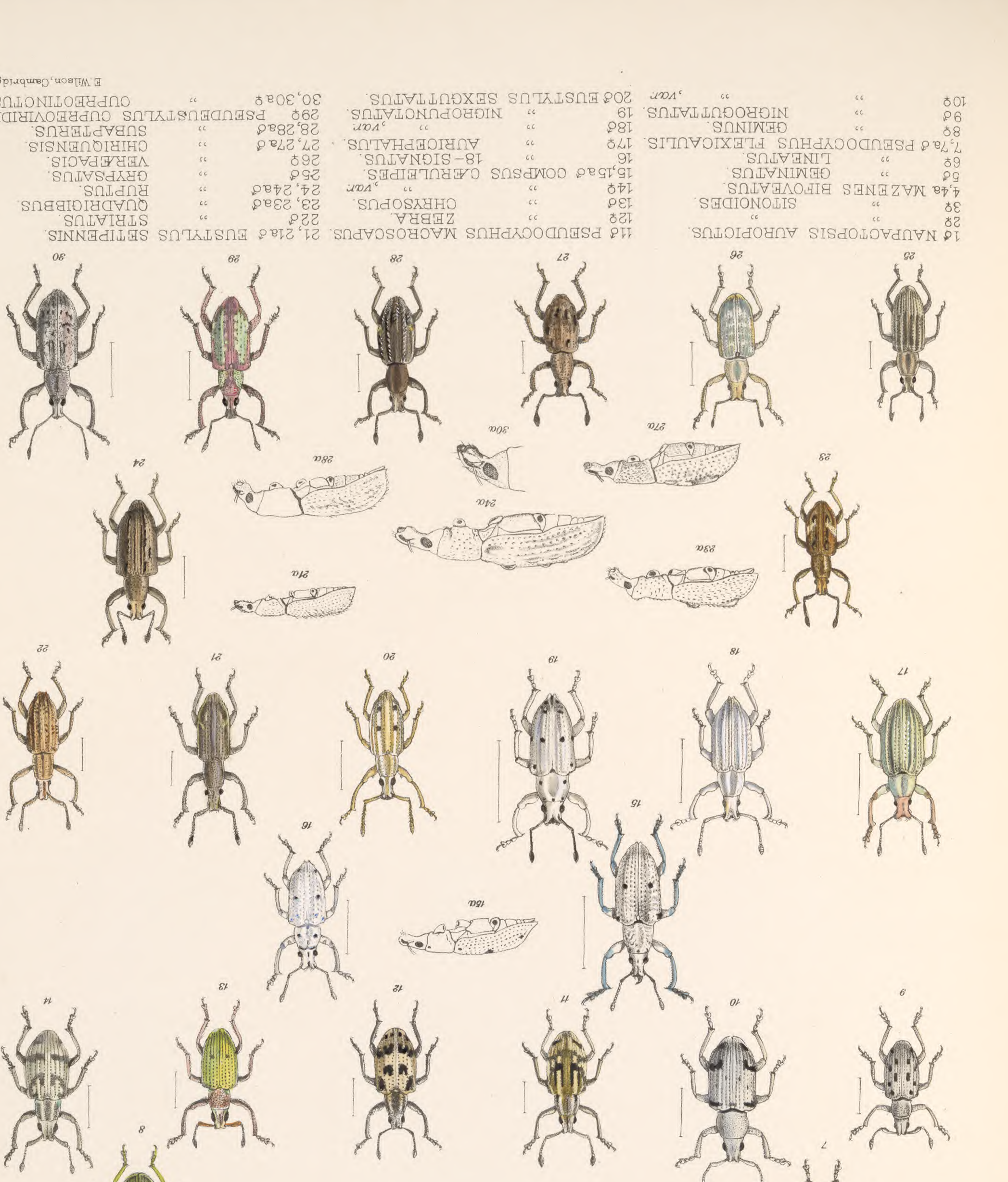
1♂ NAUPACTOPSIS AUROPICTUS.
2♀ " "
3♀ " SITONOIDES.
4,4a MAZENES BIFOVEATUS.
5♂ " GEMINATUS.
6♀ " LINEATUS.
7,7a♂ PSEUDOCYPHUS FLEXICAULIS.
8♀ " GEMINUS.
9♂ " NIGROGUTTATUS.
10♀ " " ,var.
11♂ PSEUDOCYPHUS MACROSCAPUS.
12♀ " ZEBRA.
13♂ " CHRYSOPUS.
14♀ " " ,var.
15,15a♂ COMPSUS CERULEIPES.
16 " 18-SIGNATUS.
17♀ " AURICEPHALUS.
18♂ " " ,var.
19 " NIGROPUNCTATUS.
20♂ EUSTYLUS SEXGUTTATUS.
21,21a♂ EUSTYLUS SETIPENNIS.
22♂ " STRIATUS.
23,23a♂ " QUADRIGIBBUS.
24,24a♂ " RUFTUS.
25♂ " GRYPSATUS.
26♀ " VERRUCIPACIS.
27,27a♂ " CHIRIQUENSIS.
28,28a♂ " SUBAPTERUS.
29♀ PSEUDEUSTYLUS CUPREOVIRIDIS.
30,30a♀ " CUPREOTINCTUS.

E. Wilson, Cambridge.



Biol. Centr. Am. *Coleoptera. Vol. IV. Pt. 3. Tab. 13.*

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

1,1a♀ BRACHYSTYLUS TAMAULIPANUS.
2,2a♂ " MICROPHTHALMUS.
3,3a♂ APHRASTUS ANGULARIS.
4,4a♂ " SUBMARGINATUS.
5,5a,b ENTIMUS ARROGANS.
6,6a CYDIANIRUS ARGENTEUS.
7,7a♀ HYPOPTUS MACULARIS.
8♂ " " ,*var.*
9,9a♂ PSEUDHYPOPTUS PARCUS.
10,10a♂ " EURYLOBUS.

11,11a♂ COLEOCERUS SETOSUS.
12,12a " VIRESCENS.
13,13a " DENTICOLLIS.
14,14a♂ " VARIEGATUS.
15♀ " " ,*var.*
16 " MARMORATUS.
17 " ROTUNDICOLLIS.
18,18a♀ EUCOLEOCERUS CONICICOLLIS.
19,19a♂ " GUTTULARIUS.
20 EUDIAGOGUS PULCHER.

21,21a ♂ PROMECOPS VIATOR.
22,22a,b♂ " UNIDENTATA.
23♂ " LEUCOTHYREA.
24♀ " " ,*var.*
25,25a♂ " DENTIMANUS.
26,26a♂ " TRIDENTATA.
27,27a♀ " CLAVISETIS.
28♂ " ALTERNANS.
29 " BREVISETIS
30♂ " UNIFORMIS.

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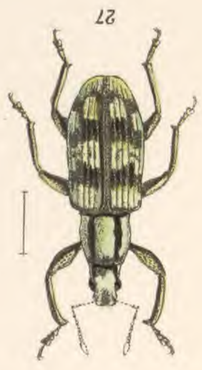
Biol. Centr. Am. *Coleoptera. Vol. IV. Pt. 3. Tab. 14.*

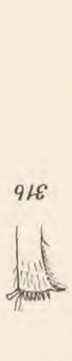
Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

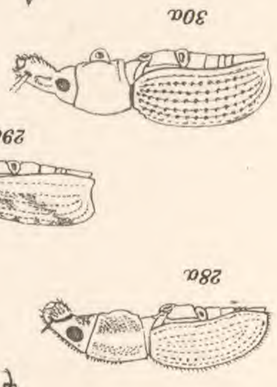
1,1a OPHRYASTES TETRALOBUS.
2,2a♂ " COLLARIS.
3,3a♀ " "
4,4a♀ TOSASTES COARCTATUS.
5,5a EUPAGODERES ROTUNDATUS.
6,6a♂ " TURBINATUS.
7,7a AMPHIDEES ACUMINATUS.
8,8a♂ EPICAERUS MACROPUS.
9,♂ " MACROPTERUS.
10,10a♂ " MONCLOVÆ.
11,11a♀ " ELEGANTULUS.

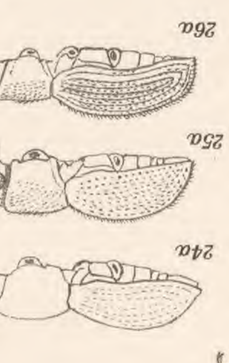
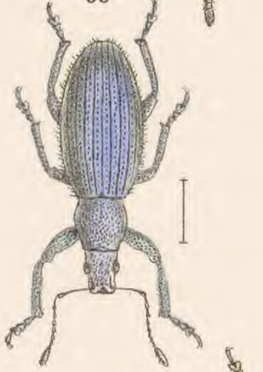
12♂ EPICAERUS FOVEIFRONS.
13 EPAGRIUS NUBILOSUS.
14 " RUGICOLLIS.
15,15a " RETRORSUS.
16,16a CLEISTOLOPHUS VIRIDIMARGO.
17,17a BOTHYNODONTES GIBBIPENNIS.
18,18a ELISSA LATICEPS.
19 PANTOMORUS FULLERI.
20,20a♀ " HORRIDUS.
21,21a,b♂ " GLOBICOLLIS, *var.*

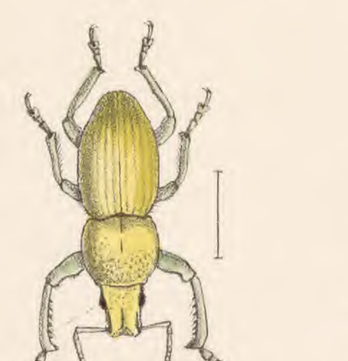
22♂ PANTOMORUS ALBICANS.
23,23a♀ " VIRIDIS.
24,24a♂ " SULFUREUS.
25,25a♂ PSEUDOPANTOMORUS LATIFRONS.
26,26a DEROSOMUS GLAUCUS.
27 CAUTODERUS NIGROCINCTUS.
28,28a PYTHIS AMPLICOLLIS.
29,29a ISODRACRYS SCHWARZI.
30,30a EUPERITELUS ALBOVARIUS.
31,31a,b TRACHYPHLŒOMIMUS SPURCUS.
32,32a THAMIRAS UNDULATUS.

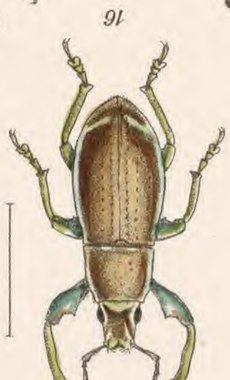


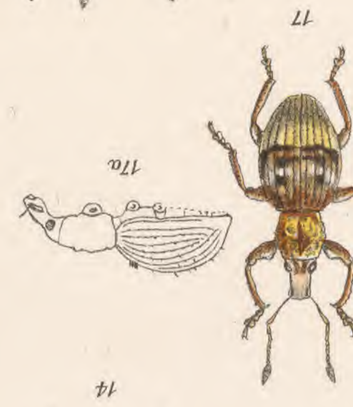
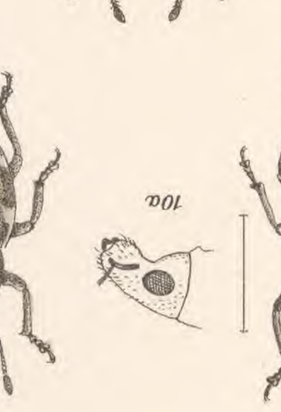


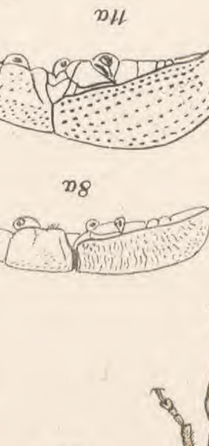








Biol. Centr. elim. *Coleoptera. Vol. IV. Pt. 3. Tab. 15.*

50 1603 (15)