# NEW SPECIES AND SUBSPECIES OF NORTH AMERICAN CARABIDAE

#### BY EDWIN C. VAN DYKE

California Academy of Sciences, San Francisco

During the last few years, quite a number of species of Carabidae have been received which have been found to be new. These are now described and at the same time a few notes made concerning others.

### Calosoma lariversi Van Dyke, new species

Rather small, short, black, smooth and shining. Head: smooth, at most with a few fine punctures and minute wrinkles, frontal impressions well marked; eyes only moderately convex; mandibles feebly striate and punctate; antennae with first five segments glabrous, the following more or less smooth on upper and lower faces, elsewhere finely pubescent. Prothorax relatively small, three-fifths as long as broad and about two-fifths broader than head, emarginate in front with anterior angles narrowly rounded, front margined and with elevated beading which is sometimes bleached or rufous, sides moderately arcuate in front, gradually narrowing and oblique behind middle, side margin well beaded, hind angles subangulate and extending backward to a moderate degree, the base feebly emarginate and sometimes finely margined laterally; disk slightly convex, almost smooth, with median longitudinal line finely impressed, lateral sulcus gradually broader posteriorly and rather coarsely punctured as is to a slight degree the area in front of basal margin. Wingless, elytra cordiform, humeral angles broadly rounded, sides moderately arcuate and gradually narrowing posteriorly to subacute apex, side margin narrow and well reflexed; disk quite convex and fairly smooth in front with striae finely and obscurely impressed and finely punctured, the apical area and declivity sometimes more coarsely sculptured, finely or even coarsely scabrous or rugose. Length 13-15 mm., breadth 6-8 mm.

Males with first three tarsal segments on front feet broadly dilated and papillose beneath.

Holotype, male, allotype, female (Nos. 5294 and 5295, C. A. S., Ent.) and four paratypes, all collected in an isolated locality near Lamoille, Nevada, June 25, 1941, by Mr. Ira La Rivers. The paratypes will all be returned to Mr. La Rivers, after whom I take great pleasure in naming this fine species.

The species superficially looks very much like smaller specimens of *Calosoma latipenne* Horn because of its more or less smooth and shining appearance. It is, however, quite distinct, having eyes that are far less convex, not prominent as in *lati*-

penne; a prothorax that is proportionately smaller, with sides almost straight and oblique behind, the hind angles subacute and projecting well posteriorly, not broadly rounded and feebly projecting, the disk not broadly deplanate toward hind angles and with the head quite smooth, not more or less coarsely punctured and rugose as is generally the case in the other; and the elytra without serrations at the humeral margin. It is really more closely related to *luxatum* Say, sharing with that species and its variations the less convex eyes and less prominent hind prothoracic angles. Its distribution also lends support to that relationship.

In this connection, I wish to state that our wingless, stubby species of *Calosoma* do not belong at all in the Old World genus *Callisthenes*. The latter are in general more powerfully constructed, with large heads, a large prothorax, robust legs and with the outer segments of the antennae uniformly pubescent. I believe that our species are derived entirely from American stock, originating as offshoots from certain West American *Calosoma*. Some of these may later have to be placed in new subgenera but that should not be done until the entire group is carefully revised.

### Calosoma zimmermanni tahoensis Van Dyke, new subspecies

Rather small and more or less gracefully formed, black, feebly shining. Head rugose, punctate, with eyes moderately convex, not hemispherical and projecting, frontal impressions distinct, antennae with outer segments more or less smooth on upper and lower faces. Prothorax rather small, 4.5-5 mm. wide, three-fifths as long as broad, two-fifths broader than head, apex emarginate, distinctly margined and with beading smooth, sides moderately arcuate in front, straight or feebly sinuate posteriorly and converging, side margin narrowly reflexed, hind angles sharply rounded and distinctly projecting beyond the almost straight basal margin; disk feebly convex, punctate, rugose, with median line finely impressed and apex and base finely and distinctly margined. Elytra elliptical, one-fourth longer than broad, humeral angles broadly rounded, sides arcuate, side margin narrowly reflexed; disk feebly convex, stria well defined and with intervals well elevated and more or less regularly interrupted to form rows of somewhat elongate tubercles. Length 13-14 mm., breadth 6-7 mm.

Males with first three tarsal segments of front feet broadly dilated and papillose. Females generally larger than males.

Holotype, male, allotype, female (Nos. 5296 and 5297, C. A. S., Ent.) and numerous designated paratypes from a series of forty-one specimens in the collection of the California Academy of Sciences. The holotype was collected by me high up on

the slopes of Mt. Tallac, near Lake Tahoe, California, during June, 1899. The allotype was also collected by me, but near Fallen Leaf Lake, July 27, 1915. Most of the other specimens were also collected in the Lake Tahoe region at the higher altitudes such as the slopes of Mt. Tallac, Heather Lake, Glen Alpine (Blaisdell, Van Dyke, Fenyes), Summit (Koebele), but other specimens from high altitudes in other parts of the Sierra Nevada mountains were also found to be of the typical pygmy type, e.g., one from Donahue Pass, Yosemite National Park (V. Duran), two from Cow Creek, Tuolumne County (Van Dyke), and one from Mammouth, Mono County (Ross).

This subspecies is a pygmy phase of zimmermani which is only found at high altitudes in the middle Sierras. Most specimens have been taken in the Lake Tahoe region. It closely resembles in sculpture some of the more typical zimmermani from farther north such as those of the Mount Shasta region. These are of course larger and more robust, also have the head and pronotum more coarsely sculptured, rugose-sinuose, and the elytral tubercles more scale-like. The relatives found in the gold belt or foothill region to the west of Lake Tahoe have an entirely different type of sculpturing which places them as exaratus Csy. while those found in the Great Basin to the east, as at Verdi, Reno and Winnemucca, Nevada, are more definitely striate with the intervals less interrupted, the monticola of Casey.

# Nebria coloradensis Van Dyke, new species

Large, robust, black, the elytra metallic and of a deep violet color, almost black, two spots on front, outer segments of antennae, tarsi and median portion of body beneath somewhat rufous. Head three-fourths breadth of prothorax, eyes moderately convex and prominent, antennae long and delicate, extending beyond middle of elytra, the frontal impressions flattening out laterally into feebly rugose triangular areas. Prothorax slightly less than three-fourths as long as broad, four-fifths as broad as elytra, apex feebly bisinuate at middle and with anterior angles sharply rounded and extending forward; sides broadly arcuate in front, sinuate posteriorly and straight and parallel to base, forming right-angled hind angles, the reflexed margin fairly wide, of even width, and more acutely elevated posteriorly, base feebly bi-emarginate; disk moderately convex and smooth, the median longitudinal line rather finely and feebly impressed, anterior and posterior transverse impressions rather deep, the anterior and basal areas punctate, rugose. Scutellum smooth and arcuate posteriorly. Elytra elongateelliptical, about three times as long as prothorax and four-ninths longer than broad, humeri not prominent, the humeral angles arcuate, sides almost straight or very feebly arcuate and gradually

diverging to posterior third, thence rounded to apex; the disk slightly convex, flattened at middle, the striae finely and rather deeply impressed and very finely, closely punctured, intervals definitely convex, narrowed and crowded near base, broader and flatter behind, the third and seventh irregularly interrupted and catenate behind, the ninth interrupted throughout, the lateral margin finely reflexed. Legs long and delicate. Length 14 mm., breadth 5.5 mm.

Holotype, male (No. 5298, C. A. S., Ent.), a unique collected by myself near the Twin Lakes, Lake County, Colorado, June 28, 1935.

This feebly metallic species belongs very near metallica Fisch. It is, however, longer, proportionately narrower as regards head, prothorax and elytra, the prothorax more gradually narrowed behind, the elytra definitely elliptical, not square shouldered, and the intervals as the result of the narrowed basal area narrower, more convex and crowded together toward the base, the striae also more evidently impressed. This species, though more robust, also has somewhat the facies of purpurata Lec. but its prothorax is larger and broader and the elytra more elliptical, less narrowed and spatulate than in purpurata.

## Nebria zioni Van Dyke, new species

Elongate, somewhat narrow, brown, head, prothorax, epipleurae and often elytral suture more or less rufous, antennae, palpi and legs testaceous, the elytra generally with a feeble, metallic green lustre. Head about one-third breadth of prothorax, eyes moderately convex, antennae long and delicate, extending to middle of elytra, the two rufous frontal spots generally coalescent or the entire forehead rufous. Prothorax two-thirds as long as broad, three-fourths as broad as elytra, apex feebly bi-emarginate, apical angles sharply rounded and extending well forward, sides arcuate in front, narrowing posteriorly, sinuate well in front of hind angles and parallel to base forming prominent right-angled hind angles, very acute at apex, base feebly bi-emarginate; disk convex, anterior transverse impression feebly to well impressed, the posterior transverse and basal impressions deep and more or less punctured, the lateral margin rather wide, broader near hind angles and with a narrow reflexed margin. Elytra elongate-elliptical, or feebly spatulate, three times as long as prothorax, two-thirds as broad as long; the disk slightly convex, stria deeply impressed and very finely, closely punctured, the intervals entire and narrowed and crowded toward base, broader posteriorly, several small punctures in third interval and generally near third stria, the humeral angles obliquely rounded, lateral margins narrowly reflexed. Legs long and delicate. Length 10 mm., breadth 4 mm.

Holotype, male, allotype, female (Nos. 5299 and 5300, C. A. S., Ent.), and several designated paratypes from a series of twenty-one specimens, nineteen collected in the canyon of Zion National Park, Utah, by myself on May 29, 1935, and two collected in the same area by Dr. A. M. Woodbury.

This species is very similar to Nebria eschscholtzi Mén. and probably derived from the same stock. It differs from it by being generally narrower, the prothorax narrower, the sides sinuate farther forward in front of the hind angles and the hind angles themselves more prominent; and the elytra elliptical or feebly spatulate, with the base much narrowed, the humeral area reduced, the elytral intervals much narrowed and crowded at base, and the elytra themselves with a feeble yet definite metallic lustre. The true wings are so much reduced or aborted that they are less than half the length of those in normal eschscholtzi which themselves are considerably aborted and the result of this is indicated in the basal area of the elytra which are very much narrowed as compared with those in the other species.

Nebria eschscholtzi Mén. is a species found commonly along the streams flowing into the Pacific ocean from Alaska to southern California but except in the north where it follows the branches of the Columbia and other streams inland, it does not extend much east of the Cascades or Sierra Nevada mountains. I have seen a typical specimen from Pyramid Lake, Nevada, a remnant of the ancient Lake La Hontine, which formerly had an outlet to the northwest, but I have seen no true eschscholtzi from the southern part of the Great Basin. The ancestors of Nebria zioni were probably isolated and left as relicts as a result of the gradual drying up of most of this inter-mountain region and their physical degenerative processes accelerated.

# Pasimachus velutinus Van Dyke, new species

Large, robust, black, the males shining, the females dull or opaque and generally with a feeble violaceous tint to pronotum, the elytra smooth or even, without sulci or striae. Head large, front smooth or feebly wrinkled, especially forwards in females, frontal impressions deep, eyes large but feebly convex, antennae robust, extending beyond middle of prothorax, segments 2-4 not carinate, feebly compressed toward base at most, labrum broadly and feebly trilobed, conspicuously strigate, mandibles robust and strigate. Prothorax robust, apex broadly emarginate, apical angles subacute and slightly produced forwards, sides broadly arcuate from apical angles to close to base, then narrowed and sinuate to small, feebly everted, acute angles, the base broadly emarginate,

basal marginal line fine and deep; disk slightly convex, almost smooth, median longitudinal line finely impressed, anterior transverse impression in general poorly defined, posterior transverse impression quite evident in the male, vague in females. Elytra cordiform, humeral area broadly rounded, sides slightly arcuate and narrowed and oblique to subacute apex, margins finely reflexed, humeral carina very short but with a small tooth at its base on the margin; disk evenly arched and smooth, the general surface as also of head and pronotum minutely alutaceous under high power of magnification, a double row of minute punctures can sometimes be seen, surface shining in males and dull in females. Legs quite robust, spine of middle tibiae slender and acute, hind tibiae of males not densely pubescent on inner side and tarsi long and slender. Beneath more or less smooth and shining. Length 35 mm., breadth, 13 mm.

Holotype, male, allotype, female (Nos. 5301 and 5302, C. A. S., Ent.) and five female paratypes, the holotype collected at Venedio, Sinaloa, Mexico, July 23, 1918, by J. August Kusche; the allotype at the same locality, June 28, 1918, four paratypes also collected at Venedio while the fifth was taken at San Bernardino, Rio Mayo. Sonora, Mexico, July 15, 1935, by H. S. Gentry.

This fine species might at first sight be confused with Pasimachus californicus Chd. It is in general somewhat longer, the males and females differ in appearance to a greater degree, and it has the distinctive characters such as the non-carinate basal segments of the antennae and the non-pubescent inner surface of the male hind tibiae. I cannot find any other species listed from Mexico other than californicus that at all resembles it and it differs greatly from any of those found in our own country.

# Dyschirius arizonicus Van Dyke, new species

Medium sized, narrow and elongate, entirely rufous to rufotestaceous. Head smooth with an inverted V-shaped impression between antennae, clypeus tridentate with median tooth prominent. Prothorax globose, smooth and shining, median longitudinal line finely impressed and anterior transverse impression distinct. Elytra elongate, base subtransverse and with basal striae distinct, humeral angles well rounded, all striae present and complete, well impressed and finely punctured to posterior third, third interval tripunctate. Anterior tibiae not dentate. Length 3 mm., breadth 1.25 mm.

Holotype (No. 5303, C. A. S., Ent.) and five paratypes collected at Holbrook, Arizona, and coming to me from the C. W. Leng collection.

This rufous species, in size, color and general appearance, looks very much like *Dyschirius salivagans* Lec. but the margined base of elytra and tripunctate elytral intervals separate it widely. The well marked tridentate clypeus would place it very close to *Dyschirius tridentatus* Lec.

## Feronia (Feronina) humidula Van Dyke, new name

In January, 1926, I described a new species of Feronia as Pterostichus pacificus (Pan-Pacif. Ent., II, No. 3, p. 114). The specific name, I find, is preoccupied by P. pacificus Poppius (Acta. Soc. Fauna Flora Fenn., XXVIII, 1906, nr. 5, pp. 25, 184). I therefore take this opportunity to change the name of my species to humidula Van Dyke. The generic name Pterostichus Bon. will also have to be replaced by Feronia Latr. for, according to H. E. Andrewes, an authority on the Carabidae, Bonelli never properly published the description of the genus, merely sending a leaflet with the description to a few friends. The species of Poppius is in the subgenus Cryobius. I formerly placed my species in that subgenus but I find upon reexamination and with the help of additional specimens, that it does not belong there but in the subgenus Feronina Csy. along with lanei Van Dyke, described at the same time. As a result, I find that there are three species in the subgenus and their distribution is interesting in that it corresponds with the three relict tertiary faunas of northern origin in North America: the Vancouveran, the Idahoan and the Alleghaenian. I have defined these in various papers, the first published in 1919 (Ann. Ent. Soc. Am., XII, pp. 1-12, 1919). The following synopsis will aid in the separation of the members of the subgenus Feronina.

#### SYNOPSIS OF THE SPECIES OF FERONINA

1. Larger species, 11 mm. or over in length, black or dark castaneous (immature), elytra about twice as long as broad..........2

-. Smaller species, 8-9 mm. long, piceous to black, legs quite rufous, elytra barely a third longer than broad; eyes moderately convex; sides of prothorax arcuate in front, sinuate behind and straight and parallel for a short distance to the right-angled hind angles, the basal impressions broad and deep and more or less coarsely punctured; elytral intervals somewhat flattened. Prosternum rounded and deflexed at apex, not margined. Grays Harbor, Wash. (type, Hoquim) and northern Coast of Oregon, Cannon Beach and Columbia County......

These three species are all rare in collections. They all dwell in very wet or boggy regions. Of humidula, I now have five specimens including the type, all from the wet belt of coastal Washington and Oregon, in the true Vancouveran faunal area. This species is also the most distinct of the three. Of the second, palmi, intermediate in size between the other two, I have twentynine specimens, all collected by myself in the Black mountains of North Carolina, in the heart of the true Alleghanian faunal area. This series also shows a great deal of variation as to the shape of the prothorax. The much flattened eyes and horizontal and margined prosternum will readily separate this species from the others though it superficially very much resembles the following. Of this last species, lanei, I have only the type though I have seen others. It is the largest of the three.

# Feronia (Cryobius) blaisdelli Van Dyke, new species

Small, narrow and elongate, gracefully formed, black and shining, antennae and legs rufous, in one specimen piceous. Head about as broad as long, as wide as apex of prothorax, front smooth, frontal grooves lunate and well impressed; mandibles prominent, porrect; eyes moderately arcuate and prominent; antennae long and delicate, extending beyond base of elytra. Prothorax as broad as long, apex feebly emarginate, sides arcuate in front, narrowed and sinuate at posterior fourth, thence straight and parallel to acute right-angled hind angles; disk with median longitudinal line finely impressed, anterior transverse impression well defined, posterior evident, basal impressions lunate, linear, extending forward almost to middle, basal area somewhat rugose, hind angles broadly and obliquely flattened and gradually elevated outwardly, without well marked carinae, base feebly emarginate and without margin. Elytra elongate-elliptical, two-fifths longer than head and prothorax combined, humeral angles obliquely rounded, sides feebly arcuate at middle, broadly rounded and somewhat sinuate to apex; disk slightly convex, more or less flattened at middle, stria finely impressed, less well defined at sides and apex and finely somewhat obscurely punctured. Legs long and delicate. Prosternum with broadly reflexed margin. Males with well dilated front tarsi. Length 7.5 mm., breadth 2.75 mm.

Holotype, male, allotype, female (Nos. 5304 and 5305, C. A. S., Ent) and three paratypes, all collected by Dr. F. E. Blaisdell at Nome, Alaska, during July, 1900.

This graceful and distinct member of the subgenus Cryobius is more like an elongated Trechus than like its relatives, though some of the species like hudsonicus Lec. resemble it somewhat but are far more robust in every regard. I have checked this species against the descriptions of Sahlberg and Poppius but cannot find any that would apply to it.

### Evarthrus (Ferestria) taurus Van Dyke, new species

Rather small, short and robust, smooth and shining, black, femora piceous and tibiae, tarsi, antennae, and generally much of front part of head, especially clypeus, rufous. Head almost as broad as long, front smooth, frontal impressions distinct; eyes rather large, moderately convex; antennae robust, extending to posterior fourth of prothorax; mandibles robust and striate, terminal segment of labial palpi longer than preceding, the latter generally with two setae. Prothorax somewhat lunate, over onefourth broader than long, front margin feebly emarginate, sides broadly arcuate to behind middle, thence narrowed and convergent to base, side margin absent and hind angles eliminated; disk feebly convex and shining, median longitudinal line finely impressed, anterior transverse impression sharply impressed, posterior transverse impression generally obsolete, basal impressions elongate-punctiform and deeply impressed. Elytra cordiform, humeral angles well rounded, sides arcuate, narrowed posteriorly, oblique and slightly sinuate before apex, margin narrowly reflexed; disk convex, striae at most finely impressed though generally more or less obsolete, the single dorsal puncture about at middle of third interval close to second stria. Beneath quite smooth. Legs rather robust, the male front tarsi feebly dilated. Prosternum sulcate behind. Length 11 mm., breadth 4 mm.

Holotype, male, allotype, female (Nos. 5306 and 5307, C. A. S., Ent) and fourteen paratypes, all collected by myself near Punta Gorda, Florida, February 5-10, 1940. Besides these I have before me three slightly smaller and narrower specimens, two collected by me near Brooksville, Harnando County, Florida, January 20-30, 1940, the third in the Fenyes collection of the Academy, merely labeled "Fla., Bowditch."

This bull-like species superficially resembles *Evarthrus* (Ferestria) morio (Dej.) especially the smaller specimens of the former, but it can always be definitely separated by the absence of the side margin to the prothorax which is so evident in morio. It is also generally larger, the type series, and more powerfully built.

## Evarthrus (Ferestria) hernandensis Van Dyke, new species

Rather small, short, and robust like the previously described species, smooth and shining, black, antennae, palpi and legs rufous. Head 5 mm. narrower than long, front smooth, fronto-clypeal suture fine, frontal impressions distinct; eyes rather large and convex; antennae robust, extending to posterior fourth of prothorax; mandibles robust, terminal segment of labial palpi longer than preceding, the latter bisetose. Prothorax transverse, almost twice as broad as long, front margin feebly emarginate, sides arcuate to behind middle, thence obliquely convergent to obtuse and somewhat rounded hind angles, side margin complete and slightly reflexed; disk feebly convex and very shining, median longitudinal line finely impressed, anterior transverse impression vague, the posterior also vague, basal impressions short, linear, moderately impressed. Elytra elongate, cordiform, humeral angles well rounded, sides feebly arcuate, almost straight at middle, gradually narrowed behind and sinuate before apex, the side margin narrowly reflexed; disk convex with six deeply impressed, finely punctured striae, obliterated toward apex, intervals quite convex, the single elytral fovea slightly behind middle on third interval. Beneath smooth and shining. Legs fairly robust, anterior male tarsi feebly dilated as in the former species and its close relatives. Prosternum sulcate behind. Length 11 mm., breadth 3.75 mm.

Holotype, male, and allotype, female (Nos. 5308 and 5309, C. A. S., Ent.), collected by myself, near Brooksville, Hernando County, Florida, January 20-30, 1940.

This species is in size and shape much like the preceding species but is readily separated by possessing a margin to the prothorax and having deeply striate elytra. It also somewhat suggests the larger specimens of *Feronia* (*Gastrosticta*) tumescens (Lec.) because of its stocky form and deeply striate elytra.

# EVARTHRUS (ANAFERONIA) CONSTRICTUS OVIPENNIS Le Conte

In the Biologia Centrali-American, H. W. Bates describes one species of Evarthrus as constrictus and Csiki, in the Coleopter-orum Catalogus, changes the name to "Batesellus" as the name constrictus had been previously used by Say. Csiki placed the species in the subgenus Cyclotrachelus where it no doubt be-

longs. I have a series of seven specimens of another species, from Mexico, collected at 9,300 feet, near El Salto, Durango, by M. A. Embury. These specimens cannot be separated from specimens of *ovipennis* Lec., collected in various places in the mountains of New Mexico. It is, of course, nothing but a smooth variety or subspecies at the most of the true *constrictus* Say now placed in the subgenus *Anaferonia*.

In this connection, I wish to state that I believe all of the Feronians in this country with a single dorsal elytral fovea should be included in the single genus Evarthrus Lec. That would include Anaferonia Csy., Cyclotrachelus Chd., Eumolops Csy. and Ferestria Leng as subgenera. Megasteropus gigas Csy. is a synonym of Eumolops heros (Say). The labial palpal characters are not always reliable because they are variable, and the variations in general shape upon which many of the so-called genera have been founded are not fundamental, merely divergencies. Evarthrus, as first conceived by Le Conte, is a genus whose species other than having the single elytral fovea, all have a common facies which unites them. Its main center of distribution is in the southeastern part of the United States and it is undoubtedly a genus of American origin. It is a definite unit, even though at times hard to properly define, and stands well apart from all other Feronians in America. I also most certainly do not agree with Csiki, the European cataloguer, in placing it as a subgenus or series of subgenera under Pterostichus Bon. or more properly Feronia Latr.

# Amara (Cyrtonotus) durangensis Van Dyke, new species

Of moderate size, elongate, moderately convex, smooth and shining, black to piceous or brown, antennae, palpi and legs lighter, piceous to rufous. Head five-sevenths as wide as prothorax, smooth, frontal impressions rather deep, eyes quite prominent, antennae reaching behind base of prothorax. Prothorax about onefourth wider than long, base definitely wider than apex, apex emarginate, margined toward sides, sides arcuate in front, sinuate and narrowed slightly in front of base to right-angled hind angles, base feebly arcuate; disk smooth with median longitudinal line finely impressed, anterior transverse impression absent or vague at the most and apical area without punctures, basal area generally with a limited number of punctures, mostly confined to basal impressions which are well impressed, distinctly bifoveate, and with a moderately acute carina as their outer boundary. Elytra somewhat elliptical, more than three-sevenths longer than broad, considerably narrowed basally, basal angles well rounded, sides arcuate, broadly rounded and sinuate before apex; disk with striae complete, finely impressed and generally finely, vaguely punctured though often impunctate. Middle tibiae with two well marked spines. Length 11 mm., breadth 4 mm.

Holotype, male, allotype, female (Nos. 5310 and 5311, C. A. S., Ent.) and numerous designated paratypes from a series of forty-four specimens in my collection, collected at Juan Manuel, El Salto, Durango, Mexico, alt. 9,300 feet, by M. A. Embury.

H. W. Bates, in the Biologia Centrali-Americana, mentions two species of the subgenus Cyrtonotus as being found in Mexico: putzeysi Bates and deparcus (Say). The former, of which I have a specimen before me (Koebele Coll.), is much larger in every regard, besides is distinctly punctured over the apical portion of the pronotum, has the elytral striae distinctly punctured, the intervals much broader and flatter and the elytra at base somewhat square shouldered. Say states that deparcus has the pronotum "deeply punctured" in front as well as behind and that the elytral striae are obsolete before the tip, neither of which conditions fits this species. This species also differs considerably from any of the species found north of the Mexican boundary. A striking feature of durangensis is not alone its general smoothness and reduced punctuation, but its somewhat elliptical afterbody which is due to the evident atrophy of certain structures near the base. As indicated in the description given above, there is considerable variation among the specimens of the series which I possess.

## Agra aethiops Van Dyke, new species

Rather large, jet black and shining throughout. Head about one-fourth longer than broad across eyes, postocular area feebly narrowed and broadly rounded before constricted neck, front smooth and shining, frontal impressions deeply impressed; antennae reaching beyond base of elytra; eyes prominent. Prothorax one-third longer than broad, narrowed and parallel-sided at apex, feebly arcuate and gradually wider to posterior third, thence sinuate and narrowed to base; disk feebly convex, smooth and shining, median longitudinal line finely impressed, area on either side finely, transversely wrinkled, a few small punctures in a row on sides and marginal groove rather deep and somewhat coarsely, irregularly punctured. Elytra less than twice as long as broad, humeral angles prominent, base margined, sides sinuate, gradually wider to posterior fourth, apex obliquely truncate with sutural angle acute and an acute spine at outer angle; disk with all striae complete, well impressed and finely, closely punctured, intervals at middle twice as broad as striae, narrowed laterally, third, fifth and seventh with a limited number of small foveate punctures generally along their inner margin. Beneath smooth and shining, a few punctures on metaepisterna and abdominal sclerites, feebly aciculate at sides and near hind margins. Median lobe of prementum not greatly prolonged and rounded apically. Legs long and slender, anterior tarsi of males broadly dilated, 2-4 transverse, the fourth deeply bilobed as usual. Length 22 mm., breadth 5.5 mm.

Holotype, male (No. 5312, C. A. S., Ent.) and four paratypes, all collected at Venedio, Sinaloa, Mexico, July 16-30, 1918, by J. August Kusche.

This species is apparently near Agra eurypelma Bates but differs by being entirely of an inky black color, antennae and legs included by having the postocular part of the head broadly rounded, slightly narrowed posteriorly, not "gradatim angustato" and the pronotum not grossly punctate. It does not appear to agree with any of the other known species of the genus.

### Stenomorphus rossi Van Dyke, new species

Very elongate, narrow, considerably flattened above, dark rufous, legs rufotestaceous. Head narrow and long, 2.5 mm. broad, 3 mm. long, neck long, 1 mm., and cylindrical, eyes moderately convex and prominent, antennae delicate, reaching to posterior quarter of prothorax, upper surface of head smooth and shining behind, sparsely punctured in front, especially on clypeus, labrum finely punctured and alutaceous. Prothorax long and elliptical, length 5.5 mm., breadth 2.5 mm. at apex, 3.5 mm. at middle and 2.25 mm. at base. Sides evenly arcuate from apex to posterior third, thence narrowed and feebly sinuate to base; disk much flattened, shining, median longitudinal line finely, not sharply impressed, anterior transverse impression obliterated, basal impressions well impressed. Elytra 8 mm. long, 4 mm. broad slightly behind the transverse base, thence gradually narrowing to posterior fourth and arcuate and feebly sinuate to apex; disk feebly convex, somewhat less flattened than pronotum, striae well impressed, intervals feebly flattened. Legs long and delicate.

Male. Front femora subangulate below near apex, middle femora with distinct rectangular and acute tooth below near apex, middle tibia feebly arcuate and densely pubescent from beyond middle to apex on inner side, first segment of anterior tarsus feebly dilated.

Female. Similar in general to male except slightly shorter and with prothorax a bit broader proportionately at base. Length 16 mm, breadth 4 mm.

Holotype, male, and allotype, female (Nos. 5313 and 5314, C. A. S., Ent.), collected near the railroad station at Chiricahua, Arizona, August 11, 1940, by Dr. E. S. Ross.

This species is proportionately the most elongate and delicately formed species that we have in our fauna. At first glance it somewhat suggests manni Darl. from Haiti. Its small and long head, especially long neck, and elongate-elliptical and much flattened prothorax will readily separate it from any of our other species. It is less robust than convexior Notm., californicus, Mén. or penicillatus Darl. Its middle tibiae are suggestive of sinaloe Darl. as shown by Darlington's plate (Pan-Pacif. Ent., XII, p. 42, 1936), but its prothorax is very different. The first segment of front tarsus in the male is also much less dilated than is the case in our other species.

### Pseudomorpha parallela Van Dyke, new species

Rather small, narrow, elongate, subcylindrical, with parallel sides, rufopiceous and alutaceous. Head more than two-thirds as wide as prothorax, smooth, with a very few, minute punctures, chiefly a row across vertex, preocular lobes not prominent. Prothorax transverse, three-fifths as long as broad, as broad as elytra, moderately convex, with a few minute punctures at sides, apex bisinuate and finely margined, base transverse, sides straight and parallel behind, forming a continuous line with sides of elytra, arcuate and feebly convergent to apex in front, lateral margin finely reflexed. Elytra 4 mm. long by 2.5 mm. wide, with straight and parallel sides, finely margined, apex truncate, outer angles well rounded, the sutural narrowly rounded, disk with seven rows of coarse punctures, obsolete at base, each row with a limited number of punctures and each bearing an erect fulvous hair. Third and fourth ventrals with a small, transverse patch of short, golden pile at middle. Length 6.5 mm., breadth 2.5 mm.

Holotype (No. 5315, C. A. S., Ent.), a unique male, collected by Dr. F. E. Blaisdell at Warners, San Diego County, California, July 13, 1925.

This small, cylindrical species, would run close to cylindrical Csy. and angustata Horn in Notman's Key (Proc. U. S. Nat. Mus., Vol. 67, Art. 14, No. 2586, pp. 14-15), but it is considerably smaller than either, finely alutaceous, not smooth, and different as regards the punctation.



Van Dyke, Edwin C. 1943. "New species and subspecies of North American Carabidae." *The Pan-Pacific entomologist* 19, 17–30.

View This Item Online: <a href="https://www.biodiversitylibrary.org/item/225864">https://www.biodiversitylibrary.org/item/225864</a>

Permalink: <a href="https://www.biodiversitylibrary.org/partpdf/236940">https://www.biodiversitylibrary.org/partpdf/236940</a>

#### **Holding Institution**

Pacific Coast Entomological Society

#### Sponsored by

IMLS LG-70-15-0138-15

#### **Copyright & Reuse**

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Pacific Coast Entomological Society

License: http://creativecommons.org/licenses/by-nc-sa/4.0/

Rights: <a href="https://biodiversitylibrary.org/permissions">https://biodiversitylibrary.org/permissions</a>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.