

**Descriptions of New Species of United States
COLEOPTERA.**

BY GEO. H. HORN, M. D.

This short contribution to Coleopterology was begun with the intention of making known the new species brought by Mr. G. R. Crotch, belonging to the families to which the author had more especially given attention. There being many new species in these families from other parts of the country, this opportunity has been made use of to add descriptions of these, as well as to make known some synonyms, and to present synoptic tables of several genera, in order that the species may be more readily recognized.

The attention of collectors in various parts of the country is called to the species of *Corphyra*. The number occurring in California alone is nearly equal to that of the entire region east of the Rocky Mountains, and this fact gives rise to the suspicion that the species of the latter region have not been properly collected and examined, owing to their great superficial resemblance.

The collections of Mr. Crotch show that, although very much has been done in the development of the Coleopterous fauna of the Pacific region, much remains to be done, especially in the smaller species, and to these the attention of collectors is particularly requested.

CYCHRUS, Fab.

C. mimus, n. sp.—Black. Head smooth, transversely moderately convex, clypeus with slight triangular impression at middle. Thorax cordate, not longer than wide, sides arcuate in front, sinuate posteriorly, hind angles rectangular, surface sub-opaque, median line finely impressed, basal transverse impression deeper, margin finely reflexed. Elytra oval, slightly more narrowed posteriorly, convex, finely striate, striæ with coarse, moderately deep but not close punctures. Body beneath smooth, shining, reflexed portion of elytra sparsely punctate. Length .56—.68 inch; 14—17 mm.

The males of this species have the anterior tarsi with three joints dilated and pubescent beneath, and in the group thus characterized it is allied to *striatus* and *obliquus* especially, differing from the former by its broader thorax and more deeply punctured elytral striæ; from the latter by the sides of thorax not being oblique. The latter species (*obliquus*) has not the triangular impression at middle of clypeal margin and has the middle portion of the head more convex. With the exception of the tarsal character of the male, this species cannot in description be distinguished from *punctatus*, the only noticeable superficial difference being that *punctatus* has the striæ much less and the

punctures rather more distinct. The resemblance between these two species has a parallel in another portion of the series, *ventricosus* and *alternatus* of which the females are at times very troublesome to separate.

Numerous specimens were collected by Mr. Crotch along the Santa Ana River, at San Bernardino, California.

HETÆRIUS, Erichs.

H. tristriatus, n. sp.—Form broadly oval, robust; color castaneous, shining; surface sparsely clothed with recumbent pubescence intermixed with moderately long yellowish hairs. Head sparsely punctured, front concave. Thorax wider than long, slightly wider at base than apex; on each side a deep oblique groove, deeper posteriorly, dividing the surface into a discal and lateral portions; discal division shining, very sparsely punctured; lateral portion divided again in two by a deep transverse groove, the posterior being elongate oval, smooth, shining, the anterior flattened but irregular, dilated in front, and with sparsely punctured surface. Elytra with the subhumeral (or marginal) stria extending two-thirds the length of the elytra, first dorsal entire arched at tip toward the third, second very slightly shorter, third entire, striæ deeply impressed at basal end, their outer margins being elevated. Propygidium sparsely punctured, pygidium smooth with few punctures at the sides only. Prosternum at tip deeply emarginate, stria extending entirely around the tip, anteriorly moderately constricted and at extremity truncate and perforate. Mesosternum with distinct marginal line. Metasternum and abdomen smooth, shining. Length .10 inch; 2.5 mm.

The appearance of this species is very much that of *morsus*, but it is smaller and relatively broader, the thoracic angles are less dilated in front although of similar aspect. The striation of the elytra is entirely different and the legs of the present species very much shorter, resembling those of our other species.

Several specimens of this species were collected by Mr. Crotch, at Calaveras, California.

PAROMALUS, Erichs.

P. difficilis, n. sp.—Oblong oval, sub-depressed, piceous, shining. Thorax and elytra moderately coarsely but not densely punctured. Elytra without traces of dorsal striæ, sutural moderately impressed, extending two-thirds to base. Body beneath much more finely and sparsely punctured than above, mesosternum with entire marginal stria. Length .08 inch; 2 mm.

This species possesses characters of *bistriatus* and *seminulum*. Of the former it has nearly the form and a similar mesosternal line, and with the latter it agrees in the possession of the abbreviated sutural stria.

Several specimens collected by Mr. Crotch, Mojave, California.

NOSODENDRON, Latr.

N. californicum, n. sp.—Form broadly oval, moderately convex, black, feebly shining. Head moderately coarsely and closely punctured. Thorax less densely punctured than the head or elytra and more shining, sides very feebly arcuate. Elytra subopaque, coarsely, densely and rather deeply punctured, punctures at sides denser but smaller, and with small, round tufts of short, erect yellowish scale-like hairs arranged in fine series on each elytron (those on the dorsum usually lost). Body beneath opaque. Mesosternum very coarsely punctured, abdomen more finely and sparsely punctured. Length .18 inch; 4.5 mm.

This species is of the same form and size of our Eastern species, from which it differs by its more opaque and closely punctured surface and the possession of the elytral tufts. In the latter character it resembles the transatlantic species, *fasciculare*, with which I have been unable to compare it.

One specimen from California, kindly given me by Mr. Ulke; others were collected by Mr. Crotch, at Calaveras, in the same State.

ESTHESOPUS, Esch.

E. bicolor, n. sp.—Oblong, rufo-piceous, thorax and head rufous, elytra black, legs testaceous. Head sparsely punctured. Thorax slightly longer than wide, in front feebly arcuate, at base slightly broader, surface shining, sparsely punctured. Elytra deeply striate, striæ coarsely and deeply punctured, intervals convex, irregularly biserially punctulate and obsoletely reticulate. Body beneath sparsely and finely punctured. Antennæ and palpi testaceous. Claws broadly toothed at base. Length .22 inch; 5.5 mm.

The surface is very sparsely pubescent. The thoracic punctures are those of the coarser series, the finer intermediate punctures being scarcely visible. Differs from our other species by its color.

One specimen presented by Mr. Edw. Tatnall, Jr., by whom it was collected in Delaware.

Cardiophorus mimeticus, Horn, (Trans. Am. Ent. Soc., 1872, p. 147,) appears to be merely a male of *C. Edwardsii*, Horn. The former species has the humeri only red, while in the latter the extension of that color embraces the entire elytra, except an elongate, fusiform, sutural black stripe. The former name should be suppressed. The determination is founded on a moderate series brought by Mr. Crotch.

ELATER, Linn.

E. Phelpsii, n. sp.—Form of *cordifer*, slightly more elongate and convex. Head black, densely punctured and opaque, sparsely clothed with short, black, erect hairs. Antennæ not longer than head and thorax, joint 3 slightly longer than 2, and together not longer than 4, outer joints triangular. Thorax not longer than wide, sides in front feebly arcuate, hind angles not divergent and

obtusely carinate, surface densely and moderately coarsely punctured and sub-opaque, with short black hairs. Scutellum black. Elytra sanguineous with apical irregularly cordiform spot involving the entire apex, surface sparsely clothed with short, erect pubescence agreeing in color with the surface, feebly striate, striæ moderately coarsely punctured, intervals flat, sparsely punctulate. Body beneath black, sparsely punctured and with short, black hair. Legs black, tarsi rufous. Length .36 inch; 9 mm.

This species is allied to *cordifer* and *Behrensi*, and differs from the former in being less depressed and the thorax more densely and coarsely punctured and opaque. In *cordifer* the apical spot is exactly cordiform in shape and does not attain either the lateral or apical margins, and there is also an ill-defined spot on each elytron behind the scutellum. *Behrensi* has the thorax shining and much more sparsely punctured and the hind angles more strongly carinate.

Specimens were collected by Mr. Crotch, at Tahoe, California. The species is dedicated with pleasure to Mr. E. L. Phelps, through whose skilled assistance Mr. Crotch was enabled to accomplish such good results.

GLYPHONYX, Cand.

G. mimeticus, n. sp.—Elongate, rufo-testaceous, sparsely pubescent. Head coarsely, deeply and densely punctured. Thorax longer than wide, sides parallel, anterior angles rounded, hind angles very feebly divergent, and with a very long carina, extending in front of the middle, very close to the marginal line posteriorly; basal impression moderate; surface shining, sparsely and moderately coarsely punctured. Elytra slightly wider than the thorax, deeply striate, striæ coarsely, deeply and closely punctured, intervals convex, more elevated at apex, very sparsely punctulate. Thorax beneath more coarsely punctured than above, body and abdomen more finely and densely punctured. Length .24—.26 inch; 6—6.5 mm.

In one specimen before me, smaller in size than the other, the eighth elytral interval is very strongly elevated at tip, forming a well marked carina. This species may be distinguished from either of those previously known by its more elongate form, more convex elytral intervals and the sexual (?) character above indicated. At first sight the species might be taken as a *Horistonotus*, and its resemblance to *H. Uhleri* or *Esthesopus humilis*, is very great.

Two specimens from Texas were kindly presented by Mr. William Jülich, of New York.

Limonius cribricollis, Horn, should be suppressed, the specimen on which it is founded being immature and without any doubt *Melanotus longulus*, Lec., in which the serrations of the claws are barely visible, except with high power.

OESTODES, Lec.

O. puncticollis, n. sp.—Form slender. surface sparsely clothed with very short pubescence. Head very densely and coarsely punctured, black; antennæ (♂) longer than the head and thorax, subserrate. Thorax black, moderately shining, longer than wide, sides very feebly arcuate, hind angles slightly divergent and moderately strongly carinate and an extra-angular carina parallel with the margin, short but well defined, base of thorax bisinuate and opposite the scutellum deeply emarginate, the emargination obtusely toothed at middle; surface strongly convex, coarsely, deeply, moderately densely and evenly punctured. Scutellum oblong, shining, slightly impressed longitudinally. Elytra testaceous, suture and base piceous, surface moderately shining, (sutural stria alone entire), vaguely and irregularly punctured and at base with a slight humeral oblique impression. Body beneath piceous, thorax less coarsely punctured than above, metasternum and abdomen sparsely and finely punctured, shining. Legs testaceous. Length .24 inch; 6 mm.

This species resembles *tenuicollis*, Rand., in form and coloration, and appears to differ only in the punctuation of the thorax, which is shining, and nearly smooth in *tenuicollis*, while in the present species it is very coarsely, deeply and rather densely punctured.

One specimen collected by Dr. Elliot Coues, near the northern boundary of Dakota, while naturalist of the North Western Boundary Survey.

APLASTUS, Lec.

Several new species having appeared, it seems advisable to present some scheme, by which they may be distinguished, founded on characters least subject to variation. The following will serve for those at present known:

Third joint of antennæ similar in size and shape to the fourth.

Antennæ slender, feebly serrate, three basal joints only pilose; sides of thorax parallel, not margined, hind angles strongly divergent.

angusticollis.

Third joint of antennæ always much smaller than the fourth, sometimes globular, never triangular; antennæ with short erect hairs.

Thorax not margined.

Antennæ strongly serrate, joints 2, 3 very small nearly equal, together slightly longer than half the fourth.

Elytra scarcely striate, thorax very sparsely punctate....**tenuiformis.**

Elytra moderately deeply striate, thorax coarsely and moderately densely punctate.....**corymbitoides.**

Antennæ serrate, joint 3 more than twice the length of 2, and together nearly as long as the fourth.....**speratus.**

Thorax with the sides distinctly margined, at least at base.

Form slender, tarsi slender and as long or longer than their tibiae. Color ferruginous. Pubescence coarse.....**optatus.**

Form shorter, less slender, thorax more convex, tarsi never as long as their tibiae. Color piceous. Pubescence fine.....**molestus.**

A. angusticollis, n. sp.—Form slender, color ferruginous, sparsely clothed with short cinereous pubescence. Head coarsely but not densely punctured, vertex slightly impressed. Eyes more prominent than the sides of thorax. Antennæ feebly serrate, three basal joints only hairy, second joint small, oval, third similar to and nearly as long as the fourth. Thorax quadrate or slightly longer than wide, sides parallel not margined, hind angles acute strongly, sometimes very suddenly divergent, acutely carinate, surface convex, sparsely punctured. Elytra as wide at base as thorax, elongate, feebly convex, sides very feebly arcuate, gradually narrowing to apex, surface obsoletely striate, intervals feebly convex, moderately densely punctured and sparsely pubescent. Body beneath darker than above and similarly punctate and pubescent. Tarsi slender, as long as their respective tibiæ, hind tarsi somewhat longer. Length .50—.56 inch; 11.5—14 mm.

This species is the most slender of the genus and is readily known by the characters in the table.

In the terminal ventral segment several characters are plainly visible. In those, which I take to be males, the last ventral segment has the sides slightly oblique near the tip, while the tip is feebly emarginate, in the other sex the segment is oval at tip and entire.

Numerous specimens were taken by Mr. Crotch, at San Diego, California.

A. tenuiformis, n. sp.—Form slender, color piceo-testaceous or ferruginous, sparsely clothed with fine cinereous pubescence. Head coarsely and moderately densely punctured. Eyes not more prominent than the sides of thorax. Antennæ strongly serrate, sparsely clothed with short erect hairs, second and third joints small, globular and nearly equal in size, and together scarcely longer than half the fourth. Thorax subquadrate, slightly longer than wide, sides very feebly arcuate and slightly divergent, not margined, hind angles acute, moderately strongly divergent and acutely carinate, surface convex, coarsely but not densely punctured, median line usually feebly impressed. Elytra as wide at base as thorax, sides gradually narrowing to base, surface moderately convex, obsoletely or not at all striate, interval scabropunctate. Body beneath more shining than above, sparsely punctulate and pubescent. Tarsi slender as in the preceding species. Length .44—.50 inch; 11—12.5 mm.

The males have the sides of the last ventral segment slightly oblique near the tip and the tip truncate.

The three specimens in my cabinet are from Nevada and parts of California unknown to me.

A. corymbitoides, n. sp.—Piceous, moderately shining, sparsely clothed with short, grayish silken pubescence. Head densely and coarsely punctured. Antennæ strongly serrate, with short erect pubescence, joints 2, 3 small, oval, the third somewhat the larger and together not longer than half the fourth. Thorax slightly longer than wide, convex, coarsely but not densely punctured, median line feebly impressed, sides not margined, anteriorly feebly arcuate, hind angles moderately divergent, carinate. Elytra as wide as thorax, sides

gradually convergent, moderately convex, surface finely but rather deeply striate, striæ indistinctly punctate, intervals moderately convex, moderately densely and rather roughly punctate, prosternum in front of coxæ obtusely carinate. Body beneath sparsely punctate and pubescent and more shining. Length .50 inch; 12.5 mm.

The males have the last ventral segment slightly oblique at the sides and very feebly truncate at tip. The last ventral of the female is not oblique and is very slightly prolonged and oval at tip, the difference between the two sexes in this respect is barely discernible.

By the form of the antennæ this species is allied to *molestus*, *optatus* and *tenuiformis*; it differs from the first two by the absence of any marginal line, and from the latter by its less slender form and rather deeply striate elytra, and from all by the thorax more coarsely and densely punctured. Its form is nearly that of the male of *Corymbites cylindriformis*.

All the species of this genus have the last joint of the antennæ rather suddenly narrowed near the tip, presenting the appearance of the false joint so often seen in *Ludius*; in *molestus*, however, this character is barely perceptible.

Specimens were collected by Mr. Crotch, at Los Angeles, California.

A. speratus, Lec.—In this species the thorax is distinctly longer than wide, the sides feebly and the hind angles more strongly divergent. The third joint of the antennæ is nearly twice as long as the second, and the two together nearly equal to the fourth. The elytra are very feebly striate, the intervals sparsely clothed with short but coarse pubescence which converges from each side of the interval to the middle and forms, apparently, lines of pubescence. The tarsi are slender and as long as their respective tibiæ. Length .56—.62 inch; 14—15.5 mm.

Occurs at Tejon and Los Angeles, California.

The sexual characters are the same in this species as in *angusticollis*. The antennæ are clothed with short erect hairs.

A. optatus, Lec.—Thorax as long as wide; sides distinctly margined, gradually divergent to base, hind angles slightly more divergent, acutely carinate, surface moderately convex, sparsely punctate and shining. Antennæ strongly serrate, sparsely hairy, third joint elongate oval, larger than the second, the two together equal to three-fourths the fourth joint. Elytra feebly striate, striæ punctured, intervals sparsely punctate and sparsely pubescent. The under surface is sparsely and finely punctate. The tarsi are slender, the anterior four as long, the hind tarsi longer than the tibiæ. Length .60 inch.

The male of this species has the last ventral segment rather deeply sinuate on each side and considerably prolonged at middle, the tip obtusely rounded.

Occurs in the Southern Coast Range and at Tejon, California.

A: molestus, n. sp.—Piceous, feebly shining, sparsely clothed with a very fine pubescence. Head moderately densely and rather coarsely punctured. Eyes feebly prominent. Antennæ serrate, sparsely hairy, second joint very small, third larger, the two together nearly equal to the fourth. Thorax not longer than wide, sides distinctly margined, very feebly arcuate, gradually divergent to base, hind angles very slightly more divergent and carinate, surface rather strongly convex, usually moderately densely punctured. Elytra finely striate, intervals moderately densely scabro-punctate. Body beneath more shining than above, moderately densely punctulate. Tarsi slender but not longer than the tibiæ. Length .48 inch; 12 mm.

The three specimens before me are probably all males. The last ventral segment has a very feeble sinuation on each side.

Collected by Mr. William M. Gabb, near San Francisco, California.

MALACHIUS, Fab.

M. macer, n. sp.—Form slender. Head black bronzed, smooth and shining, with slight frontal impression. Thorax slightly broader than long, smooth, very shining, large irregular discal spot black, margins pale testaceous. Elytra scarcely wider than the thorax, surface scabrous, moderately shining, black, slightly bronzed, with broad testaceous vitta extending from the humerus to apex. Body beneath black, shining, legs pale testaceous, upper margin of femora and last joint of tarsi black. Length .12 inch; 3 mm.

Male.—Antennæ black, pectinate, elytra slightly prolonged, and testaceous at tip.

Female.—Antennæ serrate, elytra obtuse and testaceous at tip.

Two specimens collected by Mr. G. R. Crotch, in the region of Lake Tahoe, California.

M. spinipennis, n. sp.—Form of *auritus*. Head smooth, shining, black, front slightly impressed. Thorax broader than long, surface very smooth and shining, black, lateral margins pale red. Elytra slightly broader at base than thorax, surface feebly scabrous, bluish, moderately shining. Body beneath black, shining, legs black with tinge of blue, hind tibiæ testaceous at apical half. Length .18 inch; 4.5 mm.

Male.—Antennæ black, joints 5—10 pectinate, joints 3, 4 triangular. Elytra sinuate at apex, suture prolonged into a spiniform process and red, beneath which are appendages of curious structure, one being spiniform and projecting backwards under the spiniform process of the suture and concealed by it from above.

Female.—Unknown.

Collected by Mr. G. R. Crotch, at Fort Tejon and Santa Barbara, California.

Two specimens, both males, are before me which differ from each other as follows: the smaller has the antennæ less decidedly pectinate, the elytra more opaque and bronzed instead of blue, and the discal black spots of thorax much smaller.

This species is closely allied to *mirandus*, which, however, has the elytral appendages very prominent and has not the suture prolonged, although there is a small juxta-sutural appendage.

M. Thevenetii, n. sp.—Black, with slightly bluish tinge, thorax rufous with discal black spot. Head smooth, with slight transverse impression. Antennæ black, pectinate ♂. Thorax broader than long, sides feebly, base more decidedly arcuate, hind angles broadly rounded, slightly reflexed, surface smooth, feebly shining. Elytra bluish, opaque, finely scabrous, at tip appendiculate, sutural angle prolonged in a long coriaceous process. Body beneath and legs black with tinge of blue. Length .20 inch; 5 mm.

The elytral appendices are as usual inferior but not concealed entirely from above. The sutural prolongation is limited externally by a deep sinuation of the elytra.

One specimen collected by Dr. Alphonse Thevenet, Mariposa county, California, in the collection of Dr. Leconte.

The addition of the above species requires some modification of the table given by me (Trans. Am. Ent. Soc., 1872, 113) for those species in which the male has pectinate antennæ.

Antennæ pectinate in the male.

Elytra appendiculate in the male.

Appendices entirely concealed from above, suture prolonged in spiniform process, tipped with rufous.....**spinipennis**.

Appendices visible from above.

Elytra ♂ either entirely yellow or tipped with pale rufous, sutural angle appendiculate, appendix slender, hind tibiæ yellowish testaceous.

mirandus.

Elytra ♂ entirely blue, sutural angle with long but not very slender appendix, legs entirely black tinged with blue.....**Thevenetii**.

Elytra not appendiculate in the male.

Elytra bluish with broad oblique vitta from humerus to suture....**macr.**

Elytra bluish tipped with yellow ♂**mixtus**.

Elytra entirely black ♂**Ulzii**.

STIBIA, Horn.

S. ovipennis, n. sp.—Form moderately robust, color piceous black, shining. Head coarsely and densely punctured, punctures slightly strigose, especially in front. Thorax nearly twice as wide at middle as long, apex deeply emarginate, base feebly arcuate, sides regularly and rather strongly arcuate, disc convex, densely and coarsely punctured, punctures slightly strigose near the sides. Elytra regularly oval, slightly more attenuate at apex, one-fourth broader than the thorax and nearly four times as long, convex, with coarse punctures placed in striæ at the middle of each elytron, confused at the sides and near the suture and totally obliterated at apical third. Thorax beneath very coarsely punctured, abdomen obsoletely and very sparsely punctured, mesosternum coarsely punctured, metasternum very coarsely cribrate. Length .14—.18 inch; 3.5—4.5 mm.

Male.—First ventral segment with a broad, shallow, coarsely punctured fovea behind the intercoxal process, last ventral segment nearly smooth.

Female.—First ventral segment slightly punctured at middle, not foveate, last ventral rather coarsely punctured.

This species may be distinguished from *puncticollis* by its smaller size, more robust form, different elytral sculpture and by the smooth abdomen.

Two specimens were collected by Mr. Crotch, at San Diego, Cal.

S. hispidula, n. sp.—Form robust, piceous black, moderately shining, sparsely clothed with moderately long yellowish hairs. Head coarsely, densely and sub-strigosely punctured, middle lobe of clypeus rounded in front. Thorax twice as wide as long, anterior angles acute and very prominent anteriorly, base slightly wider than apex, at middle slightly arcuate, on each side feebly sinuate, hind angles rectangular; sides very feebly arcuate, disc very convex with ante-basal transverse impression; surface coarsely, deeply and rather densely punctured, punctures becoming slightly strigose at the sides. Elytra broadly oval, very convex, moderately coarsely but not densely punctured, punctures with faint tendency to a seriate arrangement. Thorax beneath very coarsely, deeply and rather densely punctured, mesosternum less coarsely punctured, metasternum with very large, deep punctures, abdomen moderately densely punctured. Outer margin of anterior tibiae slightly spinulose. Length .22 inch; 5.5 mm.

The appearance of this species is somewhat that of *Triorophus*. It may be at once known by its form, the very prominent anterior angles of the thorax, and the sparsely hairy surface.

One specimen collected by Dr. Edw. Palmer, in Utah.

Besides the differences indicated in the table between this genus and *Triphalus* (the longer hind tarsi), it will be observed that the tarsi have coarser and sparser vestiture, and the elytra much narrower epipleuræ. The sexual character above indicated in *S. ovipennis* appears to be unique in the species of the tribe in our fauna. In form the species more closely resemble *Triorophus*, but this has the vestiture of the tarsi spinous beneath, the epistoma with much longer middle lobe which is narrowed at base and clasped by the basal tooth of the mandibles.

The three species forming the genus are related as follows:—

Elytra oblong, punctures larger, arranged in regular striæ.

Thorax moderately emarginate in front, angles not prominent.

puncticollis.

Elytra broadly oval, punctures very irregularly arranged.

Thorax moderately emarginate, angles not prominent.....**ovipennis.**

Thorax deeply emarginate in front, anterior angles very acute and prominent, disc with ante-basal transverse impression.....**hispidula.**

The tribe Gnathosiini, as at present constituted, appears to consist of material entirely too heterogeneous to be associated together. *Craniotus* cannot form part of the tribe for the following reasons. The metasternal episterna are broad, in fact nearly as wide as long, and

very much narrowed at the anterior extremity. The intercoxal process is short and very broad, and the antennæ are ten-jointed, the eleventh joint being small and conical and connate with the tenth, and finally the lateral lobes of the front are large, triangular, acute and very prominent laterally. The genus must obviously constitute a distinct tribe nearer the *Epiphysini* than *Gnathosini*, defined by the characters above noted; it cannot, as suggested by Lacordaire, be associated with *Megagenius*, as this has the metasternal episterna narrower.

With *Craniotus* removed the tribe becomes more homogeneous. It may be observed, however, that while all the other genera have the mandibles grooved above so as to permit them, when closed, to clasp the middle lobe of the epistoma and thus *completely* conceal the labrum (without becoming themselves concealed when viewed from above), *Auchmobius* has the mandibles feebly grooved not clasping the middle lobe of the epistoma, when in repose, allowing the labrum to be partially visible, while they are completely invisible from above. It is also the only genus without supra-orbital ridge, and has the outer joints of the antennæ compressed, broader than long and trapezoidal in form. It might possibly represent another tribe, the form of the antennæ being totally unlike that of any other genus in the earlier groups.

The tribe thus becomes reduced to four genera, the relations of which are as follows:—

Intercoxal process of abdomen broad, feebly narrowed in front, tip subtruncate or rounded.

Tarsi spinous beneath. Hind tarsi with joint 1 equal to 3, 4.

Middle lobe of epistoma narrowed at base and clasped by a tooth-like process from the base of the mandibles.....TRIOROPHUS.

Middle lobe of epistoma triangular, rapidly narrowed in front, mandibles without basal toothSTIBIA.

Tarsi with silken hairs beneath. Hind tarsi with joint 1 equal to joint 4 only.

Middle lobe of epistoma narrower in front, mandibles without basal tooth, thorax narrower in front.....TRIPHALUS.

Intercoxal process of abdomen triangular, either acute or oval at tip. Tarsi spinous beneath.

Middle lobe of epistoma narrower in front, either oval or truncate...TRIMYTIS.

The above genera all have the prothorax coarsely punctured beneath and the metasternum very coarsely and deeply cribrate, a character entirely unknown elsewhere among our *Gnathosini*. In *Triorophus* it will be seen that certain specimens are stouter in form, the

elytra being more broadly oval, others are more slender and always smaller. The former I find to have a smooth head and the mandibles very decidedly sometimes rather deeply notched. Both the above characters are somewhat variable but hold good with the majority of specimens, and they appear to me to be sexual.

CHILOMETOPON, n. gen.

Body winged, elongate oval. Front trilobed, middle lobe prominent, trapezoidal, feebly clasped by the mandibles and entirely concealing the labrum. Eyes with superciliary ridge, prominent and coarsely granulated. Antennæ longer than head and thorax, slender, joints 8—10 somewhat broader, last joint equal to (*helopioides*) or longer (*abnorme*) than the preceding. Mentum transversely hexagonal, large, anterior angles rounded. Maxillary palpi with last joint elongate triangular. Prosternum not produced behind. Legs slender, anterior tibiæ slender without apical prolongation, tarsi sparsely clothed with short spines, hind tarsi moderately elongate, first joint equal to the third and fourth together.

Two species before me agree in the possession of the above characters.

The genus is referred to *Epitragini* from the form of the front and the elongate metasternum. In both species the thorax is somewhat narrower than the elytra, although not more so than in some of our *Epitragus*. The vestiture of the tarsi is nearly as stiff and spinose as in *Triorophus*. The middle lobe of the front is very prominent, truncate in *helopioides*, and oval at tip in *abnorme*, the surface being flat in the former and moderately convex in the latter. Regarding the affinities of this genus with foreign genera I express no opinion; from our own genera of the tribe it is easily known, the tarsal vestiture and superciliary ridge at once distinguish it from *Schoenicus*, with which alone it could be founded. The two species are:—

C. abnorme, Horn (*Trinytis*), Trans. Am. Phil. Soc. 1870, p. 261.—Thorax narrower at base than apex. Last joint of antennæ as long as the two preceding together. Length .26 inch; 6.5 mm.

Collected in Nevada. Cabinet of Dr. Leconte.

C. helopioides, n. sp.—Castaneous, shining, form oblong oval. Head broadly oval. Mandibles and clypeus coarsely and densely punctured, vertex and occiput much more sparsely. Thorax nearly twice as wide as long, apex feebly emarginate, anterior angles acute and very slightly everted, base broadly rounded at middle, feebly sinuate each side, hind angles subacute but not prominent, sides moderately arcuate and slightly divergent to base. Elytra slightly broader at base than thorax, elongate oval, sides moderately arcuate.

ate, humeri distinct, surface moderately convex, sparsely punctured, punctures feebly seriatly arranged becoming slightly muricate and dense at the sides and apex. Epipleuræ entire. Thorax beneath densely variolato-punctate, mesosternum coarsely and densely punctured, metasternum moderately long, at middle very sparsely punctured, sides and parapleuræ very densely punctured. Abdomen sparsely punctured. Femora coarsely but sparsely punctured. Length .26 inch; 6.5 mm.

This species superficially resembles *Helops convexus*, Lec., and does not differ greatly in form from several species of *Eurymetopon*, e. g. *punctulatum* and *sodale*.

One specimen collected by Mr. E. P. Austin, in California.

CRYPTADIUS, Lec.

At the time of the preparation of the revision of the *Tenebrionidæ* of the United States *Cryptadius* was unknown to me, the type having been lost at sea while being sent for study to Lacordaire. Recently specimens have been collected at San Diego, California, by Mr. G. R. Crotch, and I am enabled to present the following observations:—

Head moderately deeply inserted; epistoma subtruncate at middle and slightly notched on each side; labrum moderately prominent; eyes feebly transverse, coarsely granulated, slightly notched in front and with distinct supra-orbital ridge; mentum large hexagonal, feebly emarginate in front; last joint of maxillary palpi elongate oval, nearly twice the length of the preceding joint; antennæ attaining the hind margin of thorax, first joint stouter, second and fourth equal, third longer, 8—11 slightly broader, the last joint oval at tip. Middle coxæ entirely enclosed without visible trochantins. Intercostal process narrow, rounded at tip. Epipleuræ moderate entire. Anterior tibiæ with the outer angle prolonged into a long obtuse process, sinuate on its lower margin. Hind tarsi nearly as long as the tibiæ, the first joint longer than the two following combined. Scutellum very small, between the elytra transverse.

C. inflatus, Lec. Ann. Lyc. v., p. 140.—Body black, feebly shining, form broadly oval, robust, convex, apterous. Head coarsely, densely and deeply punctured. Thorax more than twice broader than long, moderately emarginate in front, anteriorly narrow, sides feebly arcuate, and very narrowly margined, hind angles obtusely rounded, surface densely and moderately coarsely punctured and opaque, punctures at the sides strigose. Elytra slightly broader than the thorax, oval, slightly attenuate at apex, surface convex, moderately densely sub-muricately punctured and in the intervals very minutely alutaceous. Body beneath more shining than above, piceous, very sparsely punctured. Legs rufo-piceous. Length .26 inch; 6.5 mm.

From the above characters it will be seen that its place is with the

genera allied to *Eurymetopon* and not with those in which the front is trilobed. The notch on each side of the front is already known in *Eurymetopon*, in fact I can see no character of importance separating the two genera; the robust form, even, being already indicated by *E. convexicollis*, Lec., and *F. bicolor*, Horn. *Cryptadius* should, in my opinion, be suppressed into *Eurymetopon*.

SCHIZILLUS, n. gen.

The above generic name is proposed for a form belonging to the tribe *Cryptoglossini*, allied more nearly to *Centrioptera*, from which it differs only in having the genæ much broader and the eyes completely divided, the under portion of each eye very indistinctly granulated. The mentum is broader than long, anteriorly truncate and feebly emarginate at middle. Front hemi-hexagonal. The antennæ are 11-jointed, the first short and stout, invisible from above, terminal joint broadly oval, stouter than the preceding.

S. laticeps, n. sp.—Black, sub-opaque, moderately robust. Head sparsely punctured, neck densely and finely granulate. Thorax broader than long, apex moderately deeply emarginate, slightly broader than the base, sides moderately arcuate, sinuate near the base, hind angles rectangular, base very feebly emarginate, surface moderately convex, sparsely punctured and sub-opaque and with a moderately deep, transverse, ante-basal impression. Elytra oblong oval, not wider at base than the thorax, widest at middle, sides moderately arcuate; surface moderately convex with rows of punctures on the disc becoming irregular and sub-muricate at the sides and apex; intervals flat sub-muricate punctate. Prothorax beneath sparsely punctate, prosternum acutely oval, slightly produced, margins slightly reflexed; mesosternum nearly vertical emarginate in front; abdomen sparsely and obsoletely punctate. Legs black, sparsely muricately punctate. Tarsi stout. Length .75—.90 inch; 23 mm.

The thorax of this species is similar to that of *Cryptoglossa laevis*, but less convex, while the elytra resemble in sculpture *Eleodes consobrina*. The head is much broader than in any *Centrioptera* in our fauna.

The specimens, from which the above description was taken, were captured by Mr. Crotch in the Mojave Desert, California.

ELEODES, Esch.

E. vetorator, n. sp.—Black, above sub-depressed, opaque, sparsely clothed with short yellowish hairs. Form broadly (♀) or more elongate (♂) oval. Head sparsely punctured and pubescent. Thorax nearly twice as wide at base as long, apex emarginate not wider than the length of thorax, sides regularly arcuate and gradually narrowed from base to apex, base squarely truncate, surface feebly convex, opaque, sparsely punctured and pubescent. Elytra at base very slightly broader than the thorax and slightly overlapped by it,

sides regularly arcuate, gradually narrowing to base and continuing regularly the curve of the sides of the thorax, lateral margin acute at basal third; surface feebly convex, opaque, sparsely pubescent and punctured, pubescence arranged so that the surface appears sub-striate. Body beneath black, shining, sparsely punctured and with slight pubescence. Tarsi spinulose. Length .38—.42 inch; 9.5—10.5 mm.

The spinulose tarsi not dilated in the male, the slight dissimilarity between the spurs of the anterior tibiae in the sexes (less marked, however, in this species than in any other of the group), the anterior spur of the female larger in every way than the posterior, at once indicate the affinity of this species with those of the *tricostata* group and not with *opaca*, with which a slight superficial resemblance would seem to associate it. It may be at once known from every *Eleodes* in our fauna by its regularly oval form, equally narrowed at the two extremities, the thorax squarely truncate and its sides regularly arcuate and gradually narrower from base to apex.

Numerous specimens of this species were kindly presented by Mr. William Jülich, of New York, by whom they were procured from Texas.

E. texana, Lec.—From collections recently made in the northern parts of Texas I have become convinced that this species is merely a large variety of *suturalis*, Say.

IPHTHIMUS, Truqui.

I. zopheroides, n. sp.—Black, shining, form strongly recalling *Zopherus*. Head sparsely, between the eyes coarsely and very deeply confluent punctate. Thorax trapezoidal, wider in front, apex feebly emarginate at middle, anterior angles very broadly rounded, sides at anterior third parallel, thence gradually narrowed to the base which is truncate, disc convex longitudinally and transversely, shining, sparsely punctured. Elytra oblong, slightly broader behind the middle, convex, shining and with eight discal and a marginal row of deep, coarse, distantly placed punctures. Body beneath black, shining, mesosternum densely and coarsely punctured, abdomen sparsely punctured and slightly wrinkled longitudinally. Length .80 inch; 20 mm.

The mentum of this species differs notably from that of our other species, being trapezoidal and strongly convex at middle, the usual form being broader with rounded angles, a median groove and on each side slightly concave. This variation taken in conjunction with the general form, which is remarkably Zopheroid would seem to indicate the propriety of separating the species generically. A comparison of the superficial characters shows nothing greatly at variance with the other *Iphthimus* except the much more convex form, although the thorax is somewhat longer and the hind angles not prominent.

For the unique in my cabinet I am indebted to Mr. A. S. Fuller, who obtained it from New Mexico.

***I. serratus*, Mann.**

This species is introduced to call attention to a curious variety, found by Mr. Crotch, of much greater size than usual. The head and thorax are smoother and more shining, very minutely punctulate, the thoracic margin more broadly reflexed and very irregularly crenulate. The elytra are subopaque and the striae with the usual punctures reduced to very indistinct longitudinal and transverse wrinkles, the intervals being minutely and not densely punctulate. The specimen is slightly more than an inch long.

NYCTOBATES, Guérin.

***N. subnitens*, n. sp.**—Elongate, black, subopaque. Head very minutely punctulate. Antennae with third joint nearly equalling the three following together. Thorax slightly broader than long, apex truncate, base very feebly sinuate, sides moderately arcuate in front, narrowed and slightly sinuate near the base, hind angles acute but not prominent, surface moderately convex, sparsely and very minutely punctulate. Elytra broader than the thorax, gradually attenuate at apical third, surface slightly more shining than the thorax with faint rows of minute punctures, the intervals very sparsely and more finely punctured. Body beneath shining, sparsely punctulate, abdomen longitudinally wrinkled. Prosternum between the coxae convex, and elevated in a slight tubercle at tip. Length .70 inch; 18 mm.

A comparison of this species with either of the others shows a greater length of the third joint of the antennae. The sides of thorax are more arcuate in front and more sinuate posteriorly. The entire surface is less shining and less distinctly sculptured. The prosternum is narrower and convex longitudinally between the coxae and elevated in a tubercle at tip, our other species having the prosternum broader nearly flat and not tuberculate at tip. The mentum is also more convex and the anterior angles more distinct.

The unique in my cabinet was given me by Mr. H. Ulke, who obtained it from Arizona.

***Scotobaenus parallelus*, Lec.**

The males of this species have the anterior femora stouter than the females, the tibiae slender at basal fourth and the inner margin covered with small tubercles. The middle and hind femora have a silky pubescent space along their lower edge.

PHTHORA, Muls.

***P. americana*, n. sp.**—Oblong, ferruginous, shining. Head sparsely punctured. Thorax broader than long, apex feebly emarginate, base feebly

arcuate and slightly broader than the apex, sides very feebly arcuate, margin thickened and somewhat reflexed, surface shining, sparsely and evenly punctured. Elytra as wide at base as thorax, parallel, moderately deeply striate, striæ coarsely and subseriately punctured, intervals moderately convex, sparsely punctulate. Body beneath paler than above, very sparsely and finely punctulate. Length .12 inch; 3 mm.

The appearance of this insect is that of a miniature but rather convex *Utoma*. It resembles also *Dioedus* more closely, but differs in having the last three joints of the antennæ thickened, while *Dioedus* has but two.

Specimens collected in Oregon were kindly given me by Mr. A. S. Fuller.

SCAPHIDEMA, Redt.

S. pictum, n. sp.—Oval. Head black, surface aeneous sparsely punctate. Thorax nearly twice as wide as long, sides in front feebly arcuate, posteriorly nearly straight and slightly divergent, hind angles rectangular, color black, surface aeneous sparsely punctate, basal impressions extending nearly to middle. Elytra at base broader than the thorax, moderately convex, sides moderately arcuate, surface striate, striæ finely punctured, intervals flat, biseriately finely punctulate and obsoletely reticulate, color yellowish testaceous, with basal black band broad at middle, an irregular sinuous transverse band at middle composed of lines of variable length on the intervals but shortest at the suture, and a subapical oval spot, apical margin piceous. Epipleuræ pale. Body beneath piceous slightly aeneous, sparsely punctulate and shining. Femora piceous, tibiæ and tarsi paler. Length .14 inch; 3.5 mm.

The form of this species is broader than *æneolum* and resembles more nearly that of the European species.

Occurs in Oregon. Henry Edwards.

HELOPS, Fab.

H. arizonensis, n. sp.—Form rather slender, apterous, black, opaque. Head coarsely and rather deeply punctured. Antennæ nearly half the length of the body, outer joints slightly compressed, very slightly shorter. Thorax slightly wider than long, sides feebly arcuate, margin obtuse, apex truncate, base feebly arcuate, hind angles slightly prominent, disc moderately convex, densely and coarsely punctured and opaque, beneath punctured as above. Elytra oblong, humeri obtuse, surface deeply striate, striæ coarsely punctured, intervals convex and finely granulated. Body beneath black, slightly more shining than above, meso- and metasternum coarsely punctured, abdomen finely rugulose and more sparsely and finely punctured. Length .34 inch; 8.5 mm.

By the character given in the table (Revis. Tenebrionidæ, p. 392) this species should be placed near *sulcipennis*, but by its opaque surface and deeply sulcate elytra it differs from every other species in our fauna.

Specimens from Arizona were kindly presented by Mr. C. V. Riley.

EPICAUTA, Redt.

E. sanguinicollis, Lec. Proc. Acad. 1853, p. 344.—Body entirely black, head and thorax red. Head shining sparsely punctured, epistoma and mouth black. Antennæ black, filiform. Thorax not wider than the head, slightly longer than wide, sides parallel, arcuately narrowed in front, moderately convex, median line and ante-scutellar impression feeble, surface shining, rather sparsely but coarsely punctured. Elytra nearly twice as wide as thorax, black, coarsely scabrous, sparsely pubescent with black, with very narrow median stripe, sutural and lateral margins sparsely cinereo-pubescent. Body beneath and legs black, sparsely pubescent. Length .32 inch; 8 mm.

This species should be referred to section A of the revision of this genus (Proc. Am. Phil. Soc. 1873, p. 95), from all the species of which it differs by its color and the arrangement of the elytral pubescence.

One female specimen, collected in Florida, was kindly given me by Mr. Edward Tatnall, of Wilmington, Del.

E. Rileyi, n. sp.—Body black, densely clothed with recumbent ochreous pubescence. Head densely and finely, behind the eyes coarsely punctured rather densely pubescent, between the bases of the antennæ a smooth polished, triangular space and above the eyes and surrounding them on their posterior and upper margins a sinular smooth space terminating at the inner side of each eye in a deep fossa. Thorax subquadrate, sides very feebly arcuate, slightly converging anteriorly, disc feebly convex and with a vague but broad fossa near each front angle, surface densely and finely punctured and densely pubescent, the pubescence in the fossæ shorter (as if shaven). Elytra one-half broader than the thorax, parallel, suture at middle slightly elevated, surface densely and finely punctured, very densely clothed with ochreous pubescence, and on each side of the scutellum at base a narrow black space. Body beneath and legs very densely clothed with a somewhat paler pubescence than above, the abdominal segments at the sides with a small black spot and a similar spot on the middle of segments 2, 3, 4. Length .40 inch; 16 mm.

The eyes of this species are smooth, not at all granulated, although the lenses are distinctly visible from their transparency; otherwise the eyes are similar to the species of section C. The antennæ are rather setaceous as in that group. The rather deep fossæ at the inner sides of the eyes mark this species as one of the most peculiar of the genus. Superficially the species resembles a pale *ferruginea*, and its place in the series is near *caviceps*, forming a section by itself.

The two specimens before me exhibit no marked sexual differences and are probably both females. They were collected in Arizona and presented by Mr. C. V. Riley, of St. Louis, to whom I take great pleasure in dedicating it.

E. Alphonsei, n. sp.—Black, moderately shining. Head shining, sparsely punctured, posteriorly sparsely cinereo-pubescent. Thorax slightly longer than wide, sides in front slightly arcuate, posteriorly parallel, surface shining, sparsely punctured. Elytra black, scabrous, very sparsely clothed with short black hairs, suture and sides narrowly margined with long whitish hairs. Body beneath and legs black, shining, legs sparsely cinereo-pubescent. Length .36 inch; 9 mm.

One specimen in the cabinet of Dr. Leconte, collected in Mariposa County, California, by M. Alphonse Thevenet, to whom it is with great pleasure dedicated.

The antennæ of this species being filiform and the joints closely placed, and the eyes moderately broad, coarsely granulated and moderately convex, show the position of this species to be in the same group with *puncticollis* and *oblita*. The narrow sutural and marginal cinereous lines are found also in the group in *sanguinicollis*.

CANTHARIS, Linn.

C. tenebrosa, Lec.

A male of this species is in the collection of Mr. G. R. Crotch, having the antennæ very slightly thickened at middle, barely enough to indicate its position in the group in which it was placed. The antennæ are, however, very short as in many of the species of group I. being barely the length of the head and thorax. The outer spur of the hind tibiæ is stouter than the inner, very obliquely truncate and slightly broader at tip. The following are the abdominal characters:

Male.—Fifth ventral segment broadly rounded, sixth subtruncate and slightly emarginate at middle.

Female.—Fifth ventral broadly rounded, sixth oval and very feebly emarginate at tip.

C. Crotchii, n. sp.—Head entirely black with aeneous surface, coarsely, deeply and moderately densely punctured, especially at the sides, sparsely clothed with erect black hairs. Thorax broader than long, sides regularly arcuate, basal margin slightly reflexed and feebly emarginate at middle, color reddish-yellow, surface moderately convex and shining, very sparsely and unevenly punctured. Elytra one-third broader than the thorax, coarsely scabrous, black with bronzed surface, sparsely clothed with short, black, erect hairs. Body beneath and legs black and slightly bronzed. Outer spur of hind tibiæ slender, very obliquely truncate at tip. Length .30—.40 inch; 8—10 mm.

Male.—Fifth ventral segment very broadly emarginate, sixth moderately emarginate.

Female.—Fifth ventral broadly emarginate, sixth with scarcely evident emargination.

This species is closely allied to *aeneipennis*, next to which it should be placed in the table (Proc. Am. Phil. Soc. 1873, p. 110), and from

which it differs by the totally black, coarsely and deeply punctured head.

Collected by Mr. G. R. Crotch, at San Diego, California.

C. insperatus, n. sp.—Black, moderately shining. Head sparsely and finely punctured. Thorax subquadrate, base slightly narrowed, sides in front arcuate, surface moderately convex, median line feebly impressed, very sparsely punctate. Elytra less shining than thorax, finely scabrous. Body beneath black, very sparsely punctate, sparsely cinereo-pubescent. Legs black, punctate, with black pubescence, middle tibiae slightly arcuate, outer spur of hind tibiae short, very stout, truncate. Length .80—.90 inch; 20—23 mm.

Male.—Antennae not stouter at middle, as long as half the body. Last dorsal segment truncate. Fifth ventral acutely and deeply notched, sixth deeply cleft and fimbriate at tip. Hind trochanter with short spine near the tip. Anterior tibiae with two spurs.

Female.—Antennae shorter than the male, gradually thicker to tip. Fifth ventral truncate, sixth rounded at tip. Hind trochanter mutic.

This species is almost intermediate in appearance between *melaena* and *moerens*. It belongs to Group II. of my revision (Proc. Am. Phil. Soc. 1873, p. 109), by the form of the antennae, and to the first section of that group by the short, stout, truncate spur of the hind tibia. The male characters will serve to distinguish the species from any other in the group.

In *C. moerens*, Lec., the outer spur of the hind tibia is slender and acute and the hind trochanter of the male angulate near the distal end, thus approaching the preceding species.

Specimens of the above described species were taken by Mr. Crotch, in the Mojave Desert, California.

XANTHOCHROA, Schmidt.

• **X. californica**, n. sp.—Form slender. Head, thorax, femora and last abdominal segment pale reddish-yellow, body beneath, tibiae and tarsi black, shining, elytra bluish. Front very sparsely punctured, nearly smooth, occiput distinctly punctured. Antennae half the length of body, entirely black. Thorax slightly longer than wide, sides in front arcuate, posteriorly slightly sinuate, disc feebly convex, shining, very indistinctly punctured. Elytra bluish, moderately densely scabro-punctate, sparsely pubescent and with three feebly elevated costiform lines, two discal and one lateral, gradually evanescent toward the apex. Body beneath black, shining, very sparsely punctate, dorsal and ventral segments pale rufo-testaceous. Femora and base of tibiae pale rufo-testaceous, tibiae and tarsi black. Length .38 inch; 9.5 mm.

One specimen collected by Mr. G. R. Crotch, in California.

CORPHYRA, Say.

Several new species having been brought by Mr. Crotch, the num-

ber from the Pacific region now nearly equals that from the entire region east of the Rocky Mountains. Several present characters before unknown, which will appear in their proper places.

The following table contains the Pacific species only :—

Hind tibiæ male slightly arcuate, inner side flattened and obliquely grooved (as in the anterior tibiæ of the *Lamiidæ*) **abnormis**.

Hind tibiæ similar in the sexes, slightly, or not grooved.

Elytra in both sexes rounded at tip or very slightly more acute in the male **1.**

Elytra in male acutely prolonged, subcaudate **2.**

1.—Antennæ of male pectinate. Elytra ♂ feebly impressed at tip. **Crotchii**.

Antennæ of male at most serrate **3.**

3.—Elytra at tip ♂ slightly swollen and impressed **monticola**.

Elytra at tip ♂ neither more convex nor impressed **4.**

4.—Elytra at tip ♂ pale rufo-testaceous and smoother **5.**

Elytra at tip similar in the sexes and similarly punctured **6.**

5.—Thorax red (sometimes with discal black spot?) **punctulata**.

Thorax black **funebis**.

6.—Thorax black, elytra vittate and finely punctured **vittata**.

Thorax red, elytra black, moderately coarsely punctured... **inconspicua**.

2.—Elytra black with oblique testaceous vitta **Bardii**.

Elytra entirely black **distinguenda**.

C. abnormis, n. sp.—Head black, sparsely punctate. Antennæ black, moderately serrate. Thorax transversely oval, rufous, shining, very sparingly punctate. Elytra black, shining, moderately densely and coarsely punctured. Body beneath black, shining, very sparsely punctate. Legs black. Length .28 inch; 7 mm.

Male.—Elytra at tip not differing from the remainder of the surface in color and punctuation and neither impressed nor convex. Hind femora moderately stout. Hind tibiæ slightly arcuate, inner side slightly flattened and with an oblique groove somewhat similar to that of the anterior tibiæ of the *Lamioid Cerambycidæ*. Fourth ventral segment prolonged in a broad lobe at middle on each side of which the margin is sinuate; fifth segment truncate at middle and with a broad but feeble transverse channel in front of the hind margin, and in front of this the surface is moderately convex; sixth segment feebly prominent. Terminal lobes of penis sheath slightly arcuate, obtuse at tip and not hooked on their inner margin.

Female.—Unknown.

This species is certainly one of the most remarkable in the genus, and indicates a departure of specific characteristics, in a direction wholly unexpected. Superficially it resembles *punctulata*. The female is unknown and probably not distinguishable without great care from that of *punctulata*.

One specimen collected by Mr. Crotch, in California.

C. Crotchii, n. sp.—Head black, sparsely punctured and shining, mouth and palpi testaceous. Antennæ ♂ moderately strongly pectinate from the third joint, black. Thorax rufous sparsely punctured. Elytra (variable in color?) yellowish testaceous, suture, margin and tip narrowly bordered with black, sparsely and rather coarsely punctured and sparsely flavo-pubescent. Body beneath black, abdomen piceo-testaceous (immature?). Legs piceous, femora beneath testaceous. Length .20 inch; 5 mm.

Male.—Elytra at tip black, smooth and with broad shallow impression.

Female.—Unknown.

The elytra in this species may be perhaps entirely black in maturity. It differs from every known *Corphyra* by the pectinate antennæ which resemble those of a *Malachius*.

Collected by Mr. G. R. Crotch, at Chrystal Springs, California.

C. monticola, n. sp.—Head black, shining, sparsely punctured. Antennæ (2 basal joints) piceous. Thorax transversely oval, red, sparsely punctured. Elytra (variable?) pale rufo-testaceous, moderately densely punctured. Body beneath black, legs pale rufo-testaceous, tarsi piceous. Length .26 inch; 6.5 mm.

Male.—Elytra at tip either pale rufous or black, more convex, smoother, and with a distinct but shallow impression.

Female.—Unknown.

Resembles at first sight some of the varieties of *punctulata*, from which the male characters and pale legs at once distinguish it; differs also from *elegans* by the entirely black abdomen. The elytra may become entirely black except at tip in male.

Collected by Mr. Crotch, at Calaveras, California.

C. punctulata, Lec. Ann. Lyc. v. 151.
California.

C. funebris, Horn, Trans. Am. Ent. Soc. 1871, p. 286.

California. I have suspected that these species might be varieties of one. Varieties of *funebris* with pale elytra have been brought by Mr. Crotch and also a specimen apparently of *punctulata*, with a large discal black spot on the thorax.

An examination of the penis-sheath shows, however, that while in the former the processes at the tip are parallel and contiguous, those of the latter are somewhat longer and divergent. This organ appears to vary somewhat between all the species.

C. vittata, Horn, loc. cit. p. 279.

Varieties of this species may occur with the elytra entirely testaceous and the suture alone broadly black. The legs may be also entirely pale, and the antennæ rufo-piceous.

Occurs at Chrystal Springs, California.

C. inconspicua, n. sp.—Head black, moderately coarsely but sparsely punctured. Antennæ ♂ subserrate, entirely black. Thorax rufous, sparsely punctured. Elytra black, sparsely and moderately coarsely punctured, and sparsely pubescent. Body beneath and legs black. Length .20—.26 inch; 5—6.5 mm.

Male.—Elytra at tip black, neither smooth, elevated nor impressed.

Female.—Elytra resembling the male.

Resembles *collaris* from the Atlantic Region which, however, has the elytra of male at tip somewhat smoother and distinctly impressed.

Collected in California and presented by Mr. P. S. Sprague, of Boston.

C. Bardii, n. sp.—Head black, front sparsely, hind angles coarsely and densely punctured. Antennæ black, subserrate. Thorax rufous very sparsely punctate. Elytra black, with oblique, narrow, testaceous stripe from the humerus to the apex, surface coarsely and deeply and not densely punctured. Body beneath and legs black. Length .22 inch; 5.5 mm.

Male.—Tip of elytra testaceous, prolonged and turned slightly upward.

Female.—Elytra normal at tip.

Collected by Mr. Crotch, at San Buenaventura, California; dedicated to Mr. Thomas Bard, of that region.

C. distinguenda, n. sp.—Closely allied to the preceding species and agreeing with it in form and sculpture and differs only in the elytra being entirely black (except at tip ♂) without oblique vitta. Length .22 inch; 5.5 mm.

Collected at San Buenaventura, California.

These two species, *Bardii* and *distinguenda*, differ from all the other species in having the elytra caudate in the male. The prolongation is acute and turned slightly upward and inward.

The species of *Corphyra* may be taken in considerable numbers, at times, on the flowers of various umbelliferous plants.

MYCTERUS, Clairv.

M. quadricollis, n. sp.—Black, elytra luteous or piceous. Head sub-opaque, densely punctured. Antennæ pale yellow. Thorax sub-quadrate, slightly broader than long, sides feebly arcuate, base scarcely broader, surface moderately convex, median line vaguely defined and a feeble oblique impression on each side near the middle. Elytra oblong wider at base than thorax, surface moderately coarsely punctured, punctures gradually finer to apex and with minute punctures in the intervals bearing short cinereous hairs. Body beneath black, opaque, densely punctulate and finely pubescent. Legs yellowish, hind femora piceous. Length .20—.22 inch; 5—5.5 mm.

Male.—First joint of antennæ moderately stout; second not longer than fourth, elongated conical; third gradually clavate, as long as the two following together; joints 4—10 irregularly quadrate, flattened, gradually shorter; joint 11 flattened pyriform. Last abdominal segment broadly rounded at tip,

slightly emarginate at middle and not concave, broadly margined with rufous.

Female.—Antennæ similar in form to the male but less flattened, joints longer than wide and more triangular.

This species differs from the other *Mycterus* in our fauna by the broader antennæ of the male, the flat and emarginate last ventral segment, and the thorax not widest at base.

Specimens were collected by Mr. Crotch, at Temescal, California, on the flowers of Agave.

The last ventral segment, in the two other species of which the males are known, has the margin rather broadly reflexed so that there is a moderately deep semilunar depression formed, the posterior margin is rounded in *concolor* and broadly truncate in *scaber*. The first ventral segment at middle in the above two species is elevated in a moderately convex umbone, which in *scaber* is densely pubescent, and in *concolor* somewhat more convex, and in the only male before me entirely nude. The species just described does not appear to have this elevation of the first ventral segment.



Descriptions of New COLEOPTERA chiefly from the Pacific Slope of North America.

BY J. L. LECONTE, M. D.

The present paper is prompted by a desire to render the collections of Mr. G. R. Crotch, on the Pacific Slope of North America, available to the subscribers and purchasers of his collections with the least possible delay. On examining the large number of specimens brought back by him, as was to have been expected, many new species were found; descriptions of the more interesting of these have been prepared by Dr. Horn, Mr. Crotch and myself, according as our familiarity with the respective families represented by the new species has enabled us to do this with precision. I have availed myself of the present opportunity to add the characters of a few remarkable or important species, partly from the Pacific, partly from other regions of the United States, which have been added to my collection, by the kindness of various friends.