BIOLOGIA
CENTRALI-AMERICANA.

INSECTA.


RHYNCHOPHORA.

CURCULIONIDÆ.

CURCULIONINÆ (concluded) AND CALANDRINÆ.

BY

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INTRODUCTION.

This Volume contains the enumeration of the rest of the species of the subfamily Curculioninae (under which the Cossonids are here placed) and the whole of the subfamily Calandrinae. The Appendix to the Curculioninae was required to include such species as had been overlooked or wrongly placed in the general sorting of the collections, or that had come to hand too late to be inserted in their proper places, one holarctic group, the Gymnetrina, being thus added to the Mexican fauna.

The preceding Volume of this series, Coleoptera, IV. part 6, is devoted to the families Brentidae, Scolytidae, and Anthribidae, and the general sequence of the arrangement of the Rynchophora has thus been interrupted: species included in the present Volume, “Coleoptera, IV. part 7,” should of course follow those enumerated in “Coleoptera, IV. part 5.”

The subfamily Calandrinae is represented within our limits by a large number of species, some of them (Cactophagus, Phyllerythrurus, Eucactophagus, Metanasius, Rhodobanus, &c.) being very conspicuous brilliantly-coloured insects. Sphenophorus, sensu stricto, includes many destructive North-American species, but it is poorly represented south of Mexico. It is probable that some of the Eastern genera of this subfamily named by Chevrolat and others will prove to be inseparable from Metanasius; but no attempt has been here made to identify them. Calandra granaria, C. oryzae, &c. are carried about everywhere by commerce, and other species are often introduced in imported plants. The larger exotic forms attack palms, Cactaceae, Amaryllideae, Liliaceae, Musaceae, maize, &c.

BIOLOGIA CENTRALI-AMERICANA.

ZOOLOGIA.

Class INSECTA.

Order COLEOPTERA.

Tribe RHYNCHOPHORA.

Fam. CURCULIONIDÆ.

Subfam. CURCULIONINÆ (continued) * †.

Group ACAMPTINA.

Cryptorhynchini, Group II. Acampti, Leconte.

To this group Leconte and Horn referred a single N.-American genus, Acamptus, at the same time calling attention to its relationship with the Byrsopides and Cossonidæ. The new genera now added from within our limits, particularly Charorrhynchus, show such a decided affinity with various members of the last-mentioned group that they seem to me to be best placed near the Cossonina and Trypetina. The "Acamptina" have the rostrum stout and deflexed, its basal portion received in a deep groove in the prosternum and its apex resting on the narrowly separated anterior coxae; the prothorax projecting over the head anteriorly; the third tarsal joint simple; the funiculus 5-, 6-, or 7-jointed; and the body more or less setose and lutose. The four genera may be separated thus ‡:

Funiculus 5-jointed; antennal club with the basal joint shining and very sparsely pilose; tarsi rather stout . . . . . . . . . . . . Acamptopsis.
Funiculus 6-jointed; antennal club with the basal joint shining and very sparsely pilose; tarsi rather stout . . . . . . . . . . . . Pseudacamptus.

* By G. C. Champion.
† In a preceding volume of this subject a recorded Central-American Hyloïd was omitted, viz. Ischionatus marginatus Faust (Stett. ent. Zeit. 1893, p. 10), from Costa Rica and Colombia. This insect, the ♀ type of which I have seen, is certainly congeneric with Lizomorpha albomarginata, Champ. (B. C. A., Coleopt. iv. 4, pp. 63, 719), also from Costa Rica, and, like it, differs from typical Ischionatus (plinthoides, Kirsch, torulosus, Faust, &c.) in having the mentum and anterior coxae unarmed in the ♂. Lizomorpha (1902) must be sunk as a synonym of Ischionatus, Kirsch (1889).
‡ Paracamptus, Casey, and Acamptoides, Ch., have a complete rostral canal, a bilobed, pubescent third tarsal joint, &c., and they do not belong to this group.

Funiculus 7-jointed.
Antennal club with the basal joint shining and very sparsely pilose; tarsi rather stout . . . . . . . [Acamptus.]
Antennal club closely pubescent, larger; tarsi slender . . . . . . Chororhynchus.

ACAMPTOPSIS, gen. nov.

Head deeply inserted into the prothorax; eyes inferiorly placed, large, hidden in repose; rostrum deflexed, short, very stout, feebly curved, the tip resting on the anterior coxa, the scrobes deep and oblique, the antennae inserted at the middle, the funiculus 5-jointed, the club small, ovate, with the basal joint shining and the others very short and densely pubescent; prothorax subtriform and ciliate in front, feebly binate at the base, and emarginate at the apex beneath; scutellum prominent, small; elytra much wider than the prothorax, oblong-subtriangular, feebly sinuate at the base, abruptly produced at the apex; prosternum broadly and deeply sulcate from the apex to the narrowly separated anterior coxae; ventral segments 3 and 4 short, together a little shorter than 5; legs short and stout; tibiae strongly unguiculate at the outer apical angle; tarsi with the third joint simple, the claws divergent; body oblong, densely lutose, and also set with short clubbed setae.

Type, A. encaustus.

The 5-jointed funiculus, the somewhat curved rostrum, and the relatively shorter third and fourth ventral segments distinguish this genus from the following, Pseudecamptus. The type is from Panama, and a second species is found in Cuba*. The sculpture in both of them is in great part hidden by the dense earthy incrustation.

1. Acamptopsis encaustus, sp. n. (Tab. I. figs. 1, 1 a–c.)
Oblong, somewhat flattened above, nigro-piceous, the antennae and tarsi ferruginous; densely coated with a brown earthy incrustation, and also sparsely set with short, rather stout, clubbed, suberect setae (which extend to the rostrum, antennal scape, and legs), those on the elytra uniserially arranged along each intersticte, the last joint of the funiculus also with several very long projecting setae. Head, rostrum, and prothorax densely, finely punctate, the prothorax with a well-marked subapical constriction.
Elytra seriate-punctate, the intersticte somewhat raised and densely punctulate.

Length 2\(\frac{3}{4}\), breadth 1\(\frac{1}{6}\) millim. (♂ ?)

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

One specimen. Smaller and less robust than Pseudecamptus plurisetosus, the sete not so stout, &c.

* Acamptopsis cubanus, sp. n.—Oblong, nigro-piceous, the tips of the tarsi ferruginous; covered with a brown earthy incrustation, and also sparsely set with short clubbed setae, those on the elytra uniserially arranged along each intersticte. Rostrum very stout, rugose, about as long as the posterior portion of the prothorax as seen in profile. Prothorax as long as broad, abruptly constricted towards the apex, the posterior portion rounded at the sides, the tubulate apical portion also rounded in front as seen from above; densely punctate. Elytra moderately long, gradually narrowed from the base; seriate-punctate, the intersticte somewhat raised. Beneath alutaceous, rather sparsely punctate; first ventral segment somewhat concave. Tibiae broad, each with a long apical uncus, which is widened towards the base.

Length 3, breadth 1\(\frac{1}{6}\) millim. (♂)

Hab. Cuba, Cayamas (Schwarz, in U.S. Nat. Mus.).

One specimen. A little more oblong than A. encaustus, the rostrum longer, the prothorax rounded at the sides and strongly constricted towards the apex, the elytra less widened at the base.
PSEUDACAMPTUS.—CHERORRHYNCHUS.

PSEUDACAMPTUS, gen. nov.

Head deeply inserted into the prothorax, large; the eyes inferiorly placed, hidden in repose; rostrum deflexed, the tip resting on the anterior coxae, very stout, short, parallel-sided, nearly straight, with deep, oblique scrobes, the antennae inserted at about the middle, the funiculus 6-jointed, the club abrupt, small, ovate, with a shining, subglabrous basal joint and the other joints very short and densely pubescent; prothorax subtubulate and eunculate in front, feebly sinuate at the base, and deeply emarginate at the apex beneath; scutellum small, oblong-subquadrate, flat; elytra much wider than the prothorax, subtriangular, sinuate at the base, the apexes strongly declivous and abruptly produced; ventral segments 3 and 4 short, together about as long as 5; prosternum broadly and deeply excavate from the apex to the narrowly separated anterior coxae; legs stout; tibiae sinuous within, strongly unguiculate at the outer apexal angle and mucronate at the inner angle; tarsi sparsely pilose beneath, the third joint simple, the claws divergent and widely separated; body oblong, densely pubescent and also thickly set with stout clubbed setae.

Type, *P. plurisetosus*.

The Mexican insect from which the above characters are taken is nearly related to the N.-American genus *Acamptus*, Lec., but the funiculus is 6-jointed*, the elytra are more sinuate along the basal margin and have more prominent humeri, and the clubbed setae extend along each interstice. The sculpture is almost entirely hidden by the vestiture.

1. *Pseudacamptus plurisetosus*, sp. n. (Tab. I, figg. 2, 2 a–c)

Oblong, somewhat flattened above, opaque, alutaceous, nigro-piceous, the antennae ferruginous; densely imbricate with brown scales and also thickly set with short, stout, erect, clubbed setae (which extend to the legs, rostrum, and antennal scape), those on the elytra uniseriately arranged down each interstice, the last joint of the funiculus also with several long projecting setae. Head and rostrum densely, finely punctate. Prothorax about as long as broad, slightly rounded at the sides from the well-marked subapical constriction to the base, the tubulate portion nearly half the length of the posterior portion; closely punctate. Elytra moderately long, seriate-punctate, the interstices feebly convex, 3 and 5, and 1 (sutural) towards the apex, distinctly raised. Beneath sparsely punctate.

Length 3½, breadth 1½ millin.

*Hab.* Mexico, “Sierra de Durango” (ex coll. Flohr).

One specimen, probably from the State of Vera Cruz. The setae in this species are much stouter than in *Acamptus rigidus* (for an example of which we are indebted to Mr. Wickham), and those on the elytra are not confined to the alternate interstices, as in *A. rigidus* and *A. echinus*.

CHERORRHYNCHUS, gen. nov.

Head deeply inserted into the prothorax, large; eyes inferiorly placed, almost hidden in repose; rostrum deflexed, the tip resting on the anterior coxae, very short, stout, and parallel-sided, feebly curved, somewhat depressed at the base, the sclerites deep and obliquely descending, the antennae inserted slightly beyond the middle, the funiculus 7-jointed, joints 3–7 strongly transverse, widening outwards, the club rather large, ovate, and closely pubescent, its basal joint shorter than the others united; prothorax subtubulate and eunculate in front, feebly sinuate at the base, and deeply emarginate at the apex beneath.

* Acamptus rigidus, Lec., has the funiculus 7– (not 6–, as stated by its describer) jointed, a fact already pointed out by Casey (Ann. N. York Acad. Sci. vi. p. 446).
RHYNCHOPHORA.

Scutellum small, subtriangular, flat; elytra elongate-subtriangular, subtruncated at the base, much wider than the prothorax, their apices strongly declivous and produced; prothorax broadly and very deeply sulcate from the apex to the narrowly separated anterior coxae; ventral segments 3 and 4 extremely short, together very little more than half the length of 5; legs short, the femora and tibiae stout, the tibiae almost straight, strongly unguiculate at the outer apical angle, and toothed at the inner angle; tarsi with a few hairs beneath, slender, the third joint slightly excavate above for the reception of the base of the fourth, scarcely wider than the second, the claws divergent; body elongate, opaque, setose, the depressions of the surface lustrous.

Type, C. tenuitarsis.

This genus is easily separable from its allies by the very slender, short tarsi; the 7-jointed funiculus; the large, ovate, closely pubescent antennal club, with a comparatively short basal joint; the basally depressed rostrum; the very deep, almost glabrous prosternal sulcus; the extremely short third and fourth ventral segments; and the opaque, alutaceous, finely setose surface of the body. The type bears a certain resemblance to the European Chororrhinus squalidus, Fairm.

1. Chororrhynchus tenuitarsis, sp. n. (Tab. I. figg. 3, 3 a-c.)

Elongate, rather narrow, somewhat flattened above, opaque, alutaceous, nigro-piceous, the antennae obscure ferruginous; sparsely clothed with fine, erect, pallid, blunt setae, those on the elytra unequally arranged along each interstice, the depressions of the surface filled with a brownish incrustation. Head and prothorax densely, finely punctate. Prothorax about as long as broad, slightly rounded at the sides, the subtruncated anterior portion narrower; closely punctate. Elytra long, obliquely narrowing from the base, blunt at the apex as seen from above; striate-punctate, the interstices feebly convex, flatter on the disc. Beneath sparsely punctate.

Length 9/4, breadth 1 1/2 millim.

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

One specimen, sex not ascertained.

Group TRYPETINA.

Trypetides, Lacordaire; Trypetini, Leconte and Horn.

Of the three genera referred to the Trypetina by Lacordaire, one, Nanus, Schönh. (= Homalozenus, Woll.), is represented within our limits. This group is placed by him near the "Antliarhinides," and by Leconte and Horn near their "Derelomini." It seems to me that its proper position ought to be near the Cossonina—Wollaston, in fact, included Homalozenus* with some doubt amongst them, at the same time calling attention to the distinctly annulated antennal club, the strongly bilobed tarsi, the dentate femora†, the feebly unguiculate tibiae, &c., as not being in accordance with the usual modifications of the Cossonid type.

Hoplorrhinus, Chevr. [provisionally placed under a separate group, Hoplorrhinina, in a preceding volume of this series, Coleopt. IV. pt. 4, pp. 277-279 (1903)], the

* His description is based on the male only.
† Some true Cossonids from New Zealand have strongly dentate femora.
contiguous anterior coxae notwithstanding, would perhaps be better included under the
Trypetina, a nearly allied genus (*Hoploorrhinoidea*) with the anterior coxae as widely
separated as in *Nanus* being now known, all these insects having the rostrum
somewhat similarly formed and differing greatly in the two sexes. *Hoploorrhinus* * and
*Hoploorrhinoidea* include various subopaque elongate forms, which not only resemble
*Dorolomus* in colour and sculpture, but are of similar habits, species of each of these
three genera being found upon the male-flowers of palms. *Nesoticus*, Perkins, from
the Hawaiian Is., an insect living in the wood of *Cheirodendron* (order *Araliaceae*), and
*Spharacus*, Faust, from Brazil, referred to the Cossonina and Cholina respectively by
their describers, seem also to belong here.

**NANUS.**

and Hor. Class. Col. N. Am. 2nd edit. p. 484 (1883).

Am. Phil. Soc. xv. p. 338 (1876).

The sexual characters are so marked in this genus that, as Lacordaire states, the
males and females might be taken as belonging to different genera: in the former sex
the rostrum is long, almost straight, and opaque, and the antennae are inserted near
the tip, and in the female the rostrum is short, slender, curved, and almost smooth,
and the antennae are inserted at its middle.

Two species inhabit Central America,

1. **Nanus uniformis.** (Tab. I. figg. 4, 4 a, ♂ ; 5, ♀.)

N. Am. 2nd edit. p. 484 1.

Soc. xv. p. 338 (1876) (♀) 1.

*Hab.* NORTH AMERICA, Florida 2 4.—MEXICO, Tlacotalpan near Vera Cruz (*Höge*).—
ANTILLES, Cuba 1, Puerto Rico 1, San Domingo 3.

Sent us in numbers from Vera Cruz, these specimens agreeing with others before
me from the above-quoted Antillean localities. The elytra often have a black patch
on the disc beyond the middle. The femora are dentate in the male and almost
unarmed in the female. *N. uniformis* is described as glabrous, but the types must
have been abraded. The Colombian *N. punctellus*, Boh., is said to be clothed with
whitish pubescence and to have the disc of the prothorax flat.

* Specimens of *H. crisper*, from Cacao, Trece Aguas, Alta Vera Paz, Guatemala (*Schwarz and Barber*),
have recently been sent to me for determination by the U.S. Nat. Museum. The two examples described by
me were both of the female sex (not ♂ and ♀ as stated); the male (as is that of *H. mexicanus*) has a
straighter, stouter, carinate, rugosey punctate rostrum, the antennae inserted towards the tip, and the
metasternum and first ventral segment broadly excavate.
2. Nanus hispidus, sp. n.  (Tab. I. figg. 6, 6 a, 6 b; 7, 7 a.)

Elongate, depressed, moderately shining, the rostrum opaque in the ♂, black or piceous, the shoulders or basal portion of the elytra, antennae, tarsi, and base of the femora more or less rubescant; very finely and sparsely pubescent, the prothorax and elytra also somewhat thickly clothed with decumbent, ochreous setae, those on the elytra unilaterally arranged down each interstice, the under surface with an extremely fine sericeous pubescence. Head densely, minutely punctate; rostrum (♂) usually as long as or longer than the head and prothorax, almost straight, parallel-sided to near the tip, and densely strigoso-punctate, (♀) slender, arcuate, not longer than the prothorax, shining, and almost smooth. Prothorax broader than long, somewhat rounded at the sides, abruptly constricted in front, broadly depressed down the middle of the disc; densely, shallowly punctate, the narrow interspaces alutaceous. Elytra elongate, much wider than the prothorax, punctate-striate, the interstices feebly convex, densely, minutely punctate, and each with a row of larger, asperate, setigerous impressions. Beneath very densely, minutely punctate. Metasternum deeply sulcate down the middle for the apical two-thirds of its length. Legs elongate; femora in both sexes strongly clavate and very sharply dentate.

Length 3-4½, breadth 1-1½ millim. (♂ ♀.)

Hab. Panama, Bugaba, Tolé (Champion).

Numerous examples, males predominating, the latter varying greatly in size and in the length of the rostrum. Immature examples are entirely ferruginous. This species is separable at once from N. uniformis by its setose elytra.

HOPLORRHINOIDES, gen. nov.

Rostrum elongate, slender, widened at the tip, dissimilarly formed in the two sexes—(♂) feebly curved, flattened, punctured, and carinate, (♀) shorter, much more slender, and almost smooth,—the scrobes lateral, broad and deep in the ♂, reaching the eyes, the antennae inserted at or beyond the middle in ♂ and at about the basal third or fourth in ♀; eyes very large, lateral, coarsely facetted; mandibles prominent, curved, sharply dentate within; antennae slender, the funiculus 7-jointed, the joints obconic and decreasing in length, the club pointed, annulate, and with a long, shining, conical basal joint; prothorax suboval, truncate and sinuate marginated at the base; scutellum flattened, moderately large; elytra elongate, not or very slightly wider than the prothorax, produced at the tip; anterior and intermediate coxae exerted, each separated by at least one-half their own width; first ventral suture sinuate, the others straight; legs elongate; femora clavate and towards the apex sharply dentate, the anterior pair stout at the base; tibiae rounded and unarmed at the outer apical angle; tarsi pilose beneath, the third joint strongly bilobed, the anterior pair dilated and with long projecting hairs in the ♂, the claws long and divergent; body elongate, subcylindrical, coriaceous, very finely pubescent, testaceo.

Type, H. attaleæ.

The two immature-looking insects belonging to this genus are nearly related to Hoplorrhinus, from which they differ in their somewhat widely separated anterior and intermediate coxae, the more feebly pedunculate femora, and the deep, laterally-placed rostral scrobes of the male, the anterior tarsi, too, being dilated and very hairy in this sex. Spharacetus, Faust, from Brazil, seems to approach Hoplorrhinoïdes in many of its characters.

1. Hoplorrhinoïdes attaleæ, sp. n.  (Tab. I. figg. 8, 8 a, 8 b; 9, 9 a.)

Elongate, opaque, pale testaceo, the eyes black, the rostrum piceous or ferruginous, the anterior knees and scutellum black in one specimen; the pubescence sparse, pallid, and inconspicuous. Head shallowly foreset between the eyes; rostrum (♂) a little longer than the head and prothorax, flattened, with the
HOPLORRHINOIDEES.—COSSONINA.

basal portion multicarinate, the apical portion closely punctured, and the antennae inserted at about the middle (in the second specimen shorter, with an undulate ridge on each side, a fine carina down the middle, and the antennae inserted nearer the tip), (♀) slender, arcuate, smooth from near the base, and the antennae inserted as about the basal third, joints 1 and 2 of the funicleus elongate in both sexes, 3–5 decreasing in length. Prothorax somewhat conical and about as long as broad in the ♂, a little shorter and more rounded at the sides in the ♀, closely, minutely, or subobsoletely punctate. Elytra finely punctate-striate, the interstices feebly convex or flat, subgranulate in one specimen. Beneath sparsely, obsoletely punctate. Anterior tarsi of the ♀ dilated and clothed with long, laterally projecting, pallid hairs.

Length 7–8, breadth 2½–2¾ millim. (♂ ♀)

_Hab._ GUATEMALA, Cacao, 500 feet, near Trece Aguas, in Alta Vera Paz (Schwarz and Barber, in U.S. Nat. Mus.).

Two males and two females, the former varying in the length and sculpture of the rostrum, and in the point of insertion of the antennae. The sculpture of the prothorax and elytra varies also in the different specimens of each sex ; but as all four are labelled as having been found on the male-flowers of _Attalea cohune_ (the large palm of the region), and the general coloration is similar to that of _Derelomus_ (species of which are known to attack _Chamaerops_), this cannot be altogether due to immaturity.

2. _Hoplorrhinoides pallidus_, sp. n.

♀. Very like the same sex of _H. attalea_, but with the rostrum straighter and considerably longer than the head and prothorax, striato-punctate at the base; joint 2 of the funicleus much shorter than 1; the prothorax strongly transverse, rapidly narrowing from the middle forwards, shining, densely, minutely punctate; the elytra obsoletely punctate-striate, the interstices flat and coriaceous.

Length 6¼, breadth 2½ millim.

_Hab._ PANAMA, Volcan de Chiriqui (Champion).

One immature specimen, set aside years ago for want of further material. It probably lives upon the male-flowers of a different palm from that attacked by _H. attalea_, _Attalea cohune_ being absent, I believe, from the Pacific slope of Chiriqui.

Group COSSONINA.

The Cossonids are usually treated either as a separate Family of the Rhynchophora or as a subfamily of the Calandridae, but they seem to be best placed under the Curculioninae, the group "Acamptina" connecting them to a certain extent with the Cryptorrhynchina. Wollaston's arrangement (1873) is here followed, except that the Scolytiform Rhyncolides are dismembered from the Cossonides (following Leconte and Horn), and that certain Trypetid and Hylebiid genera are altogether excluded. The typical forms are mainly recognizable, apart from their general facies, by the claw-like prolongation of the outer apical angle of the tibiae (this being concave within in various highly developed genera, such as _Rhopalomesites_, &c.), and the feebly emarginate or simple third tarsal joint; but these characters are not always diagnostic, the tibiae sometimes being unarmed at the apex and the third tarsal joint bilobed. The Cossonina
are particularly well represented in such Oceanic islands as St. Helena, Madeira, the Canaries, the Hawaiian group, New Zealand, &c., and some of them are recorded as having been carried immense distances across the ocean in floating drift-wood.

Sect. Dryophthorides.

Dryophthorides, Lacordaire, Wollaston.

The species of this section are easily identified by their 4-jointed funiculus, the 5-jointed tarsi, the strongly unguiculate tibie, and the peculiar silky pruinosity of the surface of the body.

DRYOPHTHORUS.


A very widely distributed genus and particularly numerous in species in the northern Pacific islands*, no less than seventeen being recorded by Mr. Perkins from the Hawaiian group. The holartic D. corticalis, Payk. (lymexylon, F., americanus, Bed.), is said to attack oak and alder.

1. Dryophthus quadricollis, sp. n. (Tab. I. fig. 10.)
Moderately elongate, opaque, black, the scape of the antennae and the tarsi ferruginous, the surface with a greyish sericeous pruinosity. Head closely punctate; eyes transverse, small, depressed, coarsely faceted; rostrum very stout, moderately long, slightly dilated opposite the points of insertion of the antennae, closely punctate, smooth, bare, and shining at the tip, the antennae inserted towards the base. Prothorax as long as broad, subquadrate, abruptly constricted in front; closely punctate. Elytra comparatively short, widening to about the basal third and narrowed thence to the apex, which is somewhat produced; coarsely seriate-punctate, the interstices raised, about as wide as the punctures on the disc and becoming narrower towards the sides.

Length 2 1/2-2 3/4, breadth 1 millim. (♀ ?)

Hab. Guatemala, Totonicapam 5500-10,500 feet (Champion).

* Dryophthus cocosensis, sp. n.—Oblong-ovate, opaque, nigro-piceous or piceous, the antennal club ferruginous; the surface (when cleaned) clothed with a very fine greyish pruinosity, and the clytral interstices each with a row of extremely minute scales. Head and rostrum densely, rugosely punctate; rostrum stout, parallel-sided, slightly constricted at the base; antennal scape widened from near the base; eyes large and depressed. Prothorax about as long as broad, strongly constricted in front, coarsely, densely punctate. Elytra much wider than the prothorax, rounded-subtriangular; coarsely seriate-punctate, the interstices raised and much narrower than the punctures. Tarsi very short.

Length 1 1/2-2 1/2, breadth 1/4-1 millim.

Hab. Cocos I.

Sent in abundance (with a species of Anochorus) by the late P. Bidley, the specimens labelled as having been found in January 1902. This island belongs politically to Costa Rica, but it is situated so far from the Pacific coast that the locality has not been included within the limits of this work. The species may be known by its comparatively short, subtriangular elytra, with narrow raised interstices, the short tarsi, and the broad scape of the antennae.
Six examples. Less elongate than D. corticalis, Payk., the rostrum with a rather larger bare shining space at the tip, the prothorax subquadrate, the elytra shorter, more dilated at the sides below the base and more narrowed and attenuate at the tip. When cleaned, the surface is so strongly pruinose as to appear plumbeous or greyish.

STENOMMATUS.


The only tangible characters by which Stenommatus can be distinguished from Dryophilus appear to be the comparatively slender, curved rostrum and the narrower eyes. The supposed difference in the form of the vestiture is due to the mud-like incrustation on the specimens of Dryophilus examined by Wollaston.

1. Stenommatus fryi.


Hab. Mexico (coll. Fry 1).

The unique type of this species appears to be a female.

2. Stenommatus sulcifrons, sp. n. (Tab. I. fig. 11.)

Moderately elongate, narrow, depressed, opaque, nigro-piceous, the antennae (the club excepted), tip of the rostrum, eyes, and tarsi ferruginous, the femora and tibia piceous, the surface with a greyish pruinosity, the punctures each bearing a minute metallic scale. Head closely punctate, shallowly sulcate between the eyes; eyes somewhat prominent, strongly transverse, moderately large, coarsely faceted, separated above by about the width of the apex of the rostrum; rostrum rather slender, moderately long, abruptly dilated opposite the points of insertion of the antennae, closely punctate, the outer half of the apical portion smooth, shining, and bare, the basal portion sulcate, the antennae inserted at the middle and with an elongate scape. Prothorax narrow, about as long as broad, subquadrate, strongly constricted in front, closely punctate. Elytra moderately long, somewhat oval, confluently, subtrianularly produced at the apex; coarsely seriate-punctate, the interstices raised. Legs short, rather slender.

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

One specimen. Narrower than the Mexican S. fryi; the rostrum sulcate down the basal half, narrower at the tip, the smooth apical space less extended, and the pterygia very prominent; the eyes somewhat prominent and more approximate above.

Sect. Pentarthridae.

Pentarthis, Wollaston.

The 5-jointed funiculus is the essential character of Pentarthrum and the other genera of this section; Tomolips, Woll. (= Wollastonia, Horn *), however, has a similar number of antennal joints, but, as Wollaston says, it is so obviously related

* This name is preoccupied for a fossil beetle described by Heer.

to *Hexarthrum* that it must be placed near it. *Dryotribus mimeticus*, Horn (= *Tha. lattorhoda insignis*, Perkins), from Key West, Florida, &c., has been introduced into the Hawaiian Is., and it occurs also in Mustique Island, one of the Grenadines. This insect somewhat resembles *Dryophthorus* and *Chaeorhinus*, but has the eyes placed on the rostrum, as in *Dioptrophorus*, *Ithauria*, and *Theogone*, genera placed near *Anchonus* in this work*. In all the Pentarthrids the metathoracic episterna are almost or quite covered by the inflexed margin of the elytra, as in *Dryophthorus*.

**PENTARTHROID.**


A widely distributed genus, the type of which is the European *P. huttoni*, Woll. The only Central-American species that can be satisfactorily referred to it is *P. cylindricum*, Woll., originally described from introduced examples found in the Island of Ascension. In this latter insect the anterior coxae are more approximate, and the tarsi more slender than in *P. huttoni*. *Pentarthrum* appears to be especially well represented in New Zealand, but some of the forms from that country will certainly have to be eliminated.

1. **Pentarthrum cylindricum**. (Tab. I. fig 12.)


*Hab. Honduras* ³ (Sallé); *Nicaragua* ³, Chontales (Janson); *Panama*, Tolé ³ (Champion).—*Brazil* ², Rio Janeiro ³ (coll. Fry).

Wollaston¹ states that the specimens of this species found by Mr. Bewicke in the decayed wood at the bottom of some boxes, possibly used to import plants, in Ascension, might have come from the Cape of Good Hope or Mauritius; later², he adds, “Brazil” and “Malay Is.” as localities. There can be no doubt, however, that the home of this insect is in Tropical America. Three examples only have been received from within our limits, one of which is shown on our Plate, Wollaston’s figure being too elongate.

**RHINANISUS.**


Various small, elongate, depressed Central- and S.-American forms, with the rostrum rather long, slender, and widened outwards (especially in the male), the eyes depressed, the basal portion of the head globose and abruptly separated from the anterior portion, the elytra pilose or setose at the apex, and the anterior coxae narrowly separated, agree

* Cf. Col. iv. 4, pp. 92-97.