

NEW COLEOPTERA FROM THE WESTERN UNITED STATES.

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All of the species described in the following pages belong to genera which are of small extent or have been recently monographed, and it is hoped that no confusion will result from their publication. The types are in my own collection, and, unless otherwise credited, were captured by myself.

PHYSORHINUS, Esch.

Hitherto the only species of this genus known from the United States was *P. fuscus*, Champ. (*Anchastus frontalis*, Horn), and the curious pale head, which Dr. Horn thought might be accidental, is, according to Mr. Champion, characteristic of the genus, which is well represented in Central America. I have in my collection a form which seems to be new.

P. yuccæ, n. sp.—Elongate, subfusiform, convex, shining, clothed with rather dense yellowish pubescence; castaneous, legs rather lighter. Head yellow, clypeal margin blackish, the surface deeply but somewhat finely punctate; antennæ passing the hind angles of the thorax, second joint extremely small, third barely longer, together about equal to the fourth. Prothorax a little wider than long, broadest behind the middle, rapidly narrowing to apex, sides nearly parallel behind, hind angles just perceptibly divergent, acute, bicarinate, the inner carina straight, oblique, outer one very slightly curved and quite near the margin; surface deeply and densely but not very coarsely punctured, the punctuation of the neighbourhood of the anterior angles being the coarsest. Elytra at base not as wide as the thorax, becoming rapidly narrower from a point much in advance of the middle, sides slightly rounding, apices distinctly finely serrulate, tips conjointly rounded, all the striæ distinct, but fine, with small distant punctures at bottom. Interstrial spaces finely, irregularly and rather closely punctate. Beneath somewhat finely and closely punctured. Dilated portion of posterior coxal plates rounded at tip. Length 11 mm.

Taken near Brownsville, Texas, by C. H. T. Townsend and myself, in heads of *Yucca* during July. Differs from *P. fuscus* by the closely punctured head. It is quite closely allied to the Mexican *P. frontalis*, Cand. The Central American species are said by Champion to occur mostly in forest clearings, and are collected by beating branches of trees.

CHRYSOBOTHRIIS, Esch.

C. Piuta, n. sp.—Form oblong, subdepressed, bronzed, shining, head bright reddish cupreous, front green; pronotum reddish cupreous,

bluish at base ; elytra bronzed, but much less brilliant than the thorax, the basal half, excepting the sutural and lateral margins and foveæ, dark bluish and more opaque ; body beneath dark bronze, with whitish pubescence, which forms denser patches on the meso- and metathoracic side pieces and on the sides of the ventral segments. Antennæ greenish-bronze, slightly more slender to tip, third joint scarcely equal to the next two. Front deeply and quite regularly punctured, the punctures separated by about their own diameters, callosities indistinct, pubescence whitish, conspicuous. Clypeus broadly and obtusely triangularly emarginate, angles of emargination not rounded. Thorax about one-half broader than long, front margin slightly bisinuate when viewed from above, anterior angles obtuse, slightly rounded, sides nearly straight, but converging a trifle to near the base, whence they are suddenly sinuately narrowed to the hind angles ; disc convex, regular, the punctuation deep, well separated at middle, but becoming coarser and more crowded near the lateral margins and at sides of base, where it appears substrigose, but is scarcely confluent, median line obliterated in front, the posterior half smooth and shining, not impressed nor channelled. Elytra distinctly wider than the thorax, sides nearly parallel to about the apical third, whence they are narrowed to the separately rounded tips, serrations fine, numerous ; costæ obliterated, except the exterior one, which is distinct on the humerus and near the middle of its length, but becomes evanescent behind ; impressions deep, arranged thus : a basal bronzed rounded one on each side of the scutellum, exterior to which is a shallower crescentic mark, not bronzed, extending from just within the humeral prominence to the suture. Behind this is a transverse bronzed indentation, wider externally, reaching nearly to the suture, while still posterior to this is another less distinct impression, which fades gradually into the cupreous area behind it. The punctuation of the elytral disc is fairly deep and well defined, but becomes scabrous at sides and towards the tips. Body beneath densely punctured, except on the median area of the abdomen, which is more shining. Prosternum lobed, hairy, without median smooth space. Last ventral with serrulate margin, coarsely, closely punctured, tip with a rounded emargination. Anterior tibiæ with apical dilatation about as in *mali*, tooth of femur indistinctly serrulate, middle tibiæ slightly arcuate, not angularly sinuate within, hind tibiæ straight. Length, 6.5 mm.

This species belongs in Horn's group IV., and may be placed near *mali*, from which it differs by the usually small size, contrasting colours,

obliteration of the frontal chevrons and elytral costæ, the non-sulcation of the median thoracic line and by other characters. The description is drawn up from a male; the female differs thus: last ventral broadly triangularly emarginate, with an indication of a lobe in the bottom of the emargination, as in *chrysoela*; however, this structure is a trifle unsymmetrical, and may be accidental. The prosternum is more coarsely punctured and less hairy than in the male, the anterior tibiæ are not dilated at tip, and the middle tibiæ are straight, while the front of the head is entirely cupreous.

The name refers to the tribe of Indians inhabiting the neighbourhood from which the beetle came. The type was taken with two other slightly smaller specimens, by beating desert shrubs near Independence, in Owen's Valley, California, during the month of July. A female from Williams, Arizona, is somewhat more strongly sculptured, and the under side of the body is bluish.

AGRILUS, Steph.

The species described below seem to be well marked and easily recognizable, and thus worth describing separately. It is probable that the impetus given to the study of the genus through Dr. Horn's monograph will result in the detection of a number of undescribed forms.

A. pinalicus, n. sp. — Rather more robust and less narrowed behind than usual. Head, thorax and scutellum blue-black; elytra metallic green, with a dark sutural stripe. Antennæ short, blackish, serrations beginning on the fourth joint. Front of head deeply and broadly channelled, the sulcus extending from the occiput on to the clypeus, the bottom clothed with close, snow-white pubescence; surface of head granulate behind the eyes, the remainder, where visible, transversely rugose. Thorax broader than long, wider in front of the middle margin, sinuous in lateral view; surface somewhat irregularly convex, closely strigose, the strigæ transverse in front, oblique near the base and over most of the disc, longitudinal near the sides; median line fine, distinct near the base, interrupted about the middle; sides slightly arcuate, sinuate near the base, hind angles nearly rectangular, not carinate, front angles with a longitudinal spot of white pubescence, which diverges a little from the margin posteriorly and does not reach the middle of its length. Scutellum rough, not carinate. Elytra with the sides sinuate, apices separately rounded, margin serrulate posteriorly, surface granulate, a snow-white spot of pubescence on each side near the scutellum, which

may possibly extend at times down the dark sutural space described above, as this region shows evidence of scales in places; costa obliterated. Body beneath almost entirely concealed by white pubescence, the exposed portions imbricate-punctate, the abdomen more finely so. Last ventral serrate at sides. Pygidium with a projecting carina, which is truncate at tip. Legs sparsely pubescent. Length, 9 mm.

The type is a female taken in October at Parker's Well, on the eastern side of the Organ Mountains, New Mexico, by Theo. D. A. Cockerell, and bears his number, 5295. Another specimen which I collected during June, in the Pinal Mountains, Arizona, differs in colour, the head being cupreous, the elytra red-bronze with green sutural space. The under side of the body and the legs are also brightly bronzed, the pleura and margins of the ventral segments darker. In other respects the two correspond.

This beetle belongs near *Agrilus audax*, Horn, but differs in having a non-carinate scutellum and by the arrangement of the pubescence. The claws are sharply and strongly toothed beyond the middle, the inner division not notably inflexed.

A. mercurius, n. sp.—Rather robust, olivaceous bronze; elytra and thorax vittate with white pubescence. Head coarsely and confluent punctured, front covered with rather long white hairs, median line faint. Antennæ passing the middle of the thorax, serrate from the fifth joint. Thorax broader than long, sides arcuate, but less so than in *blandus*, sinuate in front of the hind angles, which are not carinate, disc gibbous, a faint depression posteriorly in place of the median line, surface coarsely, densely punctate, forming more or less distinct concentric strigæ, which are stronger anteriorly, margin sinuous in profile; on each side is a large spot of white pubescence, beginning at the anterior angle and extending to behind the middle, this spot confluent above with a longitudinal stripe of the same colour, which extends from a point on the thoracic disc opposite the apex of the gibbosity to base, where it meets the elytral vitta. Scutellum not carinate. Elytra not covering the sides and tip of abdomen, coarsely scabro-punctate, not costate, margin serrulate posteriorly, apices obtuse, disc of each elytron with a vitta of perfectly white pubescence extending from base, where it is confluent with the corresponding thoracic stripe, to the apex. Pygidium with a fine carina, which does not project. Prosternal lobe well developed, with a broad, slightly indented, rounded emargination on front margin, prosternum densely clothed with white

hairs ; the prosternal, mesosternal and metasternal side pieces are densely pubescent with white, as is also the vertical portion of the ventral segments. there being in addition a row of four rounded spots of the same colour and nature on each side of the abdominal region. The visible portions of the under surface are distinctly imbricately punctate. Claws with a rather broad, sharp tooth, which is not notably inflexed. Length, 6 mm.

Allied to *A. blandus*, Horn, from which the gibbous pronotum and non-carinate scutellum will separate it. It rather closely approaches *A. gibbicollis*, Fall, but may be distinguished by the emarginate prosternum, non-carinate thoracic angles, and presumably by the ornamentation, as Fall makes no mention of discal thoracic vittæ, nor of lateral abdominal spots inside of the vertical stripe.

The type was taken by myself at Deming, New Mexico, August 18, and is apparently a male. The first and second ventrals are vaguely longitudinally impressed at middle.

EUGASTRA, Lec.

In describing a species under the above generic caption, I do not wish to be understood as favoring the separation of *Eugastra* from *Lachnosterna* because of any supposed great structural differences. I am merely following the example of Mr. Bates, who, in the *Biologia Centrali-Americana*, expresses the opinion that on account of the unwieldy size of the old genus *Lachnosterna*, it is advisable to retain certain names to indicate more or less well-defined groups, which may eventually be limited in some more satisfactory manner than is possible at present.

E. epigæa, n. sp.—Subovate, obtuse behind, convex, nearly black, slightly shining. Clypeus barely perceptibly emarginate in front in the male, more distinctly so in the female, densely, deeply and coarsely punctured, margin reflexed ; front punctured like the clypeus, occiput less strongly. Thorax about one-half broader than long, widest about the middle, which is rather sharply rounded, almost subangulate ; margin coarsely serrate, sparsely fimbriate ; surface coarsely, somewhat deeply punctured, densely in the neighbourhood of the anterior angles, more sparsely and irregularly on the disc, where smooth spaces are left ; median line obliterated. Scutellum shorter in the female than in the male, subtriangular in the latter sex, a few large serial punctures along the sides. Elytra with basal margin a little elevated on each side of the scutellum, form broadly oval, surface even, not sulcate or costate, except that the longitudinal line on each side of the suture is well marked ; disc with

rather large, deep, coarse punctures, which are separated by about their own diameters, but become finer and shallower at sides and towards the tip. Pygidium alutaceous, not distinctly punctured, though large, sparsely placed, shallow punctures are indistinctly indicated. Sterna coarsely, not very closely, punctate; metasternal hairs extremely short and sparse. Abdomen rather indistinctly and much more finely punctured. Legs stout, claws arcuate. Length, 12.5-14 mm.

Male: Body winged. Antennal club shorter than the funiculus. Abdomen broadly, vaguely impressed at middle. Spurs of posterior tibiæ slender, curved, free; hind tarsi slender, much longer than the tibiæ. Claws not or barely perceptibly toothed.

Female: Body apterous. Antennal club a little smaller. Abdomen more convex, without median impression. Posterior tibial spurs broader; hind tarsi shorter than in the male. All of the claws are toothed, the tooth being short, sharp and erect, nearer the base than the apex.

This insect occurs occasionally, crawling on the ground, at Del Rio, Alpine and Marfa, Texas, during June, July and August. It belongs near *E. cribrosa*, Lec., but is distinct by numerous characters.

OLOGYPTUS, Lacordaire.

It is well known that our common *Ologyptus anastomosis*, Say, varies considerably in size and outline, as well as in the distinctness of the elytral costæ. Besides a considerable series of that insect from Kansas, Colorado, Texas, New Mexico and Arizona, I have in my cabinet another species which seems to be quite different from any of the Mexican forms described by Champion in the *Biologia Centrali-Americana*. It may be recognized by the characters noted below.

O. Texanus, n. sp.—Blackish, covered with yellowish scales. Rather elongate, somewhat flattened above. Head covered with yellowish scales, which completely conceal the sculpture, antennæ much heavier than in *O. anastomosis*. Thorax transverse, broadest at about the middle, disc convex, bifoveate, a fine distinct median carina, which is bifurcate at base, lateral margin thickened, explanate, and rather widely reflexed; the anterior margin is deeply emarginate, the base slightly bisinuate, sides very strongly rounded, more suddenly so posteriorly, a strong constriction in front of the hind angles, which are distinctly acute and rather prominent; front angles acute, feebly rounded. Elytra about as wide as the broadest part of the thorax, almost parallel to a point about one-third from the tip, thence suddenly sinuately narrowed,

apices conjointly rounded. The suture is elevated posteriorly, costæ three in number, arranged thus: first nearly straight, parallel to the suture, reaching the base but abbreviated at apex; second parallel to the first, slightly shorter at each end; third forming an overhanging margin to elytron, until it reaches a point just beyond the tip of the second, when it curves in and becomes discal, but fades out before attaining the elytral apex. None of the costæ are confluent at any point. Body beneath with large scale-bearing punctures, distant on the abdomen, but more approximate on the thoracic segments. Legs densely scaly and comparatively stouter than in *anastomosis*. Length, 9 mm.

This beetle can be separated from *O. anastomosis* at a glance, the thoracic characters alone being amply sufficient for its differentiation, while the elytra are unlike those of the former species in shape as well as in ornamentation. From the antennæ alone, one might doubt the propriety of the generic reference, but the deflexed apex of the prosternum excludes the insect from *Astrotus*. The type was taken in Cameron County, Texas, during the month of September, by Frank B. Armstrong.

PYROTA, Lec.

Several years ago I received specimens of a beetle belonging to the above genus, which, by its antennal characters, approaches *Cantharis*, recalling in its general appearance *C. biguttata*, though, of course, not to a deceptive degree. After a study of the material, I concluded that the species was undescribed, and wrote to Dr. Geo. H. Horn, asking his opinion. This coincided with my own, and as the insect seems to have been taken in some abundance, and is probably represented in numerous collections, I propose to name it after the State in which it occurs.

P. Dakotana, n. sp.—Elongate, head and thorax shining, elytra much less so. Above yellow, thorax with two small blackish discal spots, one on each side of the middle line; elytra each with a narrow, nearly straight longitudinal blackish stripe, which does not reach the apex nor the base, and is somewhat more distant from the suture than from the lateral margin. Head yellow, sparsely, irregularly and rather coarsely punctured; sides behind the eyes almost exactly parallel for a short distance; hind angles broadly rounded. Antennæ shorter and stouter than usual, blackish, first joint paler at base, third joint longer than the fourth. Palpi blackish. Thorax campanulate, widest behind the middle, sides rounded, less so anteriorly, where they are rapidly convergent; basal

margin elevated ; disc irregularly punctate, a rather large fovea in front of the scutellum. Scutellum yellow. Elytra distinctly scabrous, subopaque to the naked eye, shining under a lens, finely sparsely pubescent ; costæ faintly indicated. Body beneath alutaceous, very finely scabrous, the meso- and metathoracic regions rougher than the rest. Legs yellow, knees, tips of tibiæ and tarsi blackish. Length, 10 to 12 mm.

Eight specimens are before me, all taken at Pierre, South Dakota, by the late P. C. Truman. The principal variation in markings consists of a tendency to loss of the elytral stripe, although one strongly-developed specimen, with the vitta well marked, has the suture dark for the greater part of its length. The under surface of the body is always more or less blackish, sometimes almost entirely so except the prothoracic region, which remains yellow. In one case, the anterior tibiæ are blackish to base. By the form of the head, this insect is allied to *P. insulata* and *P. Germari*, being close to the latter in several respects, but *Dakotana* has shorter and thicker antennæ. The style of ornamentation and the opacity of the elytra will at once distinguish it from *bilineata*. The maxillary palpi are not deformed in the male, the last joint being but slightly modified.

MY LAST REPLY TO MAJOR CASEY.

BY E. WASMANN, S. J., LUXEMBURG.

In Dr. David Sharp's "Zoological Record, Insects," 1901, I find in the list of my publications of that year, under the title, 1449, "*On some genera of Staphylinidæ described by Thos. L. Casey*," the following note : "*Casey replies to this, l. c., pp. 312, 313.*"

As I do not receive American journals here, I tried to get the respective nos. of the CANADIAN ENTOMOLOGIST from one of my friends. Being informed now of the contents of Major Casey's "reply," I understand why he did not send it to me, although I had sent him a copy of my critic paper "*On some genera of Staphylinidæ*" already, Nov. 2nd, 1901.

The manner in which Major Casey has treated our scientific controversy differs far from my own in the article cited above (CANAD. ENTOM., Sept., 1901, p. 249-252). In an angry tone he reproaches me of "disingenuousness," "narrow-mindedness," etc.; he even tries to misinterpret my own personal correspondence with him in a way quite new in scientific discussion.