## V-MISCELLANEOUS NOTES AND NEW SPECIES.

In a recent rearrangement of the Cryptophagidæ of my collection, the following synonymy became apparent:

Salebius montanus Csy.-(Journ. N. Y. Ent. Soc., VIII, p. 91), should be united with lictor Csy. as a synonym.

Cryptophagus cribricollis Csy.-(1. c., p. 97), should be united with inscitus Csy., as a synonym.

In the Buprestidæ the following synonymy is noted:
Buprestis flavopicta Csy.-(Proc. Wash. Acad., XI, p. 97) should be united with consularis L.-G.

Buprestis virens Csy.-(1. c., p. 105) is the female of rufipes Fabr.
Buprestis inconstans Mels., and deficiens Csy. (1. c., p. 91) should both be united with maculipennis; fusiformis Csy., is I think distinct.

Buprestis punctiventris Csy.-(1. c., p. 99) should be united with subornata Lec.

Buprestis fulgens Csy.-(1. c., p. 107) is a variety or subspecies of fasciata Fabr.

Buprestis oregona Csy.-(1. c., p. II3) should be united with incolumis Csy., as a subspecies of langi Mann.

Dicerca inflatula Csy.-(1. c., p. 140) should be united with abrupta Csy.

Dicerca hesperica Csy.-(1. c., p. 155) is to be united with crassicollis Lec., as a synonym and not a subspecies.

The genus Texania Csy.-not "Texiana" as written by M. Kerre-mans-is probably a synonym of Chalcophorella Kerrem.

Chalcophora iridescens Csy.-(1. c., p. 82) should be united with georgiana Lec.

Chalcophora obliterata Csy.-(1. c., p. 79) placed as a synonym of virginiensis by M. Kerremans, is quite certainly a rather well defined variety and not truly a synonym.

Chalcophora brevicollis Csy.-(1. c., p. 79) is not a synonym of lacustris Lec., as placed by the above author, but is a distinct species, as may easily be seen on viewing the rather extensive series of each in my collection. The prothorax in lacustris is always more narrowed anteriorly and less abbreviated than in brevicollis, among other differences. I think also that montana Csy., is a good subspecies of angulicollis and not a synonym, as stated by Kerremans in his monumental work on the Buprestidæ.

It is almost certain that the locality "Florida" for Chalcophora prominens Csy., is a mistake; it is purely of a northern Pacific coast type and in fact I have recently received another example, agreeing very well with the type, marked "British Columbia."

The genus Paramallus Csy.,-(Mem. Col. III, pp. 222, 227) is a synonym of Archodontes Lameere (1903), and the subgenus Riponus Csy.,-(1. c., p. 245) is a synonym of Neopolyarthron Semen. (1899).

In Mem. Col. IV, p. 5, in the 3d line under "Longilabris group," for "spinitarsis" read spissitarsis and on page 127, 13th line from bottom for "pumilis" read pumilus.

In Mem. Col. IV, p. 47, for "Notiophilus evanescens n. sp.," read N. simulator Fall, and, on page 347, for " Pogonocherus emarginatus n. sp.," read P. pictus Fall. I regret very much overlooking Mr. Fall's papers published in "Psyche," and have therefore unnecessarily increased the burden of synonymy.

On page 42 (ante) for Micratopini read Micratopine.
It is highly probable that Cymindis atrolucens Csy.,-(1. c., p. ${ }^{178}$ ) is merely one of the numerous varietal forms of Pinacodera atrata Chev. It was originally described by Chevrolat under the name Cymindis atrata, which name conflicting with atrata Dej., was changed by Dejean to chevrolati, a fact that seems to have been overlooked by Bates in compiling the synonymy of Pinacodera atrata for the "Biologia." It was afterward described by Chaudoir under the name Cymindis nigrita. Although differing in some respects from both Cymindis and Pinacodera, I think it is more closely allied to the former than to the latter, especially in its general habitus. A very good figure is given in the "Biologia," which I unfortunately overlooked, owing to the generic name used by Bates, following Chaudoir.

In addition to two or three apparently undescribed species, which it is intended to make known at some future time, the series of Harpalinæ sent by Mr. Knaus, alluded to in the footnote on page 303, furnishes additional localities for a number of species. Geopinus fluviaticus is represented from Kansas, Nothopus valens from Medora, Ks., Harpalus furtivus from Wooten's, N. M., H. lustrans from Dodge City, Ks., H. lividulus from New Mexico and herbivagus from Kansas, $H$. desertus from Colorado and $H$. renoicus from Stockton, Utah; also Selenophorus houstoni from Waco, Tex., S. implicans from Brady, Tex., and S. famulus from the Baboquivari Mts., in southern Arizona; further Stenomorphus scolopax from McPherson, Ks., Agonoderus lineola, Stockton, Ut., Stenolophus semitinctus from the type locality, El Paso, Tex., and St. captiosus from

McPherson, Ks. Finally there is a specimen of what seems to be typical Anisodactylus oregonus Csy., from Cœur d'Alene, Idaho, collected by Wickham, and a rather aberrant example of A. cœпиs, of peculiar steel-blue lustre, from McPherson, Kansas; also, from the latter place, there is a single specimen of Stenocellus congener Lec.; this species has a much smaller head and somewhat smaller prothorax than rupestris and can be distinguished from it very easily.

On further consideration, it becomes evident that Omus lucidicollis Csy., reduced to synonymy on page 7 (ante), has not truly that status, but is a variety of lobatus, and further material in the neighborhood of horni Lec., given me a few days ago by Mr. E. D. Harris, proves that collaris Csy., is not the same as horni, the latter being a shorter, stouter and much more thick-set form.

## CICINDELIDÆ

In a small box of specimens recently very kindly sent to me by Mr. Leng, there is some instructive material. A male example of the bright green Cicindela oslari Leng, from San Miguel Mts., Col., taken at an elevation of 12000 feet, resembles the male type of ostenta Csy., very closely; it is narrower, with less distinct elytral foveæ and shorter antennæ, but in color and sculpture it is almost identical; the labrum, however, has three prominent teeth. On referring to the original description of oslari, I find that this bright green form is not the typical oslari, which is coppery-brown, and I have reason to believe that under that name two quite distinct forms were included and that another name - possibly varietalshould be given this green form, confounded hitherto with the true oslari; what its true relationship with ostenta may be cannot be determined exactly on such scanty material, but the two are evidently not identical.

In the denverensis subgroup of the purpurea group, Mr. Leng sent a female which proves to be truly the female of that species, having the identical form and coloration of the male type but larger and with wholly black labial palpi; it seems therefore that the pale penultimate joint mentioned under the description of denverensis is more essentially a male sexual character. With this example of denverensis, there were two related forms which are as follows:

Cicindela denverensis ssp. conquisita nov.--Bright green throughout
above and beneath, shining, the upper surface more sericeous and with a rich blue oblique reflection on the elytra; head with dense hair on the frontal tumidity, the labrum abruptly produced forward in the middle, the lobe tridentate; palpi black, with metallic green lustre; prothorax two-fifths wider than long, nearly as wide as the head, feebly obtrapezoidal, without trace of coppery lustre; elytra two-thirds longer than wide, three-fourths wider than the prothorax, with close granuliform sculpture, the humeri with a large rounded pale spot, briefly prolonged posteriorly, the anterior lunule otherwise not visible, the apical lunule very broad, subdetached anteriorly from a large rounded discal spot; just behind the middle there is a large, transverse, internally attenuated pale spot, broadly truncate externally very close to the margin. Length (o) 13.0 mm .; width 5.2 mm . Nebraska (Sioux Co.).

Differs from denverensis in the large humeral pale spot-wholly absent in the latter,-in the broad apical lunule and more developed medial band and also in the beautiful rich sericeous blue color of the elytra by oblique reflection, of which there is no trace in denverensis.

Cicindela denverensis ssp. oreada nov.-Similar to conquisita in general form, color and rich blue sericeous oblique reflection on the elytra, but with the latter relatively more elongate and differently maculate; the humeral lunule is represented by a small spot at the humeri and another at basal fourth at some distance from the edge, the middle band by a short transverse dash from the median line to outer sixth, and the apical lunule by a transverse, outwardly attenuated apical dash and a discal spot at apical fifth or sixth and outer third. Length ( $\circ$ ) 12.7 mm .; width 5.3 mm . Nebraska (Benkelman).

While the above two forms may be regarded as subspecies of denverensis, I think the indications are that pugetana and parallelonota, described on pp. 20 and 21 of the present work, are specifically different, though evidently related rather closely. These five forms, together with sierra Leng, compose a series unmistakably different from the true purpurea series in general facies and coloration of the body.*

Through the kindness of Mr. E. D. Harris, I have, within the past few days, received an example of a wonderfully decorated member of the purpurea group, which may be described as follows:

Cicindela mirabilis n.sp.-Stout in form, rather feebly convex, dull in lustre, more shining beneath; head rugose, bright cupreous, the front with two anteriorly diverging discal blue dashes, the sides of the base and the

[^0]genæ bright blue-green; frontal tumidity with moderate erect hairs; labrum much produced and sharply tridentate medially; antennæ moderate, the third and fourth joints bright coppery red, each banded with blue near the apex; prothorax short, obtrapezoidal, rugulose, nearly twice as wide as long, subequal in width to the head, the apex and base brilliant blue, the tranverse region between the sulci bright cupreous; elytra one-half longer than wide, three-fourths wider than the prothorax, inflated posteriorly and much wider at about posterior third than at base, dull sericeous-green, the lateral margin very broadly shining blue, this border angulate within at basal fourth and at the middle, abruptly narrowed and obsolete apically; finely reflexed lateral margin brilliant cupreous; surface finely, rather obscurely punctate, closely granulate, the granules shining and mingled with others that are smaller, without trace of subsutural impression; the only pale marking is a feebly oblique discal median band, from the broad blue margin to inner fourth, and an externally attenuated apical spot; under surface brilliant green, the sides of all the sterna bright cupreous; legs shining cupreous, the knees redder. Length ( ㅇ ) 14.0 mm .: width 5.8 mm . California (Dutch Flat, Placer Co.).-G. R. Pilate.

This form may be placed near lauta Csy., and is rather closely related; it seems, however, to be specifically valid.

## BOSTRYCHIDÆ

In the male of Apatides Csy., the apical part of the elytra is apt to be smoother and more punctureless than in the female, especially toward the suture; in the following species this feature is carried to an extreme:

Apatides pollens n. sp.-Stout, cylindrical, deep black and shining; head well developed, the neck longitudinally plicatulate, the vertex moderately convex, finely and sparsely punctate; eyes convex and prominent; antennæ of the usual structure in the genus, blackish, with rufous club; prothorax subquadrate, convex, a little wider than long, the parallel sides slightly arcuate; apical processes approximate, slender, abruptly turned upward at the apex, separated by between a fourth and fifth of the entire width; surface coarsely granose, with a few reflexed acute teeth at the sides anteriorly; near the base, toward the sides, the surface becomes smooth, polished and minutely, sparsely punctulate; elytra barely wider than the prothorax, more than three-fourths longer than wide, the sides straight, the apex rapidly rounded; surface strongly declivous at apex, with evenly elevated sutural margin, smooth and highly polished and almost completely impunctate in about apical third, coarsely but not very closely punctate in basal two-thirds, finely toward the sides, the suture elevated basally, the humeri rather prominent; legs weak, short and rather slender, deep black; abdomen finely and densely punctate throughout, the punctures bearing small erect hairs. Length ( $\sigma^{\text {T }}$ ) 16.0 mm .; width 5.8 mm . Arizona (Bill Williams Fork),-F. H. Snow.

This is the largest Bostrychid known thus far within our geographic limits, excepting Dinapate wrighti Horn. It is not closely related to fortis Lec., from Cape San Lucas, or to robustus Csy., from Texas; puncticeps differs greatly from the other three in the close and rather strong punctures of the head. The above measurement does not include the thoracic processes, which are about I mm. in length.

## BUPRESTIDE

A number of new forms in this family seem worthy of description as follows:

Chalcophora ingens n. sp.-Large and stout, unusually convex, strongly shining, blackish, the under surface and finely, closely punctate impressions of the upper surface cupreous; general facies and sculpture of the elytra as in virginiensis, the head larger, with very deep sulcus, the antennæ notably longer, extending to basal third or fourth of the prothorax, the latter similar in general form but having the sharply marked obtuse lateral angles but little before the middle; elytra more convex, much more sloping posteriorly from near the middle of the length, the serratures of the sides posteriorly very feeble; under surface nearly similar, the two fine grooves of the prosternum more rapidly converging posteriorly. Length ( $\circ$ ) 31.5 mm .; width ir.o mm.

A single example, unfortunately without indication of locality.
Chalcophora virginiensis ssp. antennalis nov.-Similar to virginiensis in general form, coloration and sculpture, but with a notably larger head and longer, more slender antennæ, which extend almost to the base of the prothorax, the latter similar in general form and with the sides obtusely and arcuately subprominent near apical third, but with the intricate sculpture toward the sides more broken; elytra similar but with the sides more rounded inward at base and the embossed smooth surfaces less elevated; sides distinctly serrulate apically; under surface nearly similar, except that the metasternum is more broadly concave. Length ( $\circ$ ) 29.0 mm .; width 10.0 mm . Idaho.

This form is distinguishable at once from virginiensis by its larger size, rather broader form, larger head and longer antennæ; it is probably more nearly specific in value than subspecific.

Chalcophora cupreola n. sp.-Form and habitus nearly as in laurentica and fortis, but brighter æneo-cupreous in color, with still finer longitudinal elevations of the elytra and a much smaller head; elytra near the humeri and along the epipleura metallic greenish; under surface bright cupreous throughout; head barely half as wide as the prothorax; vertex nearly as in laurentica, the median groove less deep, the sparse pubescence rather longer; eyes much less convex, separated by barely more than twice their width, viewed vertically; antennæ short, black, the two basal
joints subæneous, about as long as the thoracic length; prothorax nearly as in laurentica and fortis, the scutellum similarly minute but elongateoval, polished, black and very convex; elytra as in laurentica but more strongly rugose and rather more elongate, the serrulation almost obsolete. Length 25.0 mm .; width 8.8 mm . Kansas.

Besides the smaller head and less convex eyes, this species differs from both fortis and laurentica in the much narrower rugose sulcus of the prosternum.

Chalcophorella obsolescens n. sp.-Slightly broader, more convex and more posteriorly inflated than campestris, dull metallic green above, greenish-cupreous beneath, rather shining; head barely more than half as wide as the prothorax, deeply sulcate, coarsely, closely punctate, each puncture with a short silvery hair; antennæ rather short, stouter than in campestris, the joints much more rapidly constricted at their bases; prothorax trapezoidal, with moderately and very evenly arcuate sides, three-fifths wider than long, very coarsely, confluently punctate laterally, but less irregular than in campestris and not impressed near the hind angles, the punctures sparser and more regular medially, the sulcus very narrow, obsolete at apical third along a median line which becomes embossed, flat and impunctate thence to the apex, ending at base in a deep rounded puncture; scutellum subobsolete; elytra distinctly wider at three-fifths than at base, the sides thence straight to the base and arcuately oblique to the apex, which is smooth and obtuse, with the sutural spines small; lateral serrulation very much feebler than in campestris and still more markedly so than in serriger; surface as in campestris but with every feature much reduced, very much smoother; abdomen similarly sculptured but not so sharply pointed at apex in the female; prosternal groove broader and more coarsely sculptured. Length (of) 23.5 mm .; width 7.8 mm . Louisiana.

At first I thought that this might be langeri Chev., as the pronotal sulcus is obsolete anteriorly, but the sulcus in langeri is said to be much broader even than in campestris; here it does not have a third the width of the broad entire groove of that species; langeri is placed as a synonym of campestris by Kerremans.

Cinyra L.-G.
The species belonging to the subgenus Spectralia Csy., a group of the genus Cinyra L.-G., may be known by the following characters:

Antennæ black throughout . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
Antennæ black, becoming testaceous in about outer half, excepting the
last joint, which is blackish. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
2-Lateral impressed densely punctate line of the prothorax only present in basal half, the lateral parts thence to the apex evenly convex and sparsely punctate; body elongate-suboval, gradually pointed behind,
black, with greenish lustre, the impressed densely punctate areas of the elytra coppery, the under surface and legs cupreous; head nearly as wide as the thoracic apex, the eyes convex, widely separated, the front evenly and feebly convex, densely punctate, with a central and two sublateral irregular embossed smooth spots; prothorax one-half wider than long, the base wider than the apex, the sides nearly straight; surface very broadly impressed and closely punctate along the middle, the impression with a short narrow subimpunctate area at the bottom; elytra evidently wider than the prothorax, the sides rapidly converging and barely arcuate in more than apical two-fifths, the apices narrowly sinuate and bidenticulate, the closeset striæ rather irregular but well defined, not wholly interrupted by the numerous depressed and densely punctate areas, the intervals rather strongly and closely, subserially punctate; prosternum rather broad, flat, closely punctate; abdomen finely, sparsely punctate medially. Length 12.7 mm .; width 4.0 mm . North Carolina (Southern Pines),-Manee
abbreviata $\mathrm{n} . \mathrm{sp}$.
Lateral impressed grooves of the pronotum entire, extending, densely punctate, from base to apex, though gradually becoming shallower . 3
3 -Eyes strongly convex and prominent, the very densely punctatorugose front between them with a very irregular central broad chevron of three large embossed smooth areas; general characters somewhat as in the preceding, except that the median impressed and densely punctured line of the pronotum is narrow and even throughout, the depressed and densely punctate, brightly cupreous areas of the elytra much more numerous and more elongate, giving a more irregularly undulated surface and that the striæ are very much feebler, the subserial punctures of the intervals smaller; the sides of the elytra posteriorly are not subrectilinearly converging as in the preceding, but arcuately converge through a rather shorter extent, the apices more narrowly, feebly sinuate and minutely bidenticulate; along the sides of the elytra the densely punctate elongate depressed cupreous areas form almost a continuous depression; sterna similar, the median parts of the abdomen rather less sparsely, finely punctate. Length II. 4 mm .; width 3.75 mm . Illinois . . . . . ocularis n. sp. Eyes feebly convex and not prominent, the frontal surface densely and subrugosely but rather less coarsely punctured and simply with a small, narrow and inconspicuous median embossed smooth area along the median line; prothorax nearly as in ocularis; elytra narrower, more gradually less arcuately narrowed behind through a longer distance-more than apical two-fifths,-the apices nearly similar but the depressed areas are less definite, more confused, less cupreous and more coarsely and less densely punctate, the striæ close-set and rather deep suturally, scarcely traceable laterally; abdomen sparsely but more strongly punctate medially, densely as usual laterally. Length 10.5 mm .; width 3.2 mm . Texas.
macilenta Csy.
4-Body more slender than in any of the preceding, the head with feebly convex eyes as in macilenta but with the front more brightly cupreous and with the dense punctures finer, having centrally a feebly and very
unevenly embossed narrow smooth chevron; prothorax nearly as in the two preceding but with the densely punctate median channel broader and shallower; elytra in outline nearly as in ocularis but narrower, the depressed areas smaller, more widely separated and with their fine punctures much less dense; there are two or three before the middle, others in a slightly post-median transverse series and two or three more elongate and more posterior; the striæ are fine and rather sharply incised, the subserial punctures of the intervals distinct; abdomen densely punctate, sparsely medially toward base only. Length 8.6 mm .; width 2.7 mm . Pennsylvania.
gracilipes Mels.
Species of this group seem to be rather numerous, though not abundant individually, in the nearctic regions, and it is highly probable that Spectralia will have to be advanced to generic rank.

## CERAMBYCIDÆ

A number of interesting Cerambycids have been received of late and it seems fitting to describe them at the present opportunity.

Aneflomorpha imbellis n . sp.-Slender and rather shining, pale rufotestaceous, the head and prothorax of slightly darker tint; pubescence pale, rather long but not dense, inclined; head rather wider than the prothorax, with convex and coarsely faceted eyes; antennæ long and slender, extending a little beyond the elytra, completely devoid of spines; prothorax but little longer than wide, the sides subprominent visibly behind the middle; surface very coarsely, closely punctate, with a long smooth irregular median line which is much abbreviated anteriorly and not quite attaining the base; elytra two-fifths wider than the prothorax and about four times as long, the sides subparallel, expanding slightly toward base, rapidly rounding at apex, without trace of truncature, to the sutural angles, which are produced, dentiform and prominent but not spiniform; surface with coarse, close-set punctures, becoming gradually fine apically; under surface finely, not densely punctate throughout and with rather finer hairs; femora mutic, the legs slender. Length ( $\mathrm{O}^{7}$ ) 13.5 mm .; width 2.7 mm . California (San Diego),-Ricksecker.

Readily distinguishable from any other known species by the completely unarmed antennæ, and, from all except unispinosa, in the form of the elytral apices. I also have specimens agreeing very well with the description of linearis Lec., taken by Mr. Ricksecker at San Diego; the type locality is Tejon.

The form described by the writer under the name Hypermallus externus (Mem. Col. III, p. 300) is not even of varietal value; it may be united with incertus as a synonym; the following is, however, a distinct species allied to incertus:

Hypermallus compactus n. sp.-Shorter and relatively stouter than incertus, robust, very dark castaneous in color, the vestiture short, coarse, yellowish, condensed in irregular areas on the elytra and near the thoracic elevations; legs and antennæ dusky rufous; head ( $\sigma^{7}$ ) rather finely, not densely punctate; antennæ long, a fourth longer than the body, slightly thickened basally, loosely pubescent, with longer stiff hairs beneath, the spines very short and thick; prothorax slightly shorter than wide, the apex not quite as wide as the base, the sides feebly, unevenly rounded; surface with a central entire and strongly tumid smooth line and, on each side, two tumid smooth spots, the depressions with a loose mixture of distinct larger and small punctures; elytra a third wider than the prothorax, not quite two and one-half times as long as wide, the equal apical spines widely spaced; punctures widely spaced and only moderately coarse, fine apically; femora mutic. Length ( $0^{7}$ ) 15.0 mm .; width 4.5 mm . Texas.

Allied to incertus but shorter and relatively stouter, with much longer antennæ and stronger and closer thoracic punctures.

Hypermallus militaris n. sp.-Form ( $\sigma^{7}$ ) rather stout, the size small, dark brown in color, the legs and antennæ testaceous; head coarsely, densely punctato-rugose; antennæ slender, not a third longer than the body, the joints feebly, longitudinally impressed, the third distinctly longer than the fourth but equal to the fifth; prothorax about as long as wide, the base and apex truncate, the former the narrower, the sides evenly arcuate, more converging basally; surface strongly, deeply, very densely punctate, with a wide coarsely punctate, shining median line from base to apical third, the scanty vestiture yellow and forming three narrow loose irregular lines; elytra evidently wider than the prothorax and nearly four times as long, feebly cuneiform, the apices obliquely and narrowly, deeply sinuate, the punctures only moderately coarse, fine apically, everywhere well separated, the pubescence yellowish, scanty, the condensed spots few, small, loose and irregular; last ventral wider than long, trapezoidal, with arcuate apex and rounded angles. Length ( $\sigma^{x}$ ) II. 5 mm .; width 2.5 mm . New York (West Point),-Wirt Robinson.

Much smaller than villosus, with more slender antennæ, still more abbreviated outline and more shining and strongly sculptured male pronotum.

Hypermallus breviusculus n. sp.-Form ( $\sigma^{7}$ ) still more abbreviated, very small in size, dark brown, the legs and antennæ slightly paler and more reddish brown; head strongly, densely punctato-rugose; antennæ slender, the joints feebly flattened and densely sculptured and with the usual sharp edge internally, the spines small; joints coarsely, closely punctato-rugose, the third longer than the fourth and equal to the fifth; prothorax shorter than wide, the truncate apex and base equal, widest at the middle, the parallel sides evenly rounded; surface rather coarsely, deeply, densely punctate and somewhat shining, the central smooth spot elongate and with a few coarse punctures, the yellow vestiture
broadly and loosely aggregated sublaterally, also very narrowly along the middle toward apex and base; elytra much wider than the prothorax and almost five times as long but much less than four times as long as wide, subparallel, the apices narrowly sinuate and bidentate; surface rather closely punctate, finely apically, rather coarsely basally, the coarse yellowish vestiture slightly more close-set in irregular and ill-defined areas; last ventral shorter and more rounded than in the preceding; legs slender. Length ( $\sigma^{7}$ ) 10.0 mm .; width 2.2 mm . Massachusetts (Bed-ford),-Frost.

This species is not very closely allied to any other, being of very small size and much more abbreviated outline; it may be placed at the end of the genus. The head and prothorax are relatively smaller than usual.

Anoplium laterale n. sp.-Form, coloration and lustre very much as in mostum but with larger and relatively much broader prothorax, red-brown throughout, the legs and antennæ slightly paler, the pubescence short, sparse and even throughout. Male with the head larger than in mœstum, similarly closely and strongly punctate, the antennæ a third longer than the body, rather thick and strongly sculptured basally, the joints cylindric, not flattened and rugose internally as in Hypermallus, the spines very short; third joint longer than the fourth but not quite as long as the fifth; prothorax differing greatly, slightly shorter than wide, the sides broadly angulate just behind the middle, thence straight and feebly converging nearly to the apex and more converging and subsinuate to the base; surface rather coarsely, closely punctate, the median line narrowly smooth and irregularly punctured except apically; elytra slightly wider than the prothorax, less than three times as long as wide, the sides rounding in apical third, the apices obliquely truncate, with obtuse and blunt angles; punctures very coarse and rather close-set, small apically. Female with the antennæ almost as long as the body, more filiform, the prothorax subevenly rounded at the sides and still more coarsely punctate. Length (o $\sigma^{\circ}$ ) ) $12.0-14.0 \mathrm{~mm}$.; width $3.5^{-4.0} \mathrm{~mm}$. Texas. Three examples.

To be recognized readily by the stout form, with much broader anterior parts than in mostum and by other characters given above; the thoracic punctures in the male of that species are very much finer and denser than in the male of laterale and the sides are subevenly rounded in both sexes.

Anoplium pinorum n. sp.-Smaller and narrower than meestum and darker brown in color, the legs and antennæ dark rufous; vestiture of rather coarse hairs notably sparse, even; head coarsely and closely but not confluently punctate; antennæ ( $\sigma^{7}$ ) slender, but feebly thickened basally and with sparse strong punctures, fully a third longer than the body, with rather long bristling hairs and very short spines, the joints proportioned nearly as in the preceding; prothorax slightly shorter than
wide, the truncate base narrower than the feebly arcuate apex, the sides subparallel and nearly straight from slightly behind the middle for some distance, then rounding rapidly to the apex, slightly converging basally, the angulation very obtuse and blunt; surface with a very close-set mixture of rather fine and of less numerous larger, punctures, with an inconspicuous elongate median spot having stronger sparse punctures; elytra only a fourth or fifth wider than the prothorax, not quite three times as long as wide, very feebly cuneiform, gradually arcuately narrowing posteriorly to the narrowly and feebly sinuate apices, the external angle sharply marked but not dentiform; punctures very coarse, small apically, separated basally by about their own diameters; under surface finely, sparsely punctulate, the prosternum densely; legs rather short. Length ( $0^{\text {® }}$ ) 10.8 mm .; width 3.0 mm . North Carolina (Southern Pines), - Manee.

This species is very distinct from mostum, as shown by the above description, but belongs in that vicinity; the elytral punctures basally are even very much coarser than they are in mœstum.

Hapalosalia densicollis n. sp.-Form and coloration very much as in vibex, black, the elytra each with a pale yellowish vitta from the humerus very nearly to the apex, swollen slightly near the latter and about equal in width throughout to the black sutural vitta; head and prothorax with very short and rather abundant brownish hairs, the elytra with longer erect paler hairs, the entire under surface extremely densely and finely punctulate and with a dense covering of short decumbent silvery pubescence; head finely, very densely punctate throughout, the sides rapidly converging and arcuate behind the large and prominent eyes; antennæ very slender, filiform, piceous-black, the third joint a little shorter than the fifth and much longer than the fourth; prothorax slightly elongate, globularly swollen medially, strongly constricted at apex and base, the fine median line feebly impressed, the entire surface finely, very densely punctulate; elytra two and one-half times as long as wide, cuneiform, the apex conjointly rounded, at base two-thirds wider than the prothorax, relatively coarsely, deeply and closely punctate, the punctures gradually smaller to the apex but even there very distinct; legs slender, the pale femora and tibiæ all more or less blackish distally; tarsi piceous, the posterior paler. Length ( $\sigma^{7}$ ) 7.3 mm .; width 2.2 mm . North Carolina (Black Mountains),-Beutenmüller.

This species differs from every other thus far known in the very dense punctuation of the head and prothorax throughout their extent; otherwise it is somewhat remindful of vibex Newm.

In a series of sphericollis Say, sent me by Mr. Beutenmüller, also taken on the Black Mountains, there are four examples with red prothorax, apparently independent of sex, and three with black prothorax. The forms with red, do not differ otherwise from those with black, prothorax, and they are both different from my Canadian
exponent of ruficollis Say, in their uniformly more slender outline, more elongate, less medially inflated prothorax and relatively less narrowed apex ; ruficollis is therefore a valid taxonomic unit, which probably also has both red and black prothorax.

Mr. Beutenmüller also obtained additional specimens of Psenocerus tristis Csy., on the Black Mountains of North Carolina, which are in every way identical with the original type, showing that the nature of the latter is in no way aberrational. There is a blackish variety of the usually red-brown supernotatus, which may have been confounded with tristis, but it does not resemble it in any way, This black variety of supernotatus resembles the latter in general form, size and markings, but the antennæ are a little longer and thicker and the first joint is more developed; the basal prominence of the elytra is equally pronounced; this variety may be called Psenocerus supernotatus var. funebris n. var.; it occurs abundantly at Harrisburg, Pa. Supernotatus in a practically unvarying form occurs from Long Island to Iowa.

Strangalia maneei n . sp.-Body rather stout, suboblong, feebly convex, shining, black, the elytra each with a small elongate-oval red spot at the middle externally; pro- and mesosterna and their side-pieces and also the anterior and middle legs throughout, deep black; entire remainder of the under surface bright red; posterior femora red, the tip, the entire tibiæ and tarsi deep black; head small, with rather close-set punctures, the eyes large, virtually attaining the base; antennæ nearly as long as the body, slender, deep black, the fifth joint almost as long as the two preceding combined and, as well as the succeeding joints, more densely pubescent; prothorax campanulate, a little wider than long, the basal angles very prominent laterally, nearly one-half wider than the head, very convex, broadly impressed across the base but otherwise even, finely, sparsely punctate and with extremely short erect black hairs; elytra oblong, very feebly tapering, flattened above, dehiscent at apex, the suture broadly rounding outwardly to the very faintly denticulate outer angle; punctures coarse and deeply perforate, separated by two to three times their diameters basally, finer, feebler, asperulate and close apically, each with a very minute erect dark hair; abdomen finely and sparsely, the metasternum and side-pieces less finely and very densely, punctate throughout, the pubescence minute and very fine, pallid; legs long; basal joint of the hind tarsi longer than the remainder, the third small, very deeply and angularly notched. Length 8.6 mm .; width 2.7 mm . North Carolina (Southern Pines),-A. H. Manee.

This species is allied to cruentata Hald., but differs in its smaller size, in having merely a small lateral rufous spot on the elytra and in the coloration of the under surface, the entire hind body being
red in cruentata; it also differs in its very much coarser elytral punctures.

Goes tessellatus Hald., differs from the other species in its larger size, stouter form, in the longer basal joint of the antennæ, in the form and vestiture of the scutellum and in having two very faint fine raised lines on each elytron; it occurs exclusively in the southern Atlantic States and a specimen recently received from Mr. Manee, taken at Southern Pines, North Carolina, agrees very well with the type of Hammoderus amplipennis Csy., from the Levette collection, the Colorado label on the latter being erroneous in all probability; the type of amplipennis is shorter and relatively somewhat broader than the Carolina specimen and has a shorter and more transverse prothorax, but they are evidently very closely related. While tessellatus belongs to a special group of Goes, I am not prepared to conclude finally that it belongs truly to Hammoderus, although agreeing almost exactly with typical forms of that genus as depicted in the Biologia.

The following species is a very distinct member of the typical Goes, as represented by pulverulentus Hald., having a much shorter basal antennal joint than in tessellatus and being devoid of any trace of elevated elytral lines but differing especially in the form of the scutellum, this being smaller, shorter and with strongly parted longer and coarser vestiture, agreeing with pulverulentus and allies in this respect. In tessellatus the scutellum is larger and flatter, with much finer and shorter, dense and even vestiture, which is not definitely parted along the middle. In the Carolina specimen alluded to, which I hold to be typical tessellatus, the scutellum is rather longer than wide, but in the type of amplipennis it is broader and more parabolic in outline.

Goes robinsoni n. sp.-Form stout, parallel, piceous-black, densely clothed with short coarse ochreous hairs, condensed in spots about half as large as the scutellum, which are scattered sparsely and without order over the elytra, the latter without trace of fasciæ, nubilous or otherwise; head slightly narrower than the prothorax, with a fine entire median incised line; antennæ slender, a fourth longer than the body, the basal joint twice as thick as the succeeding joints, feebly obconic, two and onehalf times as long as wide, very finely punctulate and with close small decumbent hairs, with a few longer erect black bristles above and beneath, two-thirds as long as the third joint; prothorax not quite one-half wider than long, of the usual form, the spine acute, the surface rather coarsely and densely punctato-rugose and with short close-set hairs; scutellum
wider than long, broadly rounded, densely clothed with coarse reclined but not decumbent, yellow-brown hair, narrowly parted along the middle by a glabrous line; elytra one-half wider than the prothorax, two and one-half times as long as wide, rounded at apex, the sutural angles rounded; surface without trace of fine elevated lines, coarsely, deeply, subgranularly punctate, the punctures well separated, gradually smaller apically; under surface and legs densely clothed throughout with similar short brownishochreous hairs; last ventral broadly, feebly sinuate at apex in the type. Length ( $\sigma^{7}$ ) 23.5 mm .; width 7.2 mm . Rhode Island (Watch Hill).

This species is allied to pulverulentus and laurenticus, but is much stouter and has not even the faint semblance of nubilous fasciæ there traceable; it also has the condensed ochreous spots of the elytra larger and more conspicuous and the punctures much coarser. It is named in honor of Col. Wirt Robinson, Professor of Chemistry and Geology at the Military Academy, who very kindly, placed his unique specimen in my collection.

Within a few days I have been able to study two female specimens of Oberea flavipes Hald., taken by Mr. Hood on Plummer's Island, Md.; they show at once that flavipes is a valid and isolated species. The body is intense black almost throughout above and beneath, but has a grayish bloom due to the close-set whitish hairs; the elytra are irregularly flavescent near the scutellum and the epipleura near the base and the legs throughout are bright brown-ish-flavate; the head and prothorax above and beneath are deep black. The two callous spots on the pronotum are visible by reason of their convexity and lack of punctuation. It belongs to the bimaculata series.

Haldeman's entire description of myops Hald., is this: "yellow; antennæ, eyes, a spot upon each side of the pronotum, lateral elytral vittæ, and tarsi, black"; the description was made from a drawing in the cabinet of Major LeConte, and a penciled note by J. L. LeConte indicates that it was taken at Tolula, in June. Tolula is apparently in northern Georgia.

The original description of Oberea tibialis Hald., (Phytocia) is: "Black; anterior tibiæ and half the femora rufous; $4 \frac{1}{4}{ }^{\prime \prime \prime}$ long; (elytra 3,) I wide. Pennsylvania. Cab. Melsheimer. Slender, eyes black, orbits with cinereous hairs: thorax somewhat hairy: elytra gradually tapering, flattened above, obliquely truncate at tip on the inside: medial femora slightly rufous at tip, on the posterior side: beneath slightly cinereous."
T. L. Casey, Mem. Col. V, Nov. I9I4.

The following is a distinct species of the bimaculata series, recently taken by Mr. Beutenmüller:

Oberea umbra n. sp.-Body parallel, feebly convex, extremely slender, deep black, the entire under surface and legs deep black, the anterior part of the prosternum transversely yellow, which tint pervades the lateral part of the pronotum at apex, the remainder of the pronotum and the entire elytra black; tarsi feebly picescent distally; pubescence above everywhere minute and blackish in color, beneath longer, denser and dark gray; head wholly black, closely, strongly and unevenly punctate; antennæ four-fifths as long as the body, filiform, slender and deep black; prothorax a little longer than wide, cylindric, closely, unevenly and rather coarsely punctate, the callous spots small, embossed and pelished; elytra more than five times as long as wide, subparallel, slightly inflated basally, at base two-fifths wider than the prothorax, slightly shining, the punctures very moderate in size, in even close-set rows, becoming confused but not at all smaller in about apical fourth; legs short, sparsely, very finely pubescent. Length 9.0 mm .; width I .4 mm . North Carolina (Black mountains).

The type is of undetermined sex and the species is not closely allied to any other known to me.

The following is a rather distinct species of Tetraopes, which may as well be made known at the present opportunity:

Tetraopes sandix n . sp.-Form stout, the size rather large, dark rufous above, the entire under surface, excepting the prosternum, black and extremely densely clothed with very small decumbent slate-blue hairs; legs black, all the femora dull rufous, with black apex, the anterior tibiæ sometimes partially rufous; head rather finely, sparsely punctate; antennæ stout, black, the basal joint red, black at apex, the second, third and most of the fourth joints very densely and uniformly clothed with minute bluish-gray hairs, the first three also with short sparse erect black setæ; outer joints clothed with minute and dense, very dark brown hairs, the base and apex of the joints with gray annuli, the last only at base as usual; inferior fringe long and distinct; prothorax somewhat sparsely, not coarsely punctured, rather transverse, the lateral prominence strong, the umbo strong and abrupt, feebly arcuate at the sides, the four black spots forming a distinctly transverse parallelogram; bristling setæ at the sides short; scutellum velvety-black; elytra almost twice as long as wide, feebly tapering, rounded at apex, the sutural angles well rounded; humeri rather prominent; surface finely, sparsely punctate and covered densely with very minute decumbent gray hairs, giving a strong bloom, the sparse erect hairs short and pallid; each elytron has a humeral, anterior juxta-sutural and larger transversely oval post-medial black spot, the post-humeral wholly wanting in specimens at hand. Length ${ }^{14.6-16.7 ~ m m . ; ~ w i d t h ~} 5.0-6.0 \mathrm{~mm}$. California (Witch Creek, San Diego Co.).

Two specimens, which display no sexual differences, were very
kindly given me by Mr. J. D. Hood, of Washington. The species may be placed near coccineus Csy., but is much larger and stouter and differs in the very dense vestiture of the subbasal, and more annulate outer, antennal joints, and in many other features of form and structure.

## Tessaropa Hald.

Dysphaga Lec.
The following species does not accord at all well with published descriptions of tenuipes and it is therefore in all probability as yet unrecorded in the literature of the Cerambycidæ. Aurivillius places the genus in a very different part of the series from that determined by LeConte and Horn, in fact near Achryson and Oeme in the Cerambycinæ, where it seems more appropriately placed also by reason of habitus, than anywhere in the Lamiinæ:

Tessaropa apicalis $n$. sp.-Slender, deep black throughout the body above and beneath, the elytra pale flavo-testaceous, the tips piceousblack; head a little wider than the prothorax, densely punctato-scabrous, with very fine median stria, deeply impressed between the antennæ; eyes large, very broadly divided, separated above by half their apparent width; hairs very short, sparse and erect; antennæ extremely slender and filiform, a third longer than the body, so pale as to be almost translucent, denser basally, clothed with very short erect hairs; basal joint stout, twice as long as wide, black and densely rugose, the second joint very short though distinct, three times as wide as long; prothorax cylindric, just visibly longer than wide, truncate at apex and base, coarsely, densely and confusedly punctate, with a slightly elevated transverse flat basal area, which is minutely and transversely strigilate and having a small medial puncture; elytra twice as long as the prothorax and, at base, one-half wider, slightly cuneiform, each circularly rounded at tip, the pale part shining, rugulose, bicostulate and finely, sparsely punctate, the apical black part finely and densely rugose and more opaque; hind wings not quite extending to the abdominal tip; legs pale, slender, the tarsi very short, picescent, the posterior less than a third as long as the tibix. Length 7.8 mm .; width 1.35 mm . Pennsylvania (Harrisburg), A. B. Champlain. No record of food plant is given.

In tenuipes Hald., the head is said to be deeply impressed and the elytra fuscous, obsoletely fulvous at base; less than apical third of the elytra is dark in apicalis and this part is very differently sculptured from the very pallid remainder of the surface. A second Harrisburg specimen at hand, received with the preceding, said to have been reared from the beech, is much smaller, with entirely
black elytra, red abdomen, piceous-black legs, with pallid femora and with the antennæ shorter, deep black throughout and clothed more densely with much longer erect black hairs; the apex of the abdomen has a very large triangular emargination, occupying the entire tip; in the type of apicalis the abdominal tip has a smaller emargination, the bottom of which is not very acute and a supplementary segment is exposed through the emargination. I am not prepared to say that these two specimens are sexes of one species by any means, and do not know whether the second may be ventralis Hald., or not. Ventralis is said by LeConte to be the male of tenuipes. It is not very probable that the second specimen mentioned above, can be the male of apicalis, for the antennæ are shorter and the eyes much more widely separated on the front. The two specimens were not taken at the same time of the year, the type of apicalis being dated May 4, 1912, while the smaller one was reared and appeared Dec. 30, 191I.

## LUCANIDÆ.

Of Ceruchus MacL., there are three species now on our lists, the well known and abundant piceus Web., of the Atlantic regions and striatus and punctatus of LeConte, of the Pacific coast fauna. The following species is allied to piceus but has elytra more nearly as in striatus:

Ceruchus virginiensis n. sp.-Male, when fully developed, as broad as in the similar stage of piceus but more elongate, rufo-piceous throughout, the elytra deep black; integuments shining, glabrous; head about as wide as the prothorax, almost as in piceus throughout, except that the mandibles are much less arcuate, the opaque mentum similarly turned upward in plane anteriorly but with the median prominence at base narrower and more abruptly defined; antennæ missing in the type; prothorax as in piceus throughout; elytra evidently wider than the prothorax, nearly one-half longer than wide, one-half longer than the head and prothorax combined, omitting the mandibles, parallel, circularly rounded at apex, the striæ rather deeply impressed throughout and with moderate, close-set punctures, the convex intervals coarsely, deeply, unevenly and rather closely punctate; intervals 6-8 confused and obliterated basally to the humeri, forming an even and convex, evenly punctured surface; humeral angles sharply marked but not prominent; under surface nearly as in piceus but with the last abdominal segment relatively longer and more arcuate at apex. Length, exclusive of mandibles, 14.4 mm .; width 5.5 mm .; length of mandibles 3.5 mm . West Virginia (White Sulphur Springs).

The single type is rather dilapidated but can be seen to differ specifically from piceus in its larger, more elongate and deeply and coarsely sculptured elytra and much less arcuate mandibles; unfortunately the legs are missing in the type, which was very kindly given me by Prof. Wirt Robinson, of West Point.

So far as known to me, the following species does not closely resemble any of those hitherto described in Platycerus Geoff., having a relatively much broader prothorax:

Platycerus laticollis n. sp.-Hind body rather narrow, the color pale and uniform red-brown throughout the body and legs, the head darker basally, moderately shining, glabrous; head small, distinctly less than half as wide as the prothorax, the sides before the eyes obtusely subangulate and much more prominent than the latter, thence evenly oblique to the obtusely angulate and anteriorly prominent limits of the epistoma, the latter broadly, rather deeply sinuate; mandibles very small, stout, acute at tip and not dentate within; antennæ with the stem slender, subglabrous, the club stout, parallel, 3 -jointed, densely clothed with minute gray pubescence and barely as long as the basal joint of the stem; prothorax four-fifths wider than long, the sides prominently rounded distinctly behind the middle, thence broadly arcuate to the obtusely rounded moderately advanced apical angles and more rapidly converging and straighter to the basal angles, which are right and not rounded, the sides just before them feebly sinuate for a very short distance; base transverse, a third wider than the sinuate apex; surface broadly deplanate at the sides, less broadly and more concavely basally; punctures rather strong, well separated, close apically and on the lateral convex slopes, coarser on the deplanate sides; elytra more than one-half longer than wide, much narrower than the prothorax, parallel, evenly rounded at apex, the punctures moderate, close-set in unimpressed series, which are alternately more widely and narrowly separated toward the suture, with the broader intervals flat, the narrower slightly convex, the former closely and confusedly punctate, the latter more finely and uniseriately; toward the sides the surface is smoother and the punctuation more even; humeral angles obtuse, not prominent; anterior face of the anterior tibiæ not at all punctate except at apex and having, behind the middle, a rounded and densely, decumbently golden-pubescent area; legs rather slender, the tarsi filiform, the posterior four-fifths as long as the tibiæ. Length 9.3 mm .; width of elytral base 3.0 mm .; width of prothorax 3.65 mm . Oregon (Mary's Peak).

The single example, which is probably male, belongs to the agassizi series, but differs in its much sparser sculpture, wide and laterally deplanate prothorax, basally much stouter mandibles and in its pale coloration and small size.

I have recently received an example of californicus Csy., taken by Mr. Nunenmacher in Josephine Co., Oregon; it agrees very well
with the type but is nearly deep black in color, with slightly diaphanous thoracic sides, showing that the type is probably immature.

After carefully reading the description of pedicellaris Möllenkamp (Intern. Ent. Zeit., V, 191 I, p. 302), described as from California, I am unable to find any notable differences between it and thoracicus Csy.; it is highly probable, therefore, that it is a synonym of that species.

## PASSALIDÆ

## Proculus Kaup.

In describing Proculus magister (Ann. N. Y. Acad., IX, I897, p. 641), I compared it with a species at that time supposed to be mneszechi Kaup, but which, because of the high basal process of the mandibles, proves to be different and much closer to burmeisteri Kuw. This species may be described as follows:
> * Proculus mandibularis n. sp.-Form shorter than in magister, similarly convex and very shining throughout; mandibles with a very high slender and almost perpendicular dorsal process almost at the extreme base; small frontal tubercles mutually less separated than either from the ends of the strong oblique obtuse lateral ridges, the lateral anteriorly margined depressions distinct; central tubercle minute, isolated; anteocular lateral spur strong, subacute; labrum feebly and broadly sinuate at tip; prothorax as in magister, impunctate, the lateral irregular depression well developed; elytra oval; equal in width to the prothorax, with moderate and rather feebly impressed but distinctly and closely punctate strix throughout, the intervals everywhere almost flat; flanks glabrous except anteriorly; middle tibiæ with two or three small medial spines externally, the posterior with one to three. Length 66.0 mm .; width 26.0 ; width of head 20.0 mm .; length of prothorax 19.0, of elytra 36.0 mm . Honduras (San Pedro Sula).

The only form with which this can be compared is burmeisteri Kuw., and there the strial intervals of the elytra are particularly dwelt upon as being notably convex. In magister the mandibular dorsal process is more gradually formed, less elevated and ends at basal two-fifths; it is more prominent, however, than in mneszechi, in which species the anterior thoracic angles are better defined, the elytral intervals flatter and the ends of the anterior tibiæ more finely and obliquely incised than in magister.

[^1]ante-ocular process; mandibles evenly bowed externally, the dorsal process high, slender, basal and obliquely pointed; labrum transverse and feebly bisinuate at apex; frontal margin transverse, with two small sinuses at each side, the frontal tubercles distinct, the central small but strong, at the junction of three feeble ridges; prothorax impunctate, with well marked apical angles and lateral depression; elytra oval, apparently rather narrower than the prothorax, the striæ more evident suturad, the flanks more shining, pubescent throughout, the lateral striæ more impressed and distinctly punctate; middle tibiæ usually with two, the posterior with one, external spinule. Length 51.0 mm .; width of head 15.0 , prothorax 18.5 and elytra 18.8 mm .; length of prothorax I4.0, of the elytra 27.0 mm . Guatemala (Chiquimutilla).

Until the excellent figure of opacipennis given by Kaup was examined, I had considered this species to be identical, but it differs in the narrower and more elongate elytra, sharper anteocular processes and less spinose external tibial margins, as well as in many other features. From beckeri Zang, it differs in its much smaller size, narrower form and in the pubescence of the elytra.

The distinction made by Kuwert between Paxillus leachi and minor, relating to the presence or absence of a humeral tuft of conspicuous stiff hairs, is a good one; this tuft does not exist in parvus Csy., which is therefore a valid species and not a synonym of leachi as stated by Arrow.

## SCARABÆIDÆ

A number of interesting species of Trichius Fabr., have been accumulating in our collections for some years, principally inhabiting the southern Atlantic regions; it would seem well to make these known briefly as follows:

Trichius rufobrunneus n. sp.-Moderately stout and of pale and rich red-brown color, with the legs more obscure, the head piceous-black; pubescence very short; clypeus transverse, feebly sinuate medially at apex; prothorax nearly as long as wide, rounded at base, the sides broadly angulate before the middle, the punctures small, close-set; elytra twofifths wider than the prothorax, shorter than wide, inflated near basal third; intervals two and four depressed and finely, densely punctate, the convex intervals sparsely; flanks shining and sparsely punctate in basal third, opaque and darker brown in apical two-thirds, the two short transverse white lines distinct; pygidium with very short fine sparse pubescence, with white incrustation rather narrowly at the sides; legs slender. Length ( $\sigma^{\text {® }}$ ㅇ ) $9.8-12.0 \mathrm{~mm}$.; width $5.0-6.0 \mathrm{~mm}$. Florida (Marion Co.). Twelve examples.

Distinguishable readily from piger by the coloration and the nearly bald pygidium.

Trichius obesulus n. sp.-Stout and of moderately large size, shining, black, the anterior parts generally feebly greenish, the elytra obscure rufous, partially black to wholly black, with a large opaque black area on the flanks posteriorly; vestiture sparse and very short; clypeus transverse, very feebly sinuate; prothorax large, much wider than long, strongly, loosely punctate, subimpunctate latero-basally as a rule; elytra only a fourth wider than the prothorax, moderately inflated subbasally, the second and fourth depressed intervals finely, closely punctate, elsewhere more strongly, sparsely punctate; pygidium nearly bald, the hairs very short and sparse, denser near the apex, the sides rather broadly white; legs moderate, black. Length ( $\sigma^{7}$ ㅇ $)$ ) $10.0-12.0 \mathrm{~mm}$.; width $5.4^{-}$ 6.7 mm . Florida (Jacksonville).

The description is taken from the female; the male has the thoracic punctures finer and more close-set and the pygidium more convex.

Trichius viridulus ssp. semiviridis nov.-Moderately narrow, shining, black, with strong green metallic lustre anteriorly, the elytra rufotestaceous, with feebler green reflection, the pygidium metallic green; clypeus parallel, nearly as long as wide, distinctly sinuate; prothorax parallel, abruptly oblique at the sides in apical third; surface strongly, not densely punctate; elytra two-fifths wider than the prothorax, moderately inflated subbasally; surface almost uniformly, rather sparsely though strongly punctate, the fourth interval more closely basally; flanks polished throughout, with an anterior short, and posterior long, transverse white line; pygidium convex, with short and very sparse hair, the lateral white area prolonged inward at base as a rule; legs rather short, with green metallic lustre. Length ( $\sigma^{\top}$ \& ) $10.0-11.0 \mathrm{~mm}$.; width $5.0-5.7 \mathrm{~mm}$. Florida (Marion Co.).

Allied to viridulus but less stout and differing in the more parallel, anteriorly obliquely narrowed prothorax, rufescent elytra, much less densely punctate on the flanks and with more developed transverse white lines. One example, apparently not differing otherwise, has the metallic green replaced by bluish-black throughout.

Trichius carolinensis n. sp.-Smaller, shining, uniform blackish-blue throughout, the legs greenish-black; pubescence short, sparse and inconspicuous; clypeus notably shorter than wide, distinctly sinuate; prothorax short, much wider than long, the sides subparallel and arcuate, more converging in apical third; surface strongly but rather sparsely punctate, the erect hairs fine; elytra not quite as long as wide, two-fifths wider than the prothorax, the sides arcuate, gradually converging posteriorly; surface almost uniformly, rather finely punctate, the fourth interval more closely but not depressed, the flanks subrugose, shining, with two very small and short transverse white spots; pygidium convex, sparsely sculptured and with very short sparse inconspicuous hairs, the usual lateral white areas well developed; hind tarsi ( $\sigma^{7}$ ) not quite twice as long as the tibiæ. Length ( $\sigma^{7}$ ) 9.0 mm .; width 4.5 mm . North Carolina (Southern Pines),-Manee.

Also a member of the viridulus series but much smaller and less inflated, differing greatly, also, in coloration and in the less elongate clypeus and prothorax. This form would certainly appear to be specific in value rather than subspecific.

## TENEBRIONIDÆ

The following Blapstinus has been undescribed in my cabinet for some years, no available opportunity having occurred to define it until now:

Blapstinus pinorum n. sp.-Black and shining, the legs and antennæ black; head transversely rounded, three-fifths as wide as the prothorax, finely, closely punctate; antennæ slender, gradually broadened apically, shorter than the head and prothorax, the latter transverse, feebly sinuatotruncate at apex, with broadly rounded sides, finely, deeply and closely punctate, more closely and strongly toward the sides; elytra short, convex, not one-half longer than wide, rounding behind in apical twofifths, shining, finely striate, the striæ closely punctate, finely suturad, more strongly laterad, the intervals feebly convex, confusedly punctate throughout, the punctures half the size of those of the strix; legs slender, the hind tarsi short. Length 4.0 mm .; width I .75 mm . North Carolina (Southern Pines),-Manee.

Smaller, more convex and more abbreviated than mostus, with smaller and thinner antennæ, much less sinuate apex of the prothorax and coarser interstitial punctures of the elytra.

Aconobius densus n. sp.-Very narrowly elongate-oval and strongly convex, densely opaque, black, the legs blackish-piceous; vestiture close, short and coarse, grayish-fulvous; head fully four-fifths as wide as the prothorax, finely, densely punctate and gray-pubescent, wider than long, the antennæ long and heavy, extending well onto the elytra, black, the three outer joints slightly enlarged, the last narrower than the tenth, the third nearly as long as the next two; prothorax but little wider than long, the sides parallel, broadly and evenly arcuate, the apex and base subequally and evenly, feebly arcuate from side to side, the apical angles slightly obtuse but sharply marked; surface extremely densely punctate throughout, the short fringe along each side composed of close-set erect coarse hairs; scutellum small, triangular; elytra elongate-oval, threefourths longer than wide, at the middle a third wider than the prothorax, coarsely, feebly striate, the striæ coarsely and closely punctate, the intervals with minute sparse confused punctures, the vestiture short and stiff; legs moderately long. Length 4.5 mm .; width 1.5 mm . New Mexico (Deming),-Wickham.

Differs greatly from laciniatus Csy., in its very narrowly oval form, more convex surface, less inflated antennæ, more oval and convex elytra and blackish legs.

Aconobius nigripes n. sp.-Form much broader and less convex than the preceding, black throughout the body, legs and antennæ; pubescence very short, stiff, abundant, obscure grayish in color; head only two-thirds as wide as the prothorax, strongly, very densely punctured; antennæ thick, heavy, the last three joints dilated decreasingly to the tip, the third not as long as the next two, the fourth longer than the fifth; prothorax a third wider than long, parallel and evenly, feebly arcuate at the sides, the apex barely narrower than the base, both evenly and feebly arcuate from side to side; surface strongly, very densely punctate, the punctures separated by very fine shining intervals, the lateral fringe as usual; elytra oblong, two-thirds longer than wide, arcuately narrowing in apical two-fifths, the sides feebly arcuate, only slightly wider than the prothorax; striæ rather coarse, somewhat coarsely but not very closely punctate, the intervals minutely, sparsely punctulate. Length 4.8 mm .; width I .9 mm . Texas (Marfa),-Wickham.

Easily distinguishable from laciniatus by the less transverse prothorax, with the apex broadly arcuate and not truncate and by the much less impressed elytral striæ.

The genus Aconobius Csy., (Ann. N. Y. Acad. VIII, p. 617) is one of the Blapstinus group of Tenebrionidæ.

## ADDENDUM

The name Exoma, proposed by me for a singular genus of Byrrhids (Can. Ent. 1908, p. 282), proves to be preoccupied by Melichar (1902), as shown by the recent list of Waterhouse and Sharp. In case no other name has been suggested in recent literature to replace it, I would propose the name Exomella, in which case the tribal name would assume the form Exomellini.

It is rather remarkable that the genus Tyloderma Say, does not appear in any of the published general lists of generic names. I referred to this omission some years ago in the Canadian Entomologist.


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Casey, Thos. L. 1914. "Miscellaneous notes and new species." Memoirs on the Coleoptera 5, 355-378.

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[^0]:    * The tibial differences referred to on page 21 (ante), in distinguishing between denverensis and pugetana, do not exist, the mistake arising from having inadvertently compared the posterior tibia of one with the intermediate tibia of the other.

[^1]:    * Proculus densipennis n. sp.-Form narrower, convex, shining, the elytra very densely opaque, with feebly impressed, very obscurely punctate striæ and nearly flat intervals; head large, with acutely porrect

