The original edition is of extreme rarity - Dr. Horn informs me that he had never yet been able to obtain a sight of it.

Vanderbilt
Entomology
(1787-1834)

Voyage de la Bibliothèque de l'Américain 1842, p. 89. No. 581.

Donald Mac Gillavry
Purchased from the
Cullman Endowment
DESCRIPTIONS

OF NEW SPECIES

OF

NORTH AMERICAN INSECTS,

AND OBSERVATIONS

ON

SOME OF THE SPECIES ALREADY DESCRIBED,

BY

THOMAS SAY.

NEW HARMONY, INDIANA.

1829—1833.
Description of new North American insects, and observations on some already described.

By Thomas Say,

Amblycheila, Say.

Labrum transverse, much wider than long; mandibles prominent, strongly toothed; labial palpi elongated; basal joint short, entirely concealed by the mentum; second joint short, spherical, resting on the edge of the emargination of the mentum; the third joint elongated, cylindrical, with rigid hairs; fourth joint enlarging to the extremity where it is truncate somewhat sinuate; mentum, tooth robust, prominent, canaliculate before, acute; antennae, second joint two-thirds the length of the third; wings none; elytra united: eyes very small, hemispherical, entire; clypeus at tip entire.


This insect which I found near the Rocky Mountains, I described under the genus Manticora, but, judging by the present mutilated state of the specimen it seems to agree better with the Megacephala. It differs from Manticora altogether in form, in the smaller size of the head, and in not having alobed, thorax, &c., but it corresponds in the comparative magnitude of the eyes, the diameter of which is hardly more considerable than that of the basal joint of the antennae. In the size of the eyes it differs greatly from Megacephala, also in the circumstance that the basal joint of its labial palpi is altogether concealed by the mentum; but it agrees with this genus in form, and is probably more closely related to it than to Manticora.

Still however as it does not agree with any known group it may perhaps be proper to construct a genus for its reception.

Cicindela, Linn.

C. unicolor, Dej. This species appears to have an extensive range. I received a specimen from Dr. Pickering of Massachusetts, and I found another in Florida. It varies in having a slight tinge of white on the tip of the elytra.

C. marginata, Fabr. Syst. Eleut. 1, 241, No. 48. Dejean has described this species under the name of variagata, Sp. Gen. 1, 84—see also Vol. 2, 414.

C. unipunctata. Fabr. varies in having a very small obscure yellowish spot, half way between the ordinary spot and the tip, on the margin.


C. dorsalis, Say, Trans. Amer. Philos. Soc. 1818. Since described by Dejean with the name of signata, Sp. Gen. 1, 124, but corrected Vol. 2, 414, Supp. and on page 426 of the same supplement he describes another species under the name of dorsalis, which however will of course be changed, as mine has the priority.

Syst. Eleut. 1, 240 and Dejean Sp. Gen. 1, 55. Olivier has certainly the priority, and consequently the exclusive right as being the first describer of this species.

C. aerguttata, Fabr. Dejean has ascertained autoptically that C. violacea Fabr. is the immaculate variety of this species.

C. 12—guttata, Dej. I obtained a specimen in Missouri state.

Of this genus I have in my cabinet twenty-two species, natives of the United States, that have been described.

ARETHAREA, Say.
Artificial Character.
Elytra truncated; terminal joint of the maxillary palpi acicular; anterior tibia simple.

Natural Character.
Head large, wider than the thorax, contracted behind at the junctio with the thorax; antennae originating beneath a carina, with the first joint much shorter than the head; labrum short, bilobated; the lobes divaricated; margin hairy; mandibles very prominent, arquated, acute; within prominently and acutely denticulated; maxillae rectilinear with rigid hairs within; palpi with the penultimate joint dilated; ultimate joint acicular & minute; labium at tip with two equal membranaceous lobes & a lateral robust seta; palpi very small and feeble, terminal joint somewhat shorter & more slender than the preceding one; mentum transverse, simple; destitute of auricles; thorax cylindrical; truncate before and behind; elytra broadly truncate at tip; tibiae, anterior pair simple; tarsi with subequal simple joints; the basal one slightly longest, nails unarmed; posterior pair of feet with the nails pectinated.

Observations.
The prominent, arquated and denticulated mandibles of this curious insect, resemble with some accuracy, those of Cicindela; but the general appearance and extraordinary assemblage of characters widely separate it. It has the truncated elytra of Lebia and its congener; the simple anterior tibae of Cicindela and a singular character that seems to connect the two families, that of having the anterior pair of nails simple and the posterior pair pectinated. We may also remark, however, that the acicular terminal joint of the maxillary palpi is a trait in common with Benbidium, Bon.

A. helluoio, Head black; thorax rufous; elytra blue.

Inhab. Pennsylvania.

Head punctured, somewhat hairy; eyes small, almost equidistant between the tip of the mandibles and the thorax; antennae first and second joints pale rufous: labrum yellowish rufous; mandibles piceous: palpi pale yellowish rufous: thorax punctured excepting along the dorsal middle: elytra destitute of striae or punctures, blue with a purplish reflection: feet and postpectus pale yellowish; knees and tarsi brownish.

Length three-tenths of an inch.
The intermediate feet and the antennae excepting the first and second joints are deficient in the specimen.—I am not sure whether I obtained it on our journey to the Rocky Mountains, to St. Peter’s river, or in Pennsylvania, but I think the latter.
Descriptions of new North American insects, and observations on some already described.

By Thomas Say.

(Continued from page 67.)

CASNONIA, Latr.

C. ruséne, Dej. The insect of this genus, represented by Drury (Ins. 1, pl. 42, f. 4 & 6,) is probably a variety of this species. Dejean has not noticed this figure at all. The Galeria americana is represented in the same plate.

SPHERACRA, Say.

Elytra entire; tibiaz emarginate; terminal joint of the tarsi profoundly bilobated; nails simple; head as long behind the eyes as before them; thorax subcylindrical; antennae much shorter than the body; basal joint much shorter than the head, joints, excepting the second not very unequal in length, subcylindrical; labrum emarginate; palpi with the terminal joint somewhat fusiform, subacute; mentum with a prominent, acute, central tooth.

S. dorsalis, Fabr. "Black; elytra striate, testaceous; suture broadly black.


Smaller than O. angustata. Antennae testaceous; head black, polished, broader than the thorax; thorax cylindrical, obscurely ferruginous; elytra striate, testaceous, suture broadly black, hardly attaining the tip; body black, feet testaceous." Fabr.


In my specimen the head only is black, or rather so deep a rufous as to appear black, excepting the tip and base.

This well known species was referred by its discoverer Fabricius, to his genus Odacantha; in which arrangement he was followed by Dejean, who, however, was fully aware of its generic difference from the O. melanura, Fabr. Dejean in his observations on the genus, says, "that in consequence of the joints of the tarsi being less filiform, than those of the type of the genus, almost triangular, the penultimate one deeply bilobate and the extremities of the elytra rounded, it would be perhaps proper to make a new genus of this insect."

In this remark I perfectly coincide, as I cannot see the propriety of joining, in the same genus, two insects whose characters, in the artificial system place them in different families, though it cannot be denied that they have many, more intimate, natural affinities.

I had written the above with the expectation of introducing a new species, in an insect which in form and colour, resembles the dorsalis, exceedingly to the eye, excepting in size, but on close examination it proves to be widely distinct.

CYMINDIS, Latr. Dej.


This species has been since described by Dejean under the name of C. complanata. In my specimens the palpi are hardly dilated. It varies in having the thorax darker and of the colour of the head, I obtained an individual in Indiana.

2. C. laticollis, Blackish; thorax transverse; feet pale rufous; elytra with slender stria and minute punctures.
Inhab. near the Rocky Mountains.

_Body_ black-brown, punctured, with short hairs: _head_ - - - : thorax decidedly transverse, with numerous, somewhat large punctures; truncate before, and a little sinuate behind; margin each side depressed and a little elevated, dull rufous; at the posterior an obvious tooth: _elytra_ with very slender, capillary striae in which are minute punctures, which are larger and more obvious towards the base and lateral margin; interstitial lines with a very slight convexity, and with numerous, small punctures, rather larger than those of the stria; lateral margin obscure rufous; tip truncate, without any appearance of sinuation: _beneath_ obscure rufous, punctured: _feet_ rufous; _thighs_ and _trotchantes_ paler.

Length about two-fifths of an inch. I obtained it when on the expedition to the Rocky Mountains with Major Long. The thorax is shaped somewhat like that of _americana_, Dej., but is wider as in _platicollis_, Say. The _elytra_ have not the slightest appearance of being sinuated at tip.


CALLEIDIA, Dej.

1. _C. viridipennis_, Say, (Cymindis) _Trans. Amer. Philos. Soc._ This _species_ has been since described by Dejean, under the name of _margiata_, v._ Spec. Gen. 1_, p. 222, but corrected vol. 2. Supp. p. 450.

He has given the name of _viridipennis_, to another _species_; but as it is a subsequent name, he will of course change it.

2. _C. smaragdina_, Dej. A specimen of this insect was sent to me by Dr. Pickering, from Salem, Massachusetts, so that it is probably a general inhabitant of the Atlantic U., S., but as I have found it myself but once, (in the state of Ohio,) I should suppose it is rare.


LEBIA, Latr. Dej.


2. _L. viridis_, Say, _Trans. Amer. Philos. Soc._ Dejean has described a _species_ under the same name. It is closely allied to, if not the same as this, but if not the same _species_, the name must of course be changed. Spec. _Gen. 1_, 271.

3. _L. fusca_, Dej. varies in having the head nearly black, the thorax yellowish ferruginous, and the _elytra_ paler brown, with the yellowish spots, particularly the terminal, almost obsolete.

(The following genus should have been inserted between the genera Amblycheila and Cicindela.)

MEGACEPHALA, Latr.

_M. carolina_, Fabr. This _species_ is certainly found in the southern part of the Union: I have an individual that was taken near New Orleans, it varies a little from West Indian specimens in being less deeply sculptured.
NATURAL HISTORY.

Description of new North American insects, and observations on some already described.

By Thomas Say.

BRACHINUS, Weber.

B. stygicorinis, Ferruginous; antennæ black; elytra blackish-blue.
Inhab. Missouri.

Body ferruginous, with short hairs: head with irregular punctures each side between the antennæ, becoming irregular, but slight, lineations near the eyes: antennæ brownish-blue, first and second joints ferruginous: thorax with minute, irregular, transverse lines, dorsal lines well impressed: elytra slightly grooved, more obviously so towards the base; edges beneath, purplish; postpectus, except in the middle, and venter blackish, with short, whitish hairs.

Length seven-twentieths of an inch.

Var. a. Sutural edge of the elytra ferruginous.
I obtained this species in the winter of 1819, when with Major Long's party at Engineer Cantonment near Council Bluff. It occurred in considerable numbers, occupying some crevices of rock, eight or ten feet under the surface, in a temporary cavern, where they were hybernating. It differs from cyanipennis, Say, found at the same locality, by the different colour of the antennæ, &c.
Can this be the janus, or is the quadrripennis, Dej., synonymous with that species, described in Turton's Linn.?

CLIVINA, Latr, Dej.

1. C bipustulata, Fabr. The true species of this author, has almost always, if not in every instance, but two spots on the elytra, and these are terminal. The second interstitial line has seven or eight subequal distant punctures, and the fourth interstitial line has five or six punctures, subequal, excepting the terminal one which is more distant.

2. C. quadrirmaculatus, Palisot de Beauvois.—This species is quite distinct, though very closely allied to the bipustulata. It is similar in size and almost so in form; but the thorax is proportionally longer. In colour it is generally like the preceding, but in addition to the two terminal punctures of the elytra, their base is more or less, but generally obsoletely, tinged with obscure rusous. The interstitial lines are altogether destitute of punctures. I have a variety in my collection, of which the elytra are entirely of a rousous colour and even paler than the terminal spots usually appear; these spots are of course not visible.


Of this genus I have eight described species of this country.

CARABUS, Linn.

1. C. vicintus, Weber. I think it highly probable that Dejean is right in considering, as he does (doubtfully however) my C. interruptus, to be the same as this. Weber's expression, "lineis
2. _ligatus_, Germar. Sp. _nova_. p. 6. Since described by Dejean under the name of _carinatus_, Sp. Gen. 2, 80. He quotes _ligatus_ doubtfully as synonymous. His description, however, agrees so perfectly that I feel no hesitation in considering them the same.

3. _C. serratus_, Say. Trans. Amer. Philos. Soc. Since described by Dejean under the name of _lineato-punctatus_, Sp. Gen. 2, 77; the former has, of course, the priority.

4. _C. externus_, Say. Jour. Acad. Nat. Sc.—The largest American species I have seen. It belongs to Dejean's twelfth division of this numerous genus. What is the _C. textatus_, L.?

CALOSOMA, Weber.


2. _C. nive_, Dej. Sp. Gen. 2, 210. I obtained an individual of this insect in Mexico. It corresponds accurately with the description; but in addition I may add that it varies in having a large obscure rufous spot on the vertex.

3. _C. calidum_, Fabr. My description in the Trans. Amer. Philos. Soc. was taken from the true Fabrician species as is evinced by the expression "dilated, impressed, golden dots" as applied to the elytral excavations. But I did not sufficiently examine the very closely allied species which Dejean has separated from it, as I supposed it to be only a variety.

ELAPHRUS.

1. _E. fuliginosus_. This new species was found in Pennsylvania by Mr. Le Sueur, to whom I am indebted for the specimen; and although the head and thorax are destroyed, yet sufficient character remains to prove it the analogue of the _E. uliginosus_, Fabr., of Europe. In comparison with that species, however, many dissimilarities are perceptible. The discoidal indentations are larger and more obviously emarginated by the entering angles of the interstitial spaces. The interstitial spaces are somewhat less regular, and have rather large punctures, particularly towards the base; towards the tips of the elytra the punctures are not larger than those of the _uliginosus_, but are fewer in number. The body is slightly larger than in that species.

It appears so be rare.

2. _E. ruscarius_. This species I described in the Trans. Amer. Philos. Soc., with a mark of doubt, as the _E. riparius_, Fabr., but having recently compared it more accurately with numerous European specimens, I think it may, with propriety constitute a distinct, but certainly very closely allied species. In comparison with the _riparius_, it is rather more robust, of a darker colour; more deeply sculptured, as well on the thorax as on the elytra, and the discoidal impressions are somewhat larger and more obvious.

In these characters my specimens all agree, and I possess more or less mutilated specimens from Pennsylvania, Mississippi, Arkansas, Missouri, and the Rocky Mountains. I therefore have ventured to separate it as a distinct species.

_(To be continued.)_
NOTHIOPHILUS, Dumer.

1. N. semistriatus, Say. Closely allied to N. aquaticus, F., and biguttatus, F., partaking of the characters of both. Dejean states that it "ne diffère peut-être pas de l'une des espèces d'Europe," but he does not inform us which of the species; indeed they are all so closely allied, that considerable examination is required to detect permanent differences. The elytral puncture is small and like that of aquaticus placed nearer the base than that of the biguttatus, but the striae, like those of the latter, are not obsolete towards the tip; the four basal joints of the antennae are rufous, &c.

2. N. porrectus, Say. M. semistriatus, Var. b. Say. Trans. Amer. Philos. Soc. On close examination I am convinced that this deserves to rank as a separate species. In comparison with either of the species above mentioned the thorax is much more contracted behind, and the labrum is more advanced. The feet are entirely rufous, even including the thighs. The head is larger than that of the semistriatus, and the striae are not so deeply impressed, but the impressed point of the elytra is similarly situated, though perhaps a little further back. The length is much the same. The colour is tinged with violaceous.

CHLÆNIUS, Bonelli.

1. C. pusillus, Say. Trans. Amer. Philos. Soc. Since described by Dejean under the name of elegantulus.

2. C. tomentosus, Say. (Epomis.) Trans. Am. Philos. Soc. This species has been referred to this genus by Dejean; the palpi are not sufficiently securniform, for Epomis.

3. C. circumcinctus, Green tinged with violaceous; edges rufous.

Inhab. Louisiana.

Body green, more or less tinged with violaceous and brassy, punctured: head minutely and confluentely punctured; in the middle tinged with bronze; lateral edges dark purplish: antennæ reddish brown, three basal joints pale yellow with rufous incisures; labrum and mandibles honey yellow, the latter black at tip: palpi yellow; terminal joints honey yellow: thorax deeply punctured, sparse near the anterior angles, and almost wanting each side of the middle; dorsal line acute almost obsolete; basal lines widely indented; lateral edge regularly arquated, dull rufous; basal edge rectilinear in the middle and a little oblique each side, making the angles rather more than rectangular; green a little tinged with brassy: scutel dark purplish: elytra with profound, obsoletely punctured stria; interstitial spaces flattened, punctured, sericeous; rather dull green with a slight violaceous reflection; exterior and apical edge dull rufous: beneath black: feet yellow, joints a little rufous: venter on the margin yellowish.

Length over two-fifths of an inch.
For this pretty species I am indebted to Mr. J. Barabino of New Orleans.

4. C. vigilans, Head and thorax brassy; antennæ at base and feet ferruginous; elytra violaceous.

Inhab. Mexico.

Pubescent: head impunctured, brassy-green, polished; two obsolete indentations between the antennæ: labrum transversely narrow, trunca
ted, and with the palpi dull rufo-ferruginous:— antennæ fuscous, pubescent, three basal joints subglabrous, rufo-ferruginous: thorax brassy-
green, with rather dense, very short hair, polished; dorsal and basal impressed lines distinct;— posterior angles not excurved, but obtusely angul-
ated, almost rounded: elytra bluish-violaceous, with punctured striae; interstitial spaces pubes-
cent, depressed, and minutely granulated: beneath blackish: feet rufo-ferruginous.

Length half an inch.

Much like C. nemoralis, Say, but the antennæ of that species are entirely rufo-ferruginous, its posterior thoracic angles are slightly excurved, &c.

5. soccatus, Blackish; feet ferruginous with blackish tarsi and joints.

Inhab. Mexico.

Body blackish, with a slight violaceous tinge; minutely pubescent, punctured: head blued-black, glabrous, two slight indentations between the ant-
nëæ, and an obsolete transverse one between the eyes: antennæ pubescent, blackish, three basal joints dark piceous: palpi piceous: thorax short; lateral margin regularly arquated; posterior an-
gles rounded; impressed lines dilated: elytra with punctured striae; interstitial spaces minute-
ly granulated, depressed: beneath blackish: feet rufo-ferruginous, joints and tarsi blackish-piceous.

Length nearly half an inch.

Resembles vigilans Nob., but the thorax is shorter and the lateral curvature is more regu-
lar, that of the preceding species being almost rectilinear from near the middle to the posterior angles, the colours also are different in their ar-
rangement.

Of this genus I have sixteen North American described species.

ODES, Bonel.

O? parallelus, black; thoracic angles rufous; feet piceous.

Inhab. Louisiana.

Body black, very slightly tinged with piceous: head with but a slightly impressed point between the antennæ: antennæ reddish brown, three basal joints honey yellow: palpi honey yellow: man-
dibles piceous: thorax narrowed before, smooth; dorsal line distinct, not extended on the margins; basal lines distinct, oblique; region of the poste-
rior angles a little, but widely, depressed, rufous or sanguineous, and by transmitted light it ap-
pears reticulated; impunctured; posterior angles rounded, but not obtusely so; greatest width a
little behind the middle: elytra with the stria continued parallel to the tip, well impressed, minutely punctured; interstitial spaces depressed, third with a single slight puncture on the posterior fifth from the base: beneath black: posterior angles of the pectus, epipleura and feet piceous; anterior tarsi with four not widely dilated sub-quadrate joints, the fourth joint being as large as the third and all beneath with dense fastigiate hairs; intermediate tarsi also somewhat dilated.

Length less than two fifths of an inch.

The elytra are hardly perceptibly sinuous near the tip.

The specimen for which I am indebted to Mr. J. Barabino of New Orleans is a doubtful congener of the O. helopoides, Fabr. than which the body is somewhat more elongated, the thorax more gradually narrowed before. It has at first sight more the appearance of the Harpalus terminatus or Calathus gregarious, Say. The intermediate tarsi are somewhat dilated, the anterior tarsi are not widely dilated and the terminal joint is as large as the preceding one. I place it in this genus provisionally, more specimens may shew this arrangement to be incorrect. The parallelism of the striae of the elytra to their termination is a remarkable character, even more obvious than in the helopoides.

'DICÆLUS, Bonelli.

1. D. purpuratus, Bonelli. Since described by Dejean under the name of chalybeus, Sp. Gen. 2.

2. D. elongatus, Bonelli, Say. Trans. Amer. Philos. Soc. Dejean is of the opinion that this is not the elongatus of Bonelli, and has described it with the name of furvus, but he has not stated the reasons for this opinion.

POGONUS, Zeigl.

P. rectus, Say. (Feronia.) Trans. Amer. Philos. Soc. I may add to the description that the striae are well impressed and punctured rather densely on the sides; third interstitial line with about three punctures, excepting the middle one, hardly distinct from the punctures of the striae.

PATROBUS, Meg.

P. longicornis, Say. (Feronia.) Trans. Am. Philos. Soc. Recently described by Dejean under the name of americanus, Sp. Gen. 3, p. 34. Why he has added a synonym in this case, I know not.

ANCHOMENUS, Bonel.

1. A. decentis, Say. (Feronia.) Trans. Am. Philos. Soc. Has been recently described by Dejean under the name of gagates.


4. *A. decorus*, Say, *(Feronia)* Trans. Amer. Philos. Soc. is also referred to this genus by Dejean.

5. *A. collaris*, Black with a hardly obvious tinge of purple; tibiae and tarsi piceous; thorax subquadrate; elytra with three punctures on the third interstitial line.

Inhabits Indiana.

*Body* black, polished, glabrous, with a few, rather long, marginal hairs: *head* impunctured; base of the first joint of the antennae, of the mandibles black-piceous; antennae at tip brownish. third joint of the same length as the fourth; impressions between the eyes rather deep; thorax rather short, wider than long, subquadrate, impunctured; lateral edge regularly curved; margin slightly elevated, narrow, broader towards the posterior angles; dorsal and anterior lines distinct; posterior lines dilated, suborbicular, slightly rugose; posterior angles very obtuse; anterior and posterior margins subequal breadth; *elytra* with acutely impressed striae, regularly punctured; punctures small, obsolete towards the tip; third interstitial line with three punctures, two at the third striae and the terminal one at the second striae; interstitial lines much depressed; *tibiae*, *tarsi*, knees and extreme base of the thighs piceous.

Length seven-twentieths of an inch.

This species is rather more robust in proportion to its length than the other American species. The thorax is much broader and shorter. The species is perhaps more like *scutellaris*, Say, than any other; that insect is remarkably depressed about the region of the scutel.

*Agonum*, Bonelli.

1. *A. suturalis*, Green, polished; suture cupreous.

Inhab. Mexico.

*Above* metallic green, polished, impunctured: *head* with a slight coppery reflection; *labrum*, *antennae* and *palpi* blackish: *thorax* varied with cupreous, dorsal line and basal dots obviously indented; *elytra* with very slender striae; interstitial spaces wide and plain, first one cupreous, third with three punctures, equidistant, basal one on the third stria, middle one on the second stria: beneath piceous-black; *coxae* piceous.

Length three-tenths of an inch.

This is a brilliant species, equaling in this respect the *S. punctatus*, Fabr., and *errans*, Nob. and but little inferior to *cupripennis*, Nob., all of which, together with *mutans*, Nob., belonging to this genus, although I referred them to the including genus *Feronia*, Latr. The *cupripenne*, Nob., is equal in splendor, though not in magnitude, to the *S. punctatum*, Fabr. In comparison with the *p. punctatum*, F., the form is more...
wide at base as anteriorly; the interstitial spaces also are much more flattened.

2. *A. orbicollis*, Black; thorax rounded; third interstitial line with three punctures.

Inhab. Mexico.

*Body* black, polished, impunctured: *antennae* — basal joint, and *palpi* piceous: *thorax* orbicular, truncate before and slightly so behind; lateral edge regularly arquated, not depressed, but with a simple and equally elevated edge; — dorsal line obsolete, anterior and posterior transverse lines obsolete; basal impressed lines or dots distinct; *elytra* with well impressed striae, which are crenate, not punctured; interstitial lines convex, the third from the suture with three equidistant punctures: *feet* piceous.

Length nearly seven-twentieths of an inch.

Size of *A. viduum*, Fabr., with similar punctures on the third interstitial line, excepting that they are equidistant, and these lines are more convex, the thorax is much more orbicular, the feet differently coloured, and there is no brassy reflection. This cannot be the *melanarium*, Dej., for the striae are as obvious as in the *viduum*, and although the thorax agrees with that insect in being "plus etroit" than that of the *viduum*, yet it would not be described as "subrotundato," as that author applies the same term to designate the form of the thorax of *viduum*. It is much like *A. punctiformis*, Say, but it is a little more elongated; the thoracic lines are much less distinct, &c.


4. *A. errans*, Say, (Feronia) Journ. Acad. Nat. Sc. The interstitial space has three punctures, of which the first and second are somewhat nearer than the second and third.

5. *A. punctiformis*, Say, (Feronia) Trans. Am. Philos. Soc. I have an individual that has four punctures on the third interstitial space as Dejean describes his albicrus to have.


**OLISTHOPUS**, Dejean.


2. *O. cinerius*, Blackish; edge of the thorax, elytra and feet dull rufous.

Inhab. Pennsylvania.

*Body* blackish: head impunctured: *antennae* dusky, pale rufous at base: *palpi* piceous: *thorax* with the dorsal and anterior lines almost obsolete; lateral narrow margin obviously rufous; lateral basal impressions very distinct, suborbic-
ular and sparsely punctured: elytra dull reddish brown, with a slight pellicaceous reflection; striae well indented, impunctured; interstitial spaces depressed, third space with an impressed puncture beyond the middle: feet yellowish piceous, posterior pair darker.

Length less than three-tenths of an inch.

Much like the parvatus, Say, it is more slender.

FERONIA, Latr. Dej.
(Paucilus, Bon.)

1. convexicolitis, Say. Resembles F. chalcites, Say, but is shorter, the thorax more convex, and the punctures of the third interstitial stria of the elytra are three, of which the terminal is near the tip.

(Steropus, Meg.)

2. F. obsoleta, Blackish-ferruginous; elytra, striae obsolete each side and at tip.

Inhab. Indiana.

Body very dark rufous, polished: labrum, palpi, mandibles at base, antennae, feet and abdomen honey-yellow: head impunctured; a slight raised line over the antennae, inside of which the front is slightly corrugated transversely each side: thorax with the surface obsoletely corrugated, visible in a particular direction; dorsal line acute, slightly impressed; basal lines indented, single, viewed from above orbicular, definitely and rather deeply impressed; base a little emarginate, not wider than the abdominal petiole; elytra with punctured, not deeply impressed striae, obsolete at tip and on each side; marginal ocellate punctures about seventeen, in a continuous series rather sparse in the middle; near the tip very slightly sinuated; third interstitial space with a puncture near the middle of the second stria.

Length two-fifths of an inch.

Closely allied to S. illigeri, Panz., but the thorax of that species is not so narrow at base, and its elytral striae are not obsolete at tip, and not even decidedly so on the sides. It is exceedingly like S. ventralis, N., but it is more robust and the sides of the elytra are more arqueated.

The characters of this species agree very well with the description of tenebricosa, Dej., excepting that the elytra are not "assez fortement sinuees postierurement."

3. F. obscura, Black; tibiae and tarsi dark rufous; elytral striae obsolete each side.

Inhab. Indiana.

Body black; labrum and base of mandibles tinged with rufous: palpi dull honey-yellow: antennae blackish-ferruginous: front with two indented lines: head impunctured: thorax not so narrow at base as the petiole; dorsal line acute, not deeply impressed; basal lines well indented, definite, impunctured, not orbicular viewed in any direction, very slightly arqueated: elytra stri-
ate; the striae not distinctly punctured, obsolete on the lateral submargin, and not so obvious at tip as on the disk; marginal ocellate punctures about seventeen; near the tip rather slightly sinuate; third interstitial tri punctured, the two anterior punctures at the third stria.

Length less than nine-twentieths of an inch.

Resembles the preceding but the thorax at base is wider and the body is longer. In the proportion of the base of the thorax it corresponds with F. illigeri, Panz., but aside from colour it may be distinguished by the obsolete lateral striae, the much less dilated thoracic basal lines, &c.

(Platysma, Sturm, Dej)

4. F. oblongo-notata, Dark reddish-ferruginous; elytra with 5 or 6 large subsutural punctures.

Inhab. N. W. Territory.

Body with a hardly perceptible metallic gloss: head darker; thorax with the dorsal line very distinct; lateral basal lines well indented and with obsolete confluent punctures; posterior angles angulated: elytra striated; five or six large indented punctures placed somewhat alternately on the second and third striae; marginal ocellate punctures with their regions indented.

Length nine-twentieths of an inch.

This is the analogue of the F. oblongo-punctata, F. corresponding in the punctures of the elytra; but differing in colour, and having the thorax somewhat more robust.

5. F. deparca, Reddish-brown; thorax punctured on the anterior and posterior margins.

Inhab. Mexico.

Body reddish-brown, rather pale: head much darker, tinged with blackish, impunctured: antennæ short, not reaching the base of the thorax: thorax rather abruptly contracted behind; anterior and posterior margins deeply punctured, the punctures of the former not extending to the lateral margin; lateral margin with a puncture furnishing a hair on the middle and another on the posterior angles, which are rectangular; dorsal line distinct, but not deeply impressed; basal impressions dilated and with all the base punctured: elytra with slender striae, not deeply impressed, but with very distinct punctures; seventh stria obsolete towards the tip: epipleura and all beneath paler.

Length nearly half an inch.

The light colour, with the punctured anterior and posterior thoracic margins, will distinguish this species.

It was taken by Wm. Bennett and presented to me by Mr. Maclure.

(Abax Bonelli.)

6. A. coracinus, Say. Trans. Amer. Philos Soc. I think this is the insect that Dejean has recently placed in Ziegler's Genus Myas and described under the name of cyanescens, the insect agrees perfectly with his description, but as the
palpi of my only remaining specimen are deficient, I cannot be certain of its generic identity.

7. F' (A.) perwanda, Black, with a pearlaceous reflection; third interstitial line three-punctured.

Inhab. Indiana.

Body black; antennae piceous, dull honey-yellow towards the tip, distinctly compressed; joints, in profile, a little narrowed to the base: palpi piceous, not at all scuriform, terminal joint less dilated at tip than that of the preceding joint: thorax with a slight pearlaceous reflection, rather narrower at tip than at base; lateral margin depressed, punctured, gradually reflected to the edge, which is but little arqueated; posterior angles rectangular; disk impunctured; dorsal line well indented; basal lines two on each side, punctured within, deeply impressed, the exterior one very short: elytra brownish-black, somewhat iridescently pearlaceous; striae deeply indented, impunctured: scutellar stria short, but definite: interstitial spaces convex; third three-punctured, first puncture near the base on the third stria, second on the middle on the second stria, third towards the tip also on the second stria: beneath piceous; sides very distinctly and numerously punctured.

Length half an inch.

I obtained this fine species a few days since under an old log. It does not at all agree with either of the descriptions of Dejean. The labrum is not emarginate. The terminal joint of the palpi is less dilated towards the tip than that of the A. parallellus, Duftschm., or A. metallicus, Fabr. (Molops, Bonelli.)


STOMIS, Clairv. Dej.

S. granulatus, Black, antennae dull rufous, blackish piceous towards the base.

Inhab. Mexico.

Body black, apterus, polished: head impunctured; impressed lines between the antennae very obvious: antennae blackish-piceous to the fifth joint, which with the others are dull rufous; first joint hardly as long as the third: labrum a little prominent, piceous, widely but not deeply emarginated before: palpi dull rufous, not very widely truncated at tip; labialae not scuriform: mandibles prominent very acute: thorax as long as broad, not remarkably convex; impunctured: dorsal line distinct, not extending to the base, which is a little depressed: lateral margin depressed and reflected, narrow, wider near the posterior angles, which are somewhat acute; lateral edge excurred near the posterior angle; basal lines distinctly indented and dilated; base considerably wider than the peduncle: elytra somewhat depressed, ovate-oval; surface composed of very minute granules; striae slender, deeply impressed, impunctured; third interst}

2
tial space with three nearly equidistant punctures, the terminal one much the largest, with minute elevated centres; tip very obtusely sinuous: tarsi dull rufous.

Length less than two-fifths of an inch.

Taken by Wm. Bennett, during his stay in Mexico with Mr. Maclure.

It will be obvious from this description that our species does not well correspond with the S. pumicatus, Panz., but agreeably to the tables given by Dejean it cannot be placed elsewhere. It is larger and more dilated than pumicatus, the basal joint of the antennae is shorter, the palpi are not so obtusely truncated, and its habit and appearance quite different.

PELOR, Bonelli.


AMARA, Bonelli.

In my paper on the Carabici and Hydrocanthari, published in the Trans. Amer. Philos. Soc. Vol. 2, new series, as above quoted, I described five species of the United States, under the genus Feronia agreeably to the arrangement of Latreille, indicating, however at the same time that they belonged to Bonelli’s Amara.

But Dejean and many other distinguished entomologists give the group a separate station.


3. A. impuncticollis, Say, (Feronia) Trans. Am. Philos. Soc. Dejean thinks it the same as A. trivialis, Duftschm. but I have not yet compared it.


6. A. impunctata, Say, (Feronia) Trans. Am. Philos. Soc. Dejean thinks it the same as the familiaris, Duftschm. but I have not satisfactorily compared them.

The following species appear to be new.

6. A. dolosa, Black; oblique line near the thoracic angle obviously impressed; elytra with impunctured striae.

Inhab. Mexico.

Body black, impunctured; head with the impressed lines between the antennae obsolete; antennae fuscos, joints rather short, three basal joints honey-yellow; palpi black-piceous; thorax rather short, lines not deeply impressed; oblique line near the posterior angles very distinct; hair of the lateral margin situated at one third of the distance between the anterior and posterior angles, another hair at the basal angle; elytra with impunctured, capillary striae; interstitial lines depressed, hardly convex; feet piceous-black; tibiae and tarsi a little paler.

Length nearly three-tenths of an inch.
Resembles A. impunctaticollis, Nob. and A. communis and vulgaris, Fabr., but differs from all in colour, greater brevity of the thorax, more robust form, &c. Viewed in a particular light, a tint of blue may be, with some difficulty, detected.

7. A. serva, Greenish-black; three basal joints of the antennae yellowish.

Inhab. Mexico.

Antennae fuscous; first, second, third and base of the fourth joints yellowish: thorax impunctured, basal angles rectangular, with the oblique line not deeply impressed; basal lines rather deep, abbreviated, definite, impunctured; dorsal line distinct: elytra with the striae impunctured, acutely impressed; basal abbreviated striae rather long; interstitial lines with a very slight convexity, nearly flat; near the lateral tip slightly and rather acutely sinuated: tibiae and tarsi piceous.

Length three-tenths of an inch.

The thorax is longer than that of the preceding species and the interstitial lines are a little convex, which will readily distinguish it from A. impunctaticollis, N. The colours of the antennae as strongly contrast, as those of A. vulgaris, F.

8. A. furtiva, Pale; thorax punctured at base; elytra with punctured striae.

Inhab. Indiana.

Body honey-yellow, more or less tinted with dusky: antenna, palpi and all beneath paler:—head with the frontal impressed lines dilated, distinct: thorax a little contracted at base, the posterior angles slightly excurved and acute; dorsal line well impressed, particularly behind the middle; basal lines deeply impressed and definite, punctured; impressed lines of the posterior angles, distinct and rather deep, punctured; base punctured: elytra with punctured striae; the punctures orbicular and close set; near the tip obtusely, but not deeply sinuated.

Length less than two-fifths of an inch.

Resembles the A. fulva, III. particularly in the form of the thorax. The colour has sometimes a very slight metallic tinge but never so obvious as in the fulva.


Inhab. North-West Territory.

Body short, robust, convex, blackish piceous: head of thorax convex, descending much each side, transverse, oblong-quadrate; dorsal line almost obsolete; anterior transverse line hardly obvious; basal margin depressed and somewhat rough; lateral margin depressed, but not elevated except near the posterior angles lightly: elytra with a sinus near the tip; striae well impressed, impunctured; interstitial spaces with from five to eight distinct punctures on the third, fifth and seventh spaces; marginal series of punctures small, almost indistinct.

Length of thorax and abdomen nine twentieths of an inch.
This species I found in the North-Western part of the United States when traversing that country with Major Long's party. It is a remarkable insect, readily distinguishable by the peculiar puncturing of the elytra. I have two specimens, both of which are mutilated, so that I am not perfectly sure it belongs to this genus.

**DAPTUS, Dej.**

*D. incrassatus, Dej.* This insect appears to be rare. I obtained an individual in Pennsylvania. It has not yet occurred to me in the Western States.

**CRATACANTHUS, Dej.**

*C. pensylvanicus, Dej.* is a common insect.—But it is not confined to Pennsylvania as the name would seem to imply; it is abundant in this state, and I obtained three specimens near the Rocky Mountains; these are somewhat smaller than the inhabitants of this vicinity, and of a paler colour.

**PANGUS, Zeigl.**

1. *P. caliginosus, Fabr.* Dejean refers this large species to Pangus, which he makes a division of his genus Selonophorus.
ANISODACTYLUS, Dej.

1. A. dilatatus, Black; thorax transverse quadrato, not contracted behind; impunctured; first joint of the antennae testaceous.

Inhab. Mexico.

Body black, impunctured: antennae not reaching the base of the thorax; first joint pale testaceous, second joint darker, remaining joints blackish: impressed frontal lines very distinct: thorax without any appearance of puncture, not narrowed behind; lateral edge regularly arquated; posterior angles rounded; dorsal line not very obvious; basal indentations much dilated, not profound; minute longitudinal lines or wrinkles at the middle of the base, and less obvious ones on the anterior margin: elytra, striæ profound, impunctured; interstitial spaces depressed: abdomen, terminal and anal segments above punctured.

Length less than half an inch.

This species is closely allied to the A. ceerus, Say, and its form is perhaps still more like that of an Amara in being more obtuse and robust. It is much larger and more rounded behind. It was taken in Mexico by Wm. Bennett and was presented to me by Mr. Maclure.

2. A. baltimoriensis, Say, (Harpalus) Trans. Am. Philos. Soc., Dej. Spec. A very bad name, as the species is found as well in Indiana as in Baltimore; but it is a specific name and therefore unchangeable.


7. A. laetus? Dej. An insect is found in this vicinity, which I have referred, but very doubtfully to the laetus.—Its characters correspond to the description, but if it be indeed the same, a very important character must be added. My specimen is a male. The alternate interstitial spaces are cupreous and the remaining part is green. It has a very much dilated, slight indentation behind the middle of the elytra and a smaller one nearer the tip.

August 20, 1830.
OPHONUS, Zeigl.

O. interstitialis, Say (Feronia) Trans. Amer. Philos. Soc. Since described by Dejean under the name of Harpalus obscuripennis.

HARPALUS, Latr.

1. H. vulpeculus, Say, Trans. Amer. Philos. Soc. Since described by Dejean under the name of nigripennis. It differs however from his description by having an impressed puncture on the third elytral stria; but I have a variety altogether destitute of the puncture.


3. H. mexicanus, Dej. Sp. Gen. This appears to be a common species. Mr. Maclure has recently sent me specimens by Wm. Bennett, and I obtained it also in that country.

4. H. iricolor, Say, has been recently described by Dejean under the name of dichrous. I obtained a specimen formerly with a collection I purchased in New York as having been received from New Haven, and I have since found two in Indiana.


Body blackish; head with the frontal lines rather slightly indented: antennae, palpi, tibiae, and tarsi honey-yellow, the tibiae darkest: thorax with the basal angles rounded; edge obscure rufous; dorsal line obsolete, or slightly impressed; basal lines substituted by dilated, slightly indented spaces, in which are numerous small punctures; posterior lateral margin with small punctures; basal margin obliquely tinted with greenish; elytra with impunctured striae, more or less green, sometimes bright green; suture, outer and terminal edges obscure rufous; tip widely and somewhat obliquely truncate.

Length less than two-fifths of an inch.

Var. a. Elytra reddish-brown, with hardly any tint of green.
Readily distinguished by the truncated appearance of the tip of the elytra, from H. aeneus, F. which has the elytra decidedly sinuate at tip and even abruptly so.

7. H. ocreatus, Black-green; impunctured; feet pale-yellowish.

Inhab. Mexico.

Body very dark green, impunctured: head black, with hardly any appearance of green; antennæ honey-yellow, the joints, excepting the first and second, with darker centres: palpi and base of the mandibles honey-yellow: labrum with a slight projecting angle in the middle of the emargination: thorax blackish-green, hardly narrower at base; dorsal line indistinct, but more obvious in the middle; basal indentations dilated not profound; lateral edge dull yellow-yellow; posterior angles obtuse: elytra obviously tinged with green; a little wider at base than the thorax: striae very slender, impunctured; interstitial spaces flat, third space with a puncture at three-fourths the length from the base; lateral edge near the tip and suture near the tip obscurely piceous; tip deeply and rather obtusely sinuous: beneath black, the greenish tinge hardly perceptible: feet yellowish; tarsi rather darker; first joint of the anteriors of the male somewhat smaller than the second, these tarsi have beneath close set hairs.

Length over seven-twentieths of an inch.

This species has almost the Anara like form of some species of Anisodactylus, in which genus I should have placed the species but for the angle in the emargination of the mentum. It is very closely allied to terminatus, Say, but is rather more robust, the head and thorax are differently coloured, the posterior lateral margin is more depressed, &c. It must resemble closely H. agilis, Dej. of which it may possibly be a variety.

It was obtained by Wm. Bennett, and presented to me by Mr. Maclure.

STENOLOPHUS, Meg. Dej.

S. cinctus, Dark piceous; margin and suture of the elytra honey-yellow; feet pale yellow.

Inhab. Massachusetts.

Body blackish piceous: antennæ fuscous, three basal joints and labrum honey-yellow: mandibles piceous, black at tip: thorax rather convex, a little narrowed behind grad-
ually; base rectilinear, each side a little arquated to the posterior angles, which are obvious but almost rounded; lateral edge but slightly arquated, nearly rectilinear behind the middle, near the posterior angle hardly perceptibly ex-curved; dorsal line very distinct; anterior transverse line distinct, obtusely arquated; basal lines so much dilated as to extend to the lateral angle, including a few sparse, profound punctures; base and tip and exterior edge paler piceous: elytra with impunctured, deeply indented striæ, less profound towards the margin; rudimental striæ none; sutural interstitial space paler piceous; dilated exterior margin honey yellow; lateral series of punctures, with the exception of a small one, widely interrupted in the middle: feet pale yellow.

Length less than three twentieths of an inch.

For this insect I am indebted to Dr. Harris. On a cursory examination I considered it identical with S. ochropesus, Say, notwithstanding its great inferiority of size, which may at once distinguish it. The thoracic posterior angles are much more obtusely rounded in that species, the punctures of the basal lines are much more numerous and extend nearly to the basal middle, the dorsal line is obsolete &c.

**ACUPALPUS, Latr. Dej.**

1. *A. partius*, Say, (Treclus) Trans. Philos. Soc. Since described by Dejean under the name of testaceus. I have recently received a specimen from Louisiana, for which I am indebted to Mr. J. Barbino.


4. *A. debilipes*. Piceous-black; base of the antennæ and feet pale yellowish.

Inhab. Indiana.

Body very dark piceous, almost black: head impunctured; between the antennæ on each side a dilated very obvious indentation: antennæ brown, three basal joints yellowish: mandibles at tip black: palpi yellowish rather pale: thorax widest before the middle, gradually narrowed, by a regular arquation of the edge, to the base; basal angle obtusely rounded: anterior and posterior margins on their
middles obviously piceous; dorsal line well impressed, very distinct, not abbreviated; anterior transverse line obvious in all its length, arquated; basal lines dilated, orbicular, obvious, with a few, small, sparse punctures within or rather near the base: elytra with slender striae; interstitial spaces flat, third with a puncture between the middle and tip; marginal and sutural edges towards their tips piceous; rudimental striae none, but instead of it is a puncture at base of the second striae: feet pale yellow.

Length less than three tenths of an inch.

5. A. obsoleteus, Dark piceous; striae of the elytra obsolete.

Inhab. Mexico.

Body dark piceous, impunctured: antennaæ, labrum and palpi honey-yellow; thorax with pale piceous anterior and basal margins; lateral margin with eight or nine hairs; dorsal line almost obsolete; basal impressions dilated, oval: elytra with the basal, exterior and apical margins paler piceous; striae obsolete, excepting the subsutural and lateral ones; a series of large punctures behind the middle of the exterior margin: feet pale honey-yellow.

Length one fifth of an inch.*

BEMBIDIUM, Latr.

1. B. inaequale, Say, Journ. Acad. Nat. Sc. Vol. 3. p. 151—Very closely allied to paludosum, Panz. and may possibly be only a variety of that European species, nevertheless it is somewhat smaller, the thoracic impressed lines are more distinct, particularly the transverse basal one and the striae of the elytra are more dilated and the punctures more obvious. As it is the analogue of paludosum it belongs to the genus Bembidium, as at present restricted.

2. B. honestum, Say, Trans. Amer. Philos. Soc. When describing this species I stated that the elytral striae are "not obsolete behind." This may be corrected by substituting the phrase almost obsolete behind. The punctures of the striae are large and obvious at base, but are obsolete, or rather, entirely wanting on the posterior third. The exterior margin and epipleura are blackish green.

* Count Dejean has done me the favour to send me the four Volumes of his "Species des Coleopteres" which have now been published. This work is indispensable to all those who study the Coleoptera. It contains the descriptions of a great number of North American species, and has greatly facilitated my examination of the insects described in the preceding part of this paper.
3. *B. punctatostriatum*, Say, Trans. Amer. Philos. Soc. The posterior angles of the thorax are very acute; the basal and anterior margins are slightly longitudinally wrinkled, the dorsal line transversely wrinkled on its margins, and the basal lines are obliquely wrinkled; the sides of the thorax are also somewhat undulatedly wrinkled. The third interstitial space is much wider than the others, and the posterior puncture is much nearer to the anterior puncture than to the tip.


5. *B. coxendius*, Say, Journ. Acad. Nat. Sc. 3, 151. Antennæ with the three basal joints and base of the fourth pale yellowish; palpi (in the dry state) pale yellowish, dusky at tip: face with an impressed line each side: vertex longitudinally wrinkled: thorax with the posterior margin a little depressed; surface somewhat wrinkled transversely and at base longitudinally: basal indentations dilated, minutely rugose: elytra with the anterior and posterior discs obscurely testaceous.—I am not so fortunate as to possess definitions of the several genera into which this genus, as originally constructed by Latreille, has been recently divided; but I rather think, by analogy, that the present species is a *Peryphus*, Meg.

6. *B. dorsalis*, Say. Trans. Amer. Philos. Soc. This species varies considerably. The dorsal line is more or less obvious, and sometimes rather deeply impressed. In one specimen is a slight appearance of puncturing on the middle of the thoracic base. The thorax is more or less engraved with undulated lines, which are sometimes almost imperceptible. Perhaps a Notaphus, Meg.


8. *B. postremum*, Blackish; elytra brownish, obscure yellowish at tip.

Inhab. Pennsylvania.

*Head* greenish black; *face* with an indented line each side, between which and the eye is a large orbicular puncture: *antennæ* fuscous, piceous at base: *palpi* dark honey yellow: *mandibles* at base piceous: *thorax* bronze black, very obscurely piceous on the middle of the anterior margin; contracted behind; posterior angles obtuse-angular; dorsal
line impressed; anterior, transverse very obvious, arquated; basal lines dilated, suborbicular; basal margin with slight inequalities or punctures between the basal lines; a slightly elevated line on the lateral margin, forming a groove with the slightly elevated edge, more obvious near the angle and becoming obsolete before: elytra very dark honey yellow, or brownish, much paler at tip; striae somewhat dilated, and with dilated, quadratc, profound punctures: striae more slightly impressed towards the tip and the punctures obsolete; third interstitial space a little broader than the others, with a puncture before the middle and another equidistant behind the middle, both nearer the third striae: wings perfect: beneath black: abdomen tinged with piceous: feet pale yellowish.

Length one-fifth of an inch.

Resembles tetracolum Say, but the elytral striae are more dilated, the punctures of the third interstitial space are more anterior and the posterior pale spot of the elytra is quite terminal. Belongs to the genus Pteryphlus, Meg.

9. B. nigrum, Say, Trans. Amer Philos. Soc. The striae are so much dilated that no punctures are visible on the third interstitial space.

10. B. sigillare, Cupreous; elytra with two, dilated, subquadrate, green spots on each; fourth striae rectilinear.

Inhab. Missouri.

Body bronzed-cupreous, somewhat polished: head greenish each side and before; an impressed line near the eye, between which and the eye is a dilated puncture: antennae blackish-green, first joint beneath piceous: palpi black-piceous, tinged with green: thorax rather broader behind than before; posterior angles acute; lateral edge excurved behind; dorsal line distinct, but not deeply impressed, not abbreviated; basal lines dilated: elytra with punctured striae, punctures almost obsolete towards the tip; fourth stria not undulated; third interstitial space as broad as the seventh and with two dilated impressed subquadrate spots, green and including each a puncture, and placed near the middle: beneath dark green: feet blackish-green; tibiae and base of the thighs piceous greenish.

Length less than one-fourth of an inch.

I obtained this species during the journey of Major Long's party to the Rocky Mountains. It is very distinct from the inaequale, Say, which it somewhat resembles, by
many characters. That of the rectilinear fourth stria of the elytra, is an obvious one.

11. B. semifasciatus, Greenish black; elytra each with four spots; third interstitial space two punctured.
   Inhab. Mexico.
   Head metallic green; two impressed lines between the antennæ very distinct: antennæ dull piceous: labrum and palpi blackish; thorax metallic green with a slight tinge of cupreous; dorsal line slender; lateral indentation of the base obvious, bounded near the angle by a carinate, abbreviated line; lateral edge with a hair rather before the middle and another at the posterior angle, not arquated from behind the middle to the basal angle: elytra blackish with a slight cupreous tinge, with well impressed punctured striae, distinct to the tip; interstitial lines depressed, plane: third line with a transverse indentation before the middle and a less distinct one behind the middle; a dull honey-yellow dot on the middle of the base, a semifascia before the middle, another behind the middle, and an irregular apicial spot: beneath black: feet piceous.
   Length over three-twentieths of an inch.
   Resembles N. ustulatus, Fabr. and therefore probably is a Notaphus, Meg.

12. B. oppositum, Say. Resembles the maculatum, Gyll. and probably belongs to Lopha. The sutural stria is impressed from the middle of the tip. It is somewhat bronzed.

13. B. ephippium, Pale testaceous; elytra with punctured striae and a large common blackish spot.
   Inhab. Indiana.
   Body pale testaceous or honey yellow; antennæ paler than the head, a little darker towards the tip: palpi colour of the antennæ: thorax widest before the middle, gradually contracting by an almost rectilinear, but hardly perceptibly concave line, to the basal angle, which is rectangular; dorsal line but slightly impressed, obsolete before; basal lines hardly distinct from the depressed basal margin, which is minutely wrinkled: elytra with impressed, punctured striae, obsolete at tip; seventh stria wanting; third interstitial line with two small orbicular punctures, one before the middle and the other a little behind the middle; a very large, common blackish spot on the middle, within which the suture is reddish brown; suture behind the spot blackish; a
small, obsolete blackish spot at base each side of the scutel: feet pale yellowish.

Length one-tenth of an inch.

At first view it resembles *proximus*, Say, both as respects size and colour, but it may be distinguished by many characters, of which the punctured striae is one.

14. *B. tripunctatum*, Piceous; elytra with five abbreviated striae; thorax three punctured between the dilated basal lines.

Inhab. Indiana.

*Body* piceous; head and thorax darker: *antennae* light brownish, paler at base: *palpi* pale yellowish: *thorax* with the dorsal line distinct, terminating on the basal margin in an impressed puncture, on each side of which is another rather smaller puncture; basal lines much dilated, deeply undulating the posterior edge of the thorax: *elytra* with about five, rather obtuse striae, not extending to the tip or base; sides destitute of striae excepting a marginal interrupted one: an indentation each side of the scutel and on the humerus.

Length four-fifths of an inch.

The dilated basal thoracic lines deeply indenting the posterior edge, together with the three intervening punctures, will readily distinguish this species. At first view it resembles *B. flavicaude*, Say, but is more highly polished.

15. *B. incurvum*, piceous; elytra with a honey yellow vitta from the humerus, a little dilated at its termination before the tip.

Inhab. Indiana.

*Body* piceous: head blackish-piceous: *antennae* honey yellow: *thorax* a little contracted gradually to the base; dorsal line slender and slightly impressed; basal transverse line deeply impressed, with numerous minute wrinkles; basal lines dilated, undulating the posterior edge; *elytra* polished, with a profoundly impressed, somewhat dilated, simple, sutural stria; the second stria obsolete; an interrupted stria on the lateral margin; a dilated indentation each side of the scutel, and a smaller one on the humerus; a dilated vitta from the humerus, near its tip curves a little towards the suture, and is in that part a little more dilated: *venter* black piceous: feet honey yellow.

Length over four-fiftieths of an inch.
Resembles the preceding, but is destitute of the three punctures at the base of the thorax, and with that species belongs probably to Peryphus, Meg.

Of the genus Bembidium, Latr. I have twenty two described species natives of North America.

DYTISCUS, Linn. Latr.

1. D. confluens, Blackish-brown, margined with honey-yellow; four exterior grooves of the elytra nearly or quite geminately confluent at tip.

Inhab. Maine.

**Body** blackish-brown with a green reflection, covered above with minute punctures: *head* dark green, with a frontal rufous semicircle, diverging at its anterior tips into a more dilated spot between the canthus of the eye and the nasus, which is yellowish, excepting the anterior edge; above the nasus a transverse impressed line, ending each side in a more dilated spot: *thorax* margined all around with honey-yellow; anterior margin with a somewhat double line, of which the posterior one is obsolete; posterior margin with the yellow colour, near the lateral angles, contracted or almost obsolete: *elytra* with about ten grooves which extend three-fourths the distance to the tip, the four exterior interstitial spaces confluent, or nearly so, by twos; lateral margin not dilated; honey-yellow with an obsolete branch towards the tip proceeding obliquely to the suture: *beneath* honey-yellow, sutures more or less margined with black.

Length one inch and a half.

This fine large species was sent me by Dr. E. Holmes of Gardiner Lyceum, together with many other interesting objects of Natural History. It is more than double the size of *D. fasciventris*, Say, and may also be distinguished from that species by the confluent termination of the four exterior grooves of the elytra in the female.

It is less dilated than the *latissimus* Fabr. and is destitute of the wide elytral margin.

2. D. habilis, Blackish olivaceous; thorax and elytra margined with yellow; elytra with three series of punctures.

Inhab. Mexico.

**Body** oval; above with minute, distant punctures: *head* with a frontal rufous angular line or semicircle; divarica-
ing at its anterior tips into a more dilated spot between the canthus of the eye and the nasus, which is yellow excepting the anterior edge; above the nasus on each side is an orbicular, punctured indentation; front each side at the eye with an indented, punctured line: thorax with a broad yellow margin; dorsal line acute, distinct, not extending upon the margins; a line of impressed punctures on the anterior margin interrupted in the middle; lateral margin not at all depressed: scutel honey-yellow on the posterior submargin: elytra with three series of impressed punctures; the exterior series less distinct; general puncturation near the tip much larger and more obvious; posterior margin yellowish with an obsolete undulated branch proceeding obliquely towards the tip: beneath varied with blackish, piceous and yellow.

Length one inch.

A male of this species was taken by Wm. Bennett in the River beyond Vera Cruz, and, together with the two following, presented to me by Mr. Wm. Maclure. It is allied to the D. marginalis, F. but that species in form approaches the ovate; the present also is much smaller and oval.

3. D. bimarginatus, Black; head and thorax rufous; elytra with a yellow vitta on the lateral submargin.

Inhab. Louisiana.

Body oval, blackish: head honey-yellow, posteriorly black; palpi and antennae yellowish: thorax honey yellow; posterior margin black, which is more dilated on the middle half: elytra with three series of distant slight punctures; on the lateral submargin a yellow vitta, which passes a short distance on the humeral base, and posteriorly diverges a little from the margin, attenuates, and does not reach the tip; margin and epipleura dull rufous, not reaching the tip: beneath piceous black: pectus and anterior feet yellowish; terminal joints of the tarsi piceous: posterior pairs of feet piceous; intermediate thighs dull yellow: venter each side with obsolete piceous spots.

Length less than half an inch.

For this species I am indebted to the politeness of Mr. J. Barabino, who sent it to me from New Orleans.
1. C. tæniolis, Say (Dytiscus) Trans. Amer. Philos. Soc. In Mexico is a variety, being smaller. The specimen is a male and proves that the species must be placed in the present genus. It was taken in the River beyond Vera Cruz.

2. C. gutticollis. Thorax yellowish with four black spots; head black, anteriorly and band of the vertex yellow.

Inhab. Mexico.

Head black; a transverse yellowish band between the nearest points of the eyes; a dilated yellowish triangle occupying all the anterior part of the head, the apex being at the middle of the face: antennæ and pulpi honey-yellow, dusky at their tips: thorax honey-yellow, anterior margin blackish; posterior margin dusky; four large black spots in a transverse series, the two intermediate ones nearer together: elytra honey-yellow with minute black points more or less crowded so as to give a dusky, sometimes almost blackish appearance; lateral margin destitute of black punctures, but with a black line on the posterior curvature; at base, particularly the humeral base, destitute of the black punctures; three regular series of small black dots: beneath black; pectus, feet, and epipleura yellowish.

Length over two-fifths of an inch.

Taken in the River beyond Vera Cruz.

It is about the size of the C. adspersus, F. which it considerably resembles, if we except the thoracic black dots.


C. venustus, Say, Trans. Amer. Philos. Soc. When describing this species I stated that it “may probably prove to be the interrogatus of Fabricius.” Of this I have now so little doubt, that I venture to reject the name I then provisionally gave and to adopt the true, or anterior name.

Dejean is also of the opinion that it is the interrogatus, F.—Sturm, however, considers it distinct.

COPTOTOMUS, Nob.

Tarsi distinctly five jointed; basal joints of the anterior pair of the male subequally dilated or gradually tapering; posterior nails appressed together and apparently single; pos-
terior feet nutatory, base of the thighs naked; antennae eleven jointed, at least as long as the head and thorax, filiform; scutel distinct; terminal joint of the palpi somewhat compressed at tip and emarginate.

Observations.

This genus differs from other genera of this family in the character of the emarginate palpi, excepting the genus Noterus which is destitute of an apparent scutel and the emargination of the palpi is confined to the labiales. The name is derived from the words *copto* I cut, and *tome* joint or articulation, in allusion to the form of the palpi.

Species.

*C. serripalpus*, Yellowish; elytra brownish varied with whitish.

Inhab. Mexico.

**Body** oblong-oval, honey-yellow: head black on the posterior margin: *labial palpi* with the penultimate joint crenate or bituberculate before: *thorax* on the middle of the anterior and posterior margins broadly black: *elytra* brownish, with very numerous, minute honey-yellow points; two very slightly impressed striae, with punctures hardly distinguishable from minute inequalities of the surface, and an indistinct part of a series of hardly impressed punctures each side; from the base near the scutel proceeds a whitish broad vitta one-fifth of the length of the elytra, bifid at tip; from the humeral base to the tip proceeds a broad, interrupted and somewhat irregular vitta also whitish: *venter* piceous.

Length less than three-tenths of an inch.

This insect was obtained on the estate of the Conde del Regla about 10 leagues N. E. of the city of Mexico by Wm. Bennett and presented to me by Mr. Wm. Maclure. It cannot be the *Dytiscus circumscriptus*, Germ. which is "breviter ovali."

**LACCOPHILUS**, Leach.


**HYPHIDRUS**, Latr.

HYDROPOrus, Clairv.

1. H. bifidus, Elytra with a subsutural impressed, punctured stria.
   Inhab. Mexico.
   Body black: head with much dilated indentations between the eyes; a longitudinal honey yellow line, more dilated before; antennae yellowish, dusky at tip: thorax with a submarginal honey-yellow band before, having three processes, one in the middle and one, rather more dilated, on the lateral margin, not reaching the posterior edge: elytra with a very distinct, punctured, subsutural stria, and about two other hardly obvious ones near the middle; bifid yellowish lines at base and near the tip; feet dark honey yellow.
   Length less than one fifth of an inch.
   This species and the two following were taken by Wm. Bennett in a small river beyond Vera Cruz, and were presented to me by Mr. Maclure.

2. H. nudatus, Beneath black; feet yellowish; thorax and head on their disks yellowish; elytra blackish with lines and tip yellowish.
   Inhab. Mexico.
   Head with numerous deep punctures, honey-yellow on the disk, blackish each side and behind: antennae pale yellowish, dusky at tip: thorax with numerous deep punctures, more dense and obvious towards the base; honey-yellow, anterior and posterior margins dusky: elytra brownish-black, with numerous, profound, approximate punctures; stria not distinct, but traces of two may be discovered near the base; about four, more or less confluent lines at base, irregular ones each side and tip dull whitish yellow: beneath black, pectus yellow; feet honey-yellow. Length over three-twentieths of an inch.

3. H. sericatus, Yellowish; elytra blackish with abbreviated lines and margin dull yellowish.
   Inhab. Mexico.
   Dull honey yellow, somewhat sericeous above: head with a dilated, not profound, indentation each side, and numerous small punctures: antennae also honey-yellow: thorax a little dusky on the anterior and posterior margins, with numerous, small, slightly impressed punctures: elytra dark
brownish, almost black, more obviously sericeous than the thorax; striae none; lateral margin dull honey, dilated near the base into a band of about four abbreviated, unequal, longitudinal lines excepting the inner one, not reaching the base, another somewhat similar band behind the middle, and slight double dilatation at tip of the same colour.

Length less than one-fifth of an inch.

This species was obtained in the same locality with the preceding. It is closely allied to undulatus, Say, but is more sericeous, the elytral lines are not so dilated or confluent, &c.

4. H. interruptus, Black; feet, frontal line, three thoracic spots, and many elytral abbreviated lines yellowish.

Inhab. Pennsylvania.

Body blackish: head with a slight piceous tinge; an anterior honey-yellow triangular spot, the superior angle near the vertex: antennae pale yellow, dusky at tip: thorax obsoletely tinged with piceous; a lateral irregular spot, and a dorsal, longitudinal, somewhat fusiform one, honey yellow; elytra with an oblique impressed line at the inner angles, a slightly impressed subsutural stria, and an obsolete one on each side of the middle; lateral margin with two slender oblique branches before the middle, slender subsutural vitta exterior to the stria, interrupted line or two along the middle, a small spot behind near the middle and about two transverse series of two or three short lines, dull honey yellow: beneath black: pectus, feet and epipleura yellowish.

Length over three-twentieths of an inch.

5. H. discicollis, Reddish brown somewhat sericeous, minutely punctured, middle of the thorax without punctures.

Inhab. N. W. Territory.

Body entirely dark reddish brown, with minute punctures: head: thorax with the disk impunctured, polished and a little more convex; elytra darker than the thorax, more obviously sericeous; lateral margin a little paler; spot at the tip dull yellowish: postpectus black piceous.

Length three-twentieths of an inch.

I obtained an individual of this species during Long's Expedition to the source of St. Peter's River, and although
it is now mutilated, yet I have no hesitation in giving it as distinct from any other I am acquainted with.

**HALIPLUS, Latr.**

H. 12-punctatus, Say. Some specimens were found in Mexico, in the locality above mentioned by Wm. Bennett and presented to me by Mr. Wm. Maclure. They vary a little from those of this region in being very slightly more elongated and larger; but the spots, their arrangement and the sculpture appear to be precisely the same. The species is therefore found over the greater part of North America East of the Rocky Mountains.

**NOTERUS, Latr.**

N. bicolor, Honey-yellow; elytra black, punctured.
Inhab. Louisiana.

Head and thorax honey yellow: eyes black: palpi not deeply emarginate: elytra black, punctured; at tip obliquely piceous, very obliquely and slightly truncate; acute beneath honey yellow, or piceous.
Length one-tenth of an inch.
For this species I am indebted to Mr. Barabino.

**HYDROCANTHUS, Say.**

H. atripennis, Ferruginous; elytra black.
Inhab. Mexico.

Head and thorax ferruginous; the former with an oblong triangular, obsolete, darker spot between the eyes, and the latter with an impressed line on the lateral submargin: elytra blue-black, immaculate, impunctured: pectus, as well as the head beneath, dull yellowish; sternum flat, at its anterior tip acute, but not prominent, dusky: postpectus blackish, dull yellow at tip: feet, intermediate and posterior pairs blackish, slightly varied with piceous.
Length less than one-fifth of an inch.
This is the second species of this genus; the first I published in the Trans. Philos. Soc. of Philadelphia, New Series, Vol. 2——. The genus is allied to Noterus, Latr. but the labial palpi are much more dilated and have no appearance of emargination.

**GYRINUS, Linné.**

Since described by Germar under the name of *vittatus*, Spec. Nov.

2. *G. analis*, Say. Trans. Amer. Philos. Soc. Germar is of opinion that this is the same as *natator*, F.; but on comparison, I find it to differ in many small characters, the most obvious one of which is the colour of the epipleura, that of the *natator* being light piceous whilst in the *analis* it is of a bronzed-black, &c. It is no doubt a closely allied species.

3. *G. obtusus*, Black; feet honey-yellow; behind obtuse.

   Inhab. Mexico.

   **Body** black, polished: **head** with two indented dots between the eyes: **mouth** piceous: **antennae** piceous-black: **thorax** with the posterior lateral and medial impressed lines very distinct: **elytra** obtuse behind and widely truncate; near the tip obviously depressed; punctures well impressed, in regular series, the intervals not impressed: **beneath** dark piceous, somewhat paler on the edges of the segments: **feet and tip of the venter** honey-yellow.

   Length over one-fifth of an inch.

   It may be distinguished from the *analis* and *limbatus*, Nob. and from the *natator*, Fabr. and *marinus*, Gyl. in being more obtuse behind and the consequent greater truncation of the elytra.


   Inhab. Mexico.

   **Body** rather robust, black, highly polished: **head** with two indented, oblique lines between and before the eyes: **thorax** with the impressed lines very obvious: **elytra** with very distinct, well impressed series of punctures, the intervals not at all impressed; tips obtusely rounded: **feet** honey yellow.

   Length nearly one-fifth of an inch.

   In comparison with *minutus*, Fabr. this species is a little longer and much more robust, more highly polished and the impressed lines of the thorax and dots of the elytra are more profound and distinct. It is somewhat smaller than either of those I have before described, and the punctures of the elytra are, notwithstanding, larger.
STAPHYLINUS, Linn. Grav.

1. S. ephippiatus, Black, elytra rufous.

Inhab. Mexico.

Body black, polished: head with a longitudinal, impressed line between the eyes; superior orbits with three or four punctures, above these a lateral series of four or five punctures, and two or three insulated ones, and at base each side a transverse series of four or five punctures; antennae, terminal joint obliquely truncate: thorax semi-oval, with a few scattered punctures each side, an abbreviated dorsal series of four or five punctures not extending on the posterior third of the length of the thorax: scutel densely punctured, black: elytra cinnamon-rufous, with very numerous small hairs and slightly impressed punctures: tergum a little hairy; deep, blackish-blue, iridescent: palpi piceous.

Length over half an inch.

This and the following species belong to Family 1st of Gravenh. Monogr.

2. S. connexus, Black; elytra and feet rufous.

Inhab. Mexico.

Body black, polished: head with punctured orbits and a few scattered punctures each side: palpi piceous-black; a deep and wide indentation between the antennae, on each side of which above is a single puncture: thorax with a series of about five large dorsal punctures and a few scattered lateral ones: antennae cinnamon-rufous, with very short hair and minute punctures: feet colour of the elytra.

Length over three-tenths of an inch.

Resembles the preceding, but the feet are rufous, and the tergum is simply black; the clypeus is a little advanced in the middle. Fam. 1st.

3. S. iracundus, Black; elytra rufous; dorsal thoracic punctures three.

Inhab. Indiana.

Head with an orbital puncture and three occipital punctures, of which the anterior one is near the eye and larger: antennae piceous; flagellum fuscous; the joints a little broader than long; terminal joint with the apex rather prominent: mouth dull piceous: occiput with numerous small punctures: thorax with three small dorsal punctures,
not reaching the middle of the length; lateral punctures about five, the second and fifth placed a little above the straight line; marginal punctures two or three; towards the anterior angles are numerous obsolete discoidal punctures, visible with a strong power: scutel glabrous, black: elytra rufous, densely punctured, with short prostrate hairs: tergum at tip slightly tinged with piceous: tibiae, tarsi and posterior margins of the ventral segments piceous.

Length over seven-twentieths of an inch.

This species seems to have some relation to the laticollis Grav. but the thorax is less dilated, the lateral puncturations are much more numerous; the elytra are of a different colour, &c. Fam. 1st.

4. S. blandus, Grav. The reddish colour of this handsome insect is of a tint approaching sanguineous.

Gravenhorst had probably old specimens of which the colour had faded. He describes the feet as "rufo-testacei," but in my specimens the tibiae and tarsi are piceous. He says "coleoptera depilia" but my specimens certainly have prostrate hairs on the elytra as well as on the scutel. If this is not in reality Gravenhorst's species, it differs in the exceptions I have stated and can be called lactulus. Fam. 1st.

5. S. inversus, Black; dorsal thoracic punctures three.

Inhab. Indiana.

Head with an orbital puncture, and another above the eye: mouth and antennae piceous; joints of the flagellum rather transverse, point of the last joint not prominent: thorax a little narrowed before; dorsal punctures three, the series nearer each other at tip than near the head and hardly reaching the middle of the length; lateral two, remote, with a single puncture midway between the second and the dorsal series; marginal one: scutel glabrous, impunctured: elytra on the disk with but very few hairs; punctures few, distant, almost to be traced into obsolete series; laterally with small punctures, furnishing short hairs: tergum in some lights, slightly iridescent towards the tip: beneath very obscurely piceous: feet piceous.

Length nearly three-tenths of an inch.

The two dorsal series of punctures in other species diverge a little posteriorly, but in the present species they evidently approach towards their posterior extremation. Fam. 1.
6. *S. dimidiatus*, Blackish; elytra and margins of abdominal segments reddish brown; feet pale.

Inhab. U. S.

**Body** piceous-black: *head* oval black, with two punctures between the eyes, two punctures on the posterior anthus and five or six behind: *mouth* piceous: *antennae*, first and second joints and part of the third yellowish, or reddish brown more or less pale: *thorax* black, with a tinge of piceous; dorsal series five and an equal puncture more distant than the others, near the anterior margin, and a little exterior to the line of the series; lateral punctures two, or in a much curved line three; marginal two: *elytra* reddish-brown, with prostrate hairs: *abdomen*, segments reddish-brown on their posterior margins: *feet* yellowish, or pale reddish-brown.

Length nearly one-fifth of an inch

I have found specimens in Pennsylvania and Missouri. The reddish-brown colour of the posterior margins of the abdomen, is obvious beneath. Fam. 1st.

7. *S. tachiniformis*, Black; thorax sanguineous; feet piceous.

Inhab. Mexico.

**Body** black: *head* rather small, oval, polished; with two punctures each side between the eyes, and eight or ten behind the eyes: *antennæ* fuscous, dark piceous at base: *mouth* piceous: *thorax* sanguineous; dorsal punctures five distant from the base and tip; lateral two; marginal three placed triangularly: *elytra* with a slight, obscure metallic tinge, with numerous minute punctures furnishing prostrate hairs: *feet* honey-yellow; posterior pair and *tibiae* and *tarsi* darker.

Length one-fourth of an inch. Fam. 1st.

8. *S. apicalis*, Black; terminal joint of the *antennæ* and abdomen towards the tip, rufous.

Inhab. U. S.

**Body** black, polished, punctured: *head* with numerous punctures, smooth in the middle: *antennæ* with the terminal joint yellowish-rufous: *mandibles* piceous: *palpi* with the terminal joint rather long, slender, piceous: *thorax* with numerous not crouded punctures, with a longitudinal, dila-
ted, glabrous line: *scutell*, punctures, minute, dense: *elytra* with a subsutural line and numerous, small punctures furnishing hairs: *abdomen* towards the tip dull rufous: *feet* pieceous-black.

Length nearly two-fifths of an inch. Fam. 3rd.

9. *S. cyanipennis*, Fabr. The allied species of the United States was considered by Gravenhorst as a variety only of the European species. I have not at present in my collection the true cyanipennis of Europe to compare, but as Gravenh. mentions a difference in the size of the head, it may yet prove to be a distinct species and if so the name proposed by Knock, *S. cyanopterus*, will be an appropriate one.

—Fam. 1st.

10. *S. viduatus*, F. This name has the priority over that of maculosus Grav. Belongs to family 4. It is singular that Gravenhorst in his revised work the "Monographia" quotes the proper name of this insect and yet retains the synonym of maculosus as the true name, although it was given by himself a year after the Fabrician name.

11. *S. violaceus*, Grav. This species is subject to vary considerably; the "*linea media longitudinali labei*" of the head is very commonly obliterated by punctures, and there exists a variety, of which the elytra are tinged with greenish, or are dusky brassy. Belongs to Fam. 3.

12. *S. umbratilis*, Grav. My specimens, five in number, have about five punctures in the dorsal series, neither of them has four only as stated in the description. Belongs to Fam. 1st.

13. *S. ater*, Grav. In my cabinet I find that I formerly placed this species under the genus *Astrapæus*, Grav. from the circumstance that the terminal joints of the palpi are more dilated than in any other species of *Staphylinus*, that I am acquainted with. The terminal joint of the maxillary palpi, is not longer than the penultimate one and the diameter is nearly, if not quite as great; the terminal joint of the labial palpi is very obviously dilated, oval and its transverse diameter is nearly double that of the last joint of the maxillaries. Still however, as neither of these joints can be called securiform agreeably to the essential characters of *Astrapæus* we must agree with Gravenhorst, and return the
species to his third family of Staphylinus, from which it certainly differs in the characters above stated.

**XANTHOLINUS, Dahl.**

1. *X. emmesus* Grav. Coleopt. Micropt. 176 belongs to this genus. It is subject to vary in its colouring; the abdomen is often piceous, and sometimes even still paler.

2. *X. cephalus*, Black; antennæ reddish-brown; *elytra* and *feet* honey-yellow.

Inhab. Virginia.

*Body* black, polished: *head* elongated, sides parallel, punctured; punctures numerous and larger each side, excepting immediately the line behind the eye obsolete on the longitudinal middle; a larger puncture each side at base; and a slight longitudinal indentation on the basal margin; *thorax* as wide as the head anteriorly, becoming gradually a little narrower to the base; a dorsal series of 5 or 6 punctures; lateral four or five punctures; on the anterior termination of this series a much dilated slight indentation; marginal puncture one; basal edge each side and lateral edge with a series of punctures: *elytra* honey-yellow, irregularly, not profoundly punctured: *pectus* rufous: *feet* honey-yellow: *abdomen* piceous-black.

Length one-fourth of an inch.

The head is large, longer than the thorax. I obtained it on Chinquotege Island.


Inhab. U. S.

*Head* piceous-black, ovate, with sparse, profound punctures, wanting on the longitudinal middle and immediately in a line behind the eye: *antennæ* reddish-brown, paler at base; *palpi* pale reddish brown: *thorax* rufo-piceous, not distinctly contracted behind; dorsal punctures about ten, with an anterior, nearly parallel, exterior series of about four; lateral series ten or twelve punctured, extending to the locality of the posterior angle, and at its anterior extremity curved outward and backward with four or five additional punctures: *elytra* honey-yellow, sparsely and irregularly punctured; a somewhat elevated line on the sutural submargin: *feet* dark honey-yellow.

Length about one-fourth of an inch.
Remarkable for the number of punctures in the thoracic series.

LATHROBIUM, Grav.

1. L. simili'penne, Black; members rufous or yellowish.

Inhab. Mexico.

Body black, polished, hairy, densely punctured: antennæ reddish brown, 1st and second joints rufous: labrum and palpi piceous: thorax longer than broad, with a longitudinal glabrous line in the middle, and a glabrous basal margin: elytra, terminal edge piceous: tergum with more minute punctures; more hairy at tip: feet honey-yellow; thighs pale yellow.

Length two-fifths of an inch.

Like most of the species of this genus the middle of the thorax is destitute of punctures; in this character it also agrees with Staphylinus violaceus, Grav.

2. L. armatum, Anterior thighs dilated and angulated beneath.

Inhab. Indiana.

Body black; punctured: antennæ piceous; 1st joint obconic, not longer than the 2nd and 3d together, which are equal; 4-10 joints moniliform; last joint ovate-acute: palpi pale piceous; terminal joint minute, that of the labials longer: thorax oblong-quadrate; angles rounded; glabrous line none: elytra black-piceous, punctures not deeply impressed; sutural stria distinct: feet rufous; thighs robust, particularly the anteriors, which have a prominent angle beneath near the tip: tibiae a little dilated and compressed, obliquely truncate at tip; anterior pair with an obtuse sinus on the inner side: tarsi, 1st joint not longer than the second; penultimate joint a little lobed beneath.

Length about seven-twentieths of an inch.

I have obtained but one specimen, which is a male. The above description will show that it differs much from any known species.

3. L. cinctum, Black, punctured; antennæ and mouth piceous; feet yellowish; posterior margins of the segments of the abdomen rufous.

Inhab. Missouri.
Body black, punctured, hairy; head above, punctures dense, distinct, profound, furnishing hairs; on the front sparse, remote; antennae pale piceous, first joint nearly one-third of the entire length, third joint rather longer than the second and with the others obconic, two terminal ones sub-globular; labrum very short at tip punctured and setous, emarginate in the middle; mandibles piceous, prominent, strongly dentate in the middle; palpi, maxillaries prominent, pale piceous, terminal joint conic-acute, as large at base as the preceding joint, labiales pale testaceous, minute, throat with an impressed convex line; thorax oblong, not wider than the head, punctures numerous, profound, furnishing hairs, angles rounded; scutel impunctured; elytra, punctures somewhat transversely confluent, a little hairy; feet testaceous, thighs paler, anterior thighs near the tip abruptly narrowed beneath, coxae piceous; pectus impunctured; postpectus and abdomen densely and minutely punctured, punctures hairy; segments of the latter with rufoserruginous posterior margins.

Length less than two-fifths of an inch.

Found near Engr. Cantonment on the Missouri.

4. L. bicolor, Grav. This is an abundant species, and widely distributed. Nuttall gave me a specimen which he found in Arkansaw; I have taken them in Missouri, Pennsylvania and very commonly in this State. It varies considerably in its shades of colouring. I have an individual of which the thorax is pale yellow.

5. L. dimidiatum, Black; thorax and posterior half of the elytra rufous.

Inhab. U. S.

Black: head with scattered punctures; antennae fuscous; first and second joints, and palpi honey-yellow; thorax bright rufous, with a dorsal hardly regular stria of seven or eight punctures, the stria somewhat impressed towards the base; lateral punctures many, not crowded; elytra with one or two hardly regular striae of punctures, and lateral scattered punctures; an indented subsutural line; bright rufous, the basal half black; tergum piceous black; segments dull rufous on their posterior margins; feet pale yellow.

Length three-twentieths of an inch.

Var. a. Punctures of the thorax a little more regular and
numerous; black portion of the elytra confined to the basal margin and sometimes obsolete.

Punctured somewhat like longiusculum, Grav. but is much smaller and differently coloured.

6. L. sphæricolle, Blackish; thorax orbicular, convex; antennæ long.
Inhab. Indiana.

Body black piceous: head with the carina of the antennæ a little elevated, abrupt before: antennæ much thicker towards the tip, rather longer than to the base of the thorax, first joint hardly longer than the second and third together, fuscosus, three basal joints honey yellow, fourth and terminal joints obscure honey yellow; larger joints hardly longer than broad: mandibles bident at tip, and with the pulpi piceous: neck distinct: thorax nearly orbicular, a little wider before the middle and narrower behind; convex, with sparse black hairs: elytra with scattered upright hairs; sub-sutural stria deeply indented, particularly towards the base; tip truncate not sinuate; taken together, transverse quadratet: tergum black: feet yellowish: thighs towards the tip piceous.

Length over one-tenth of an inch.
The labrum is longitudinally indented in the middle and at tip is widely, but not very deeply emarginate. The habit differs from that of most of the species, and it cannot be, rigidly speaking, congeneric with bicolor and pallipes, Grav. It varies in having the feet entirely yellowish and the tips of the carinae of the head honey-yellow.

7. L. millepunctatum, Piceous; with dense, minute punctures; thorax with a glabrous line, rounded behind.
Inhab. Indiana.

Body dull piceous, with very minute, crowded punctures and small hairs: head larger than the thorax, black-piceous, quadratet, almost lobed at the posterior angles: antennæ and mouth paler, rufous: thorax, as in Staphylinus, rounded behind and truncate before; a dorsal, slender, glabrous line: elytra paler on the humerus: tergum dark piceous, posterior margin of the segments and lateral margin paler: beneath honey yellow, head rufous.

Length less than one-fourth of an inch.
The form of the thorax and head is that of a Staphylinus; which together with the dense and minute puncturing, distinguish this species very readily from others.
8. **L. confluentum**, Piceous; densely punctured; thorax short, rounded behind and angulated before each side; head large.

Inhab. U. S.

_Body_ piceous: _head_ with close set, discoidal punctures; large, ovate or subquadrate; tips of the carinae of the antennæ, base of the antennæ and palpi paler: _palpi_ with the terminal joint very small: _antennæ_ towards the tip moniliform: _thorax_ much smaller than the head, paler on the lateral and posterior margins; punctures confluent longitudinally; anterior margin with a short, abrupt neck; anterior angles angulated; behind rounded: _elytra_ with small, irregular punctures, furnishing short hairs, almost obsolete at tip; tip paler: _feet_ honey yellow.

Length less than three-twentieths of an inch.

I obtained a few specimens at Chincoteage Island, in dung, October. And one in Indiana.

PINOPHILUS, Grav.

_P. latipes_, Grav. In his last work this author abolishes this genus and unites the species with _Lathobium_. But I think with Latreille that it must be a distinct genus.

PÆDERUS. Fabr.

4. **P. discopunctatus**, Yellowish; abdomen black at tip.

Inhab. U. S.

_Body_ elongated, dull honey-yellow, punctured: _head_ with close set, discoidal punctures; subquadrate, obtuse before: _antennæ_ and _palpi_ paler than the head: _thorax_ with discoidal punctures, which are close set and like those of the head with a central point: oval, rather smaller than the head; edges a little darker: _elytra_ a little paler than the head and thorax, with dense, transversely somewhat confluent punctures: _abdomen_ dark honey-yellow, black at tip: _feet_ colour of the elytra.

Length less than three-twentieths of an inch.

Resembles _P. binotatus_, Say, but may be distinguished at first sight by the more obtuse anterior termination of the head and by the absence of the elytral spots, which mark that species.
2. *P. cinereus*, Black; tips of the elytra obscure rufous.

Inhab. U. S.

*Body* elongated, black with a slight tinge of piceous, and with discoidal punctures: *head* obtuse before: *antennæ* and *palpi* honey-yellow: *thorax* somewhat smaller than the head, a little obovate, obscurely rufous behind: *elytra* obscure rufous at tip: *tergum*, posterior margins of the segments dull rufous: *feet* pale honey-yellow.

Length nearly three-twentieths of an inch.

Resembles the preceding in form and in the obtuse anterior termination of the head.

**RUGILUS**, Leach.

*R. dentatus*, Black; feet pale; elytra dull rufous at tip.

Inhab. U. S.

*Body* piceous black: *head* longitudinally wrinkled: *antennæ*, *palpi* piceous: *labrum* large, bidentate in the middle, piceous, rounded each side: *thorax* smaller than the head, longitudinally wrinkled, convex, with a longitudinally, glabrous line: *elytra* with numerous, minute, hairy punctures; a subsutural impressed line; posterior margin dull rufous, or yellowish: *feet* pale yellowish.

Length over three-twentieths of an inch.

Var. a. Posterior margin nearly black towards the suture; glabrous thoracic line almost obsolete.

Much smaller than *R. orbiculatus*, Payk. and the wrinkles of the head and thorax are larger and more obvious.

**STENUS**, Latr.

1. *S. geniculatus*, Black: *antennæ* and feet whitish.

Inhab. U. S.

*Body* black, with a very slight cinereous tinge; deeply punctured: *head* with a wide, but not very deep indentation each side of the middle; profoundly punctured: *antennæ* whitish: anterior part of the head with short whitish hairs: *thorax* punctured like the head: *elytra* also with profound punctures: *tergum* a deeper black than the elytra; segments with large punctures at base and small ones towards the tip: *feet* yellowish-white; posterior knees blackish.

Length less than one-fifth of an inch.
This has been supposed to be the same as the *fuscipes*, Grav. but it is much larger, with pale feet, &c.

2. *S. colon*, Black; elytra with a rufous dot; feet pale beneath.

Inhab. Indiana.

*Body* black, with large, dense, not very profound punctures: *elytra* with the punctures towards the suture longitudinally confluent; a sublunate or triangular, dull rufous spot rather behind the middle of each elytron: *tergum* with the punctures not smaller at the posterior margins of the segments: *feet* dirty yellowish: *thighs* blackish above.

Length over three-twentieths of an inch.

Much like *S. biguttatus*, Linn. but is much, smaller, and the spot of the elytra is placed rather more outward and backward, and is more triangular and emarginate before.


Inhab. Missouri.

*Body* black, with a slight tint of gray; punctures dense, with short, prostrate hairs: *head* obtusely indented each side between the eyes: *thorax* broadest a little before the middle: *elytra*, region of the scutell indented: *tergum* of a more unmixed black than the anterior part of the body: *feet* immaculate.

Length nearly three-twentieths of an inch.

Resembles *buphthalmus*, Schr. but may be distinguished by the more obvious indentations of the head.


Inhab. Pennsylvania.

*Body* black with a slight tinge of gray; punctures dense, with short, prostrate hairs: head obtusely indented each side between the eyes: *thorax* broadest rather before the middle, contracted behind; a slight appearance of indentation behind the middle: *elytra*, region of the scutell a little indented: *tergum* of a more unmixed black than the other part of the body: *anterior* thighs rufous, black at the knee; *posterior* thighs obscure rufous.

Length less than three-twentieths of an inch.
5. S. quadripunctatus, Black, punctured; thorax hexagonal, unequal.

Body deep black, immaculate, profoundly and densely punctured; mouth testaceous; palpi black; thorax hexagonal, the lateral edge projecting into an angle in the middle, disk with four dilated, indented spots, placed in quincunx, with a slightly elevated line between them, one or two obsolete, indented spots near the lateral angle; abdomen, pectus and postpectus impunctured, the former with short hairs; feet piceous.

Length more than one-tenth of an inch.

Found at Engineer Cantonment. It has a somewhat different aspect from the preceding species. The eyes are not quite so large, and the three last joints of the antennæ are not so remarkably larger than the others.

OXYPORUS, Fabr.

O. stygicus, Black; tarsi rufous.

Body black, polished; antennæ 2-5 joints rufous: labrum rufous: palpi honey-yellow: thorax with the lateral deflected margin indented: elytra entirely black: a subsutural stria, and an abbreviated one on the middle, near which is another obsolete one, and many rather large distant punctures; exterior margin impunctured: feet blackish piceous: tarsi pale rufous.

Length three-tenths of an inch.

The thorax is somewhat longer than that of cinctus, Grav. and the punctures of the elytra are more numerous.

OXYTELUS, Grav.

1. O. sculptus, Blackish; five lined; elytra rufous; feet pale.

Body piceous-black, punctured: head indented, with numerous, small punctures above; mouth piceous: antennæ fuscos, piceous at base: thorax with five grooves, of which the exterior ones are dilated and not deeply impressed; densely punctured; anterior angles not acute: elytra dull rufous, with small hairy punctures; a subsutu-
ral impressed line and another from the humerus not reaching the tip: **tergum** black with a piceous tinge; **feet** yellowish-white; **tibiae** and **tarsi** a little darker.

Length over three-twentieths of an inch.

Gravenhorst considered this insect as specifically identical with his **pieus**, but in his remarks on that species he states that “huic *Oxytelo* alius affinis est, quam D. Prof. Knoch O. sculptus nuncupavit. Differt thorace lateribus subrotundatis, basin versus paulo angustiore, coleoptris breviore et paulo angustiore, fusco seu rufo; coleoptris quadratis, rufescentibus seu piceo-rubo.” These differences of character, indicate a difference of species.—It is the Aleocharasculpta of Melsheimer’s catalogue.

2. O. **rugulosus**. Black; logitudinally wrinkled; **elytra** obscure piceous.

Inhab. Mexico.

**Body** black, rather short, with numerous punctures, somewhat confluent into longitudinal wrinkles: **head** with three grooves, rather slightly impressed, the lateral ones dilated: **antennae** brown, dull honey-yellow at base: **pulpi** dull honey-yellow: **thorax** with three grooves, of which the middle one is wider before and the lateral ones wider behind; each side a little concave, the edge slightly reflected; anterior angles acute; lateral edge arquated; rounded behind: **elytra** transverse quadrate, blackish-piceous: **tergum** with dense, minute punctures: **feet** honey-yellow.

Length less than one-tenth of an inch.

This does not altogether agree with the var. a. of the **carinatus** of Gravenhorst and to which he has given the name of insignitus. The present species is proportionally much shorter than the **carinatus**. It is not more than half the length of that species. It is more than probable that the insignitus is also a distinct species.

I obtained three specimens of the rugulosus in Mexico.

3. O. **cordatus**, Black: **elytra** whitish, with a common brown spot.

Inhab. Virginia.

**Body** black, with numerous, small punctures: **mandibles** piceous: **antennæ** pale, towards the tip brownish: **thorax**
angles almost rounded: *elytra* yellowish white, with a common fuliginous disk: *feet* yellowish-white; *tibiae* and *tarsi* darker.

Length three-twentieths of an inch.

This occurred extremely numerous, in October, under the surface of the sand in flat places on the sea beach, over which the high tides flow. When the water subsides their labours become visible. They proceed forwards a little beneath the surface in a very irregular line, casting up the sand so as to resemble a miniature mole tunnel.

On the wet or partially dry plain, their tunnels, though very small, are yet very striking to the eye, in consequence of their great abundance, and being drier and whiter than the general surface. They appear to be in search of the various minute crustaceous animals, that take refuge in the sand on the recession of the waters.

4. *O. emarginatus*, Black; *elytra* whitish with a fuliginous suture.

Inhab. Indiana.

*Body* black, punctured: *head* with numerous, but not crowded, punctures; two longitudinal indentations between the antennæ: *antennæ, mandibles* and *palpi* honey-yellow: *thorax* with a piceous tinge, rounded behind; with rather sparse, well defined punctures, and an obvious, impressed, dorsal line: *elytra* with separate punctures and a much dilated, common, fuliginous vitta; sutural tip very obtusely rounded: *feet* honey-yellow: *thighs* and *coxae* whitish.

Length less than one-tenth of an inch.

The obtusely rounded sutural tip of the *elytra*, gives this part, in repose, a profoundly emarginated appearance.

**GENUS MOLOSOMA**, Say.

*Labrum* entire; *palpi* filiform, terminal joint of the maxillaries much longer than the second, slightly attenuated to the tip; *antennæ* before the eyes, inserted under the margin, gradually thicker at tip, four last joints larger; *body* cylindric; *thorax* truncate at base; *abdomen*
with the penultimate segment longest: tibiae spinous, a little arquated.

M. latipes, Grav. (Monog. Coleopt. Micr. p, 198.)

In the present state of the science the latipes, can no longer remain in the genus Oxytelus, as a species of which Gravenhorst described it. That author was, however, perfectly sensible of its distinguishing characters and had he written twenty years later, I should not now have to construct this new genus. The following are his remarks adjoined to his copious description, to which I must refer the reader;

"Cum hoc insectum palpis instructum sit filiformibus, antennis extrorsum crassioribus, thorace immarginato basi truncato, Tachinis adnumerandum foret, si solos characteres, artificialia, (Coleopt. Micropt. p. 134) datos, respicieramus. Habitue autem toto et, exceptis ultimis palporum articulus, partibus etiam singulis cum Oxytelis huius familiæ plane congruit. Certo systematis naturalis nullam haberemus rationem, cum hoc micropterorum Tachinis adiungeremus. Oxytelus autem, sicut huc usque determinati erant, ob characteres per systema artificialia constitutos, haud associari potest. Eodem ergo iure, quo Astrapæi genus olium a Staphylinus disungeatur, quibus attamen simillimum est, hoc etiam insectum genus novum, ab Oxytelis separatum, conderet, nisi regula systematis naturalis, i. e. character totus externus seu habitus totus, dissuaderet."

ANTHOPHAGUS, Grav.

A. verticalis, Body reddish-brown; elytra and margin of the tergum yellowish.

Inhab. Pennsylvania.

Body chestnut, punctured, a little hairy: head darker than the thorax, punctures sparse; disk of the vertex impressed; between the antennae uncinal: untemæ and mouth paler than the head: thorax convex, rounded each side, contracted at base, with a conspicuous impressed line, terminating behind in a dilated puncture: elytra reddish-yellow, punctured, at tip obscure: tergum with a with a dorsal impressed line; posterior or rather lateral
triangular yellow spot, on the lateral margin of each segment: *thighs* testaceous; *tibiae* & *tarsi* somewhat darker.

Length under one fifth of an inch.

Allied to *A. brunneus*, Nob. but the segments of the tergum are not margined around by dusky; on each is a dusky triangle, much dilated on the posterior margin so as nearly to reach the lateral edge.

**OMALIUM**, Grav.

1. *O. marginatus*, Piceous, punctured; antennae & feet dull rufous.

Inhab. Upper Missouri.

**Body** oblong oval, piceous, punctured; *head*, punctures sparse, obsolete at tip; with an indentation each side between the antennae & a longitudinal impressed line each side at base: *antennae* rufous at base, red-brown-obscure at tip with cinerous hair: *palpi* rufous: *thorax* transverse subquadrate, punctures not crowded; posterior edge obscurely piceous; *elytra* longitudinally quadrates, covering more than half of the tergum, exterior margin piceous towards the humerus; exterior hind angles rounded, sutural ones acute; almost to be traced into striæ: *feet* piceous, paler towards the tip; *tergum* obscurely rufous on the margin, & on the posterior margins of the segments.

Length one tenth of an inch.

I obtained this insect when with Major Long's expedition to the Rocky mountains; I think it occurred at Engineer cantonment on the Missouri.

2. *O. rotundicolle*, Piceous black; thorax rounded behind, emarginate before.

Inhab. Pennsylvania.

**Body** with rather large, numerous & profound punctures; *antennae* piceous, brown, the three basal joints, *labrum* & *palpi* honey yellow: *thorax* transverse oval, deeply emarginate before, equally punctured; posterior angles rounded; edges piceous: *elytra* equally punctured, long; terminal edge piceous: *tergum* piceous, rather paler on

**NOTE.**

Since the preceding pages were printed I have received the second edition of the Regne Animal (Amer. Ed.)
the posterior margins of the segments: *feet* dark honey yellow; *venter* somewhat piceous.

Length less than one fifth of an inch.

Taken on the wing at twilight, in October.

**TACHINUS**, Grav.

1. **T. atricaudatus**, Nob.
   
   Is very closely allied to *atricapillus*, & *cinctus*, Grav.

2. **T. obsoletus**, Black; *thorax*, curve on the *elytra*, segment margins & feet yellowish.
   
   Inhab. *Virginia*.

   **Body** black: *antennae* fuscous; four basal joints yellowish; tip of the last joint dirty fulvous; *mouth* honey yellow: *thorax* honey-yellow: *elytra*, in some lights with an appearance of obsolete striae; subsutural impressed line obvious; a honey-yellow base, suture & terminal margin; *abdomen* with the segments piceous on their posterior margins: *feet* pale yellowish.

   **Length** over one fourth of an inch.

   I obtained this species in October, at Chinquapin Island.

   
   Inhab. *Pennsylvania*.

   **Body** yellow, tinged with honey-yellow: *head* obscure piceous; *antennae* fuscous: four basal joints pale yellow; *mouth* yellow: *mandibles* piceous at tip: *thorax* immaculate: *scutel* piceous; *elytra* with a few remote punctures on the basal half, & towards the tip obsolete impressed striae, a subsutural impressed line, near which is a series of distant larger punctures; region of the scutel with a dilated blackish triangle, extending to the middle of the length of the suture & thence by a narrow & paler sutural line to the tip; exterior margin or epipleura black, with a spot near its tip extending inwards, half way to the suture but not reaching the tip of the *elytra*: *tergum* dull sangineous; near the tip with an obsolete, blackish band; at tip with a yellowish tinge.

   **Length** over three twentieths of an inch.

4. **T. cineticollis**, Black; posterior thoracic margin, line of the *elytra* & *feet* yellowish.
Inhab. Indiana.

**Body** black; *mouth* yellowish; *palpi* pale yellow; *antennae* fouscous, three basal joints yellowish; fourth joint piceous; *thorax* posterior margin, & lateral margin dilating towards the posterior angles, honey-yellow; *scutellum* piceous; *elytra* with an appearance of striae at tip; a sutural impressed striae, near which is a series of distant punctures, & another near the the middle & a submarginal one; pale yellowish, a dilate, oval blued black spot extends from before the middle to the tip, does not attain to the sutural & is confluent with a blackish marginal line, which does not reach the humerus: *tergum*, segments on their posterior margins, obscure piceous: *feet* pale yellow.

Length less than one fifth of an inch.

Distinguished from the others of this country, by the differently coloured thoracic margin.

5. **T. humidus**, Black; *elytra* & posterior margins of the abdominal segments, rufous.

Inhab. Indiana.

**Body** black; *antennae* brownish, base & mouth honey yellow; *thorax* piceous on the posterior edge; *elytra* rufous or honey yellow, an impressed subsutural line, near which is a series of punctures, surface with sparse punctures almost to be traced into two or three series; sutural margin very slightly dusky; *tergum* blackish, with piceous posterior margins of the segments: *tip* somewhat fulvous: *feet* honey-yellow.

Length one tenth of an inch.

Allied to the preceding, but is a much smaller species, & the *elytra* are immaculate.

**TACHYPORUS**, Grav.

1. **T. fumipennis**, Black; margin of the thorax & base of the *elytra* yellowish.

Inhab. Pennsylvania.

**Body** minutely punctured; *head* black; *antennae* filiform, brown; four basal joints honey yellow; *palpi* filiform, yellowish; *thorax* black, margined around with honey-yellow; *scutellum* black; *elytra* fuliginous, a wide part of the base & narrow tip dull honey-yellow; *tergum* blackish.
the segments piceous on the hind margins; beneath black-piceous: feet honey yellow.

Length over three twentieths of an inch.

2. T. moestus, Piceous, sericeous: thorax & elytra margined with dull yellowish obscure.

Inhab. U. States.

Body, blackish piceous, somewhat sericeous: mouth & antennæ dull yellowish; the latter pale brownish towards the middle; palpi, penultimate joint thick; last joint much shorter & acicular: thorax dilated, convex, lateral & basal margins dull yellowish: elytra, basal & exterior margins dull yellowish: abdomen somewhat hairy at tip: beneath honey yellow: feet not or hardly spiny.

Length less than three twentieths of an inch.

The paler margins of the thorax & elytra are sometimes almost obsolete.

3. T. jocosus, Black; thorax, elytra, feet & mouth yellowish.

Inhab. Indiana.

Head black-piceous, polished, convex, impunctured: antennæ honey-yellow (six ultimate joints wanting in the specimen) palpi honey-yellow, terminal joint acicular: thorax polished, impunctured, yellowish; anterior & posterior margins blackish; scutell blackish: elytra yellowish, with very fine, prostrate hairs; region of the scutell blackish: tergum, posterior margins of the segments yellowish; longer than the elytra, (in the preserved state:) feet pale yellow.

Length one tenth of an inch.

4. T. ventriculus, Black; thorax each side & elytral margin piceous.

Inhab. Pennsylvania.

Body black, with a slight piceous tinge, polished; antennæ dull yellowish, dusky towards the tip: mouth dull yellowish: palpi filiform: thorax piceous on the lateral margin, gradually shading to the general blackish colour: elytra on the lateral margin & at tip piceous; common edge of the tip not indented at the suture: tergum (in the preserved state,) much shorter than the elytra; at tip of the
segments dull piceous: *feet* honey-yellow; *tibiae* not remarkably spiny.

Length one twelfth of an inch.

The abdomen contracts very much in desiccation.

This can hardly be the *crassus* Grav. as his description does not indicate it.

5. T. opicus, Blackish; *feet*, base of the thorax & of the elytra obscure reddish brown.

Inhab. Missouri.

*Body* deep black-brown, somewhat sericeous: *head* black; *antennae* at base & tip, pale reddish brown; *palpi* pale reddish brown; *thorax* convex; a narrow, obscure, red brown posterior margin; *elytra* with a broad red-brown basal margin: *feet* red brown; *tibiae* not remarkably spinous; *tergum* with paler margins to the segments, shorter than the elytra, hairy at tip.

Length over one tenth of an inch.

This species is not highly polished, but is distinctly sericeous.

6. T. acanthis, Abbreviated; honey yellowish; thorax paler each side.

Inhab. Indiana.

*Body* honey-yellow, polished: *head* black-piceous; *antennae* fuscos, four basal joints obscure yellowish; *palpi* yellowish, last joint acicular; *thorax* honey yellowish, more dusky on the disk & at base; and paler, somewhat translucent on the lateral margin; *elytra* yellow with a rufous tinge, a little hairy, dusky on the region of the scutel; *tip* of the suture a little rounded so as to produce an acute, but small, common emargination: *tergum* less than half the length of the elytra, blackish brassy, somewhat hairy: *feet* yellow, pale: *tibiae* with obvious, but not very prominent spines.

Length nearly one twelfth of an inch.

This is very broad in proportion to its length, in consequence of the great contraction of the abdomen in drying. It resembles *joecus*, N. but is wider in proportion to its length, without taking into consideration the extraordinary brevity of the abdomen.
7. *T. fuber*, Thorax & elytra yellowish; near the scutel depressed; last joint of the palpi very short.
   Inhab. Indiana.

   Body somewhat depressed: head black-piceous, polished: antennae yellowish towards the base: palpi, penultimate joint rather dilated; ultimate joint very short, conic, hardly one fourth as long as the preceding: thorax honey yellow glabrous; scutel small, dusky: elytra paler than the thorax, slightly hairy; suture & base near the scutel a little dusky; region of the scutel somewhat indented: tergum wider & more depressed than in most species, paler towards the tip: beneath reddish brown: feet yellowish; tibiae a little spinous.

   Length about one twelfth of an inch.

   The abdomen is more depressed than usual in this genus, & the terminal joint of the maxillary palpi is much shorter than in our other species.

   Much reform seems requisite in this & the preceding genera.

8. *T. fimбриatus*, Grav. Varies in being more or less tinged with ferruginous. The head & thorax are sometimes entirely dull ferruginous. It is the boleti of Melsh. Catal. but it was afterwards first described by Grave- nhorst under the name which I have of course adopted.

   **ALEOCHAEA**, Grav.

1. *A. obscuricollis*, Black; elytra ferruginous; tarsi piceous.
   Inhab. Mexico.

   Body black: head opake: labrum piceous: thorax orbicular, truncated before for the reception of the head, opake: elytra ferruginous, length hardly exceeding the breadth: scutel black, opake: abdomen obviously hairy, polished, lateral edge somewhat elevated: tarsi piceous.

   Length less than three tenths of an inch.

2. *A. bimaculata*, Grav.

   A species very closely allied, or perhaps the same as the *bimaculata*, Grav. is an inhabitant also of Mexico.

3. *A. lustrica*, Blackish; thorax each side, elytra & feet dull rufous.
Inhab. Pennsylvania.

**Body** piceous-black, obviously punctured: *head* black, with numerous punctures, sparse in front & more dense behind; before the antennæ triangularly carinate, dull piceous: *antennæ* dark reddish brown, three basal joints honey-yellow: *mouth* dull honey yellow: *thorax* with very numerous punctures, rather larger towards the base & almost to be traced into transverse arquated lines; lateral margins piceous: *elytra* dull yellowish-rufous, with dense punctures: *abdomen* piceous at tip: *feet* honey yellow.

Length under one fourth of an inch.

5. *A. fasciata,* Yellow; head, band of the elytra & spot on the tergum, black.

Inhab. Pennsylvania.

**Body** yellow, with a slight rufous tinge: *head* black piceous, with rather large punctures each side towards the eyes: *eyes* large, prominent: *mouth* dull yellowish: antennæ at base pale yellow: *thorax* sparsely & unequally punctured, with four somewhat larger remote punctures on the disk: *elytra,* punctures small, not deeply impressed; posterior half blackish: *tergum* with a black dot near the tip: *feet* whitish.

Length about one twelfth of an inch.

This is the *A. fasciata* of Melsch. Catal.

5. *A. indentata,* Yellowish; head, thoracic disk, elytral spot & middle of the tergum, black.

Inhab. Pennsylvania.

**Head** not obviously punctured: *eyes* not remarkably large or prominent: *antennæ* reddish brown, pale at base: *mouth* honey yellow: *thorax* dull yellowish, dusky in the middle; a longitudinal impressed line, & an indentation on the middle of the base: *elytra* with small, numerous punctures; yellowish with the sutural edge & a triangular spot, extending from before the middle to the posterior outer angle, but not reaching the suture: *tergum* reddish yellow the two middle segments blackish: *beneath* yellowish: *postpectus* & middle of the venter black: *feet* whitish.

Length one fifteenth of an inch.
Var. A. Thorax with the dusky disk obsolete.
Resembles the *dichroa* Grav. in having the indentation on the middle of the base, but it it differs in many respects & obviously in colouring.

6. A. *4-punctata*, Thorax rufous, with four punctures placed transversely.
Inhab. Missouri & Indiana.

- Head piceous black, with one puncture on the inner orbit, & three or four behind the eye: *antennae*, reddish brown, three basal joints honey yellow: *palpi* piceous: *thorax* honey yellow with four distant punctures before the middle, placed in a transverse line, the lateral ones less distinct: *elytra* dull honey yellow, with minute punctures, having prostrate hairs; *tergum* piceous, paler towards the tip: beneath dark piceous: *feet* yellowish.
- Length over one tenth of an inch.
- The four punctures of the thorax is an obvious character.

7. A. *propera*, Blackish; thorax depressed on the posterior middle.
Inhab. Indiana.

- Body with very numerous, small punctures, furnishing pale yellowish hairs: *antennae* black fuscous, three or four basal joints piceous: *mouth* piceous: *thorax* black-piceous, conspicuously hairy; on the middle of the base indented: *elytra* piceous-brown, obviously hairy, a little depressed on the basal margin & in the region of the *scute*: *tergum* black: *feet* pale piceous.
- Length over or about one tenth of an inch.
- The depression, almost are quite amounting to an indentation at base of the thorax is sometimes geminate.

8. A. *semicarinata*, Blackish; thorax with a carina on the basal half.
Inhab. Missouri.

- Body black with a piceous tinge: *thorax* with an elevated line, or two parallel impressed striae, from the middle to the base: *elytra* with a slightly impressed sutural groove on the basal half: *abdomen* black: *feet* pale piceous.
Length less than one tenth of an inch.
Resembles the preceding, but may be distinguished by
the double thoracic groove, forming an inclined carina.

9. **A. Simplicicollis**, Blackish; antennæ, feet, inner tip
of the elytra and posterior margins of the segments of the
tergum reddish-brown.

Inhab. Missouri.

*Body* with short prostrate hairs: *head* black: *antennæ*
reddish-brown, transverse joints somewhat darker: *elytra*
on the sutural margin, particularly towards the tip, obscur-
redish-brown; common emargination at tip very ob-
vious: *tergum* with, the posterior margins of the segments
dull reddish brown, *feet* reddish-brown or honey yellow.

Length about one tenth of an inch.

Distinguished from the two preceding species by the
simplicity of the thorax and the margined segments of
the tergum.

10. **A. falsificæ**, Black; with converging hairs; elytra
and *feet* yellowish.

Inhab. Indiana.

*Body* black, with rather long, prostrate hairs: *head* with
the hairs converging to the middle line and directed for-
ward: *antennæ* blackish, basal joints obscure piceous: *pho-
pi* dull yellowish: *thorax* with the hairs converging to
the middle line and directed forwards: *elytra* dull yel-
lowish, darker on the base, suture and outer margin, the
hairs somewhat arranged so as to resemble striae: *feet* hon-
ey yellow.

Length about one tenth of an inch.

11. **A. verna**, Black, distinctly punctured; inner tip of
the elytra dull yellowish.

Inhab. Missouri.

*Body* with scattered hairs: *head* polished, with sparse
irregularly arranged, rather large punctures: *antennæ* or
the basal joints hardly tinged with piceous: *thorax* pol-
ished, with numerous, rather large, unequal, and irregu-
larly scattered punctures; middle line destitute of punctu-
tures: *feet* black-piceous.
Lengt about one tenth of a inch

The more conspicuous and irregular puncturing will distinguish this species from the above described.

12. A. exigua Black; punctured antennae and feel hardly.
   Inhab. Indiana.
   Body black, a little polished, with short hair; punctures.
   Number, somewhat regular; antennae at base, & palpi very
   slightly tinged with picceous; elytra a little indented at the
   decline, at tip the common emargination obtuse not
   profound; feel Black, picceous.
   Lengt one twentieth of an inch.

13. A. minima Black; elytra and feel dull yellowish.
   Inhab. Indiana.
   Body black, with numerous prostrate hairs; antennae
   towards the base with a very slight ting of picceous.
   Elytra dull yellowish; tergum dirty, yellowish at tip; feel whiteish,
   yellow, dull.
   Lengt nearly, one tenth of an inch.

14. A. Bilobata Dark reddish brown, thorax subcordate.
   Calanicate, feel pale.
   Inhab. Missouri and Indiana.
   Body very dark reddish brown, with numerous regular
   punctures; antennae two basal joints paler; mouth
   beneath excepting the terminal joints of the maxillary palpi;
   pale testaceous thorax rounded before & narrower behind, very
   deeply calanicate; groove abruptly abbreviated on the
   basal margin; Elytra at tips and sides with smaller
   punctures than the thorax; suture indented; feel pale testaceous;
   tergum segments with dilated punctures at base.
   Lengt less than three twentieths of an inch.
   The thoracic canal is less dilated, but at least as
   profound as that of the calanicate, grow. the thorax is
   more contracted behind and the head is more prominent and
   distinctly separate from the thorax by a short neck.
the genus aleochara, as is obvious to entomologists needs
information. the present species and some others of gravenhorst's
first divisions may be separated from it under the following
name and character. genus aleocharus.

Head prominent, with a distinct neck not inserted
into the thorax; antennae inserted into the anterior internal
orbit of the eye, three basal joints longest, maxillary palpi
long, terminal joint acicular; thorax (longitudinal) rounded on
the sides, or without lateral edge; feelers simple.

Buprestis F.

F. B. virginiensis Turton. S. Linn. p. 481. Brux. Ins. vol. 1
p. 66. pl. 30, fig. 3.

This species very closely resembles B. mariana, L. and
notwithstanding the magnitude of Bruy's figure, it is
somewhat smaller than the latter species, the posterior part
of the thorax is a little narrower and the curvature of its
lateral edge is somewhat different. it inhabits the eastern
and middle States.

3. B. liberta Geen. This differs more in color from the
virginiensis, than the latter species does from the mariana; but
it corresponds with virginiensis in the form of the thorax. I
am still inclined to consider it a variety of that species, which
Geen does not refer to in his description of his liberta.

3. B. lucida F. (and melas catala).

this is the corvus. fig. moss. Herbert. Olivier did not
observe the anal points, which are sometimes obscured by the
hair.

A B. diversicolor not that this insect is closely allied
to acuminata F. There can be no doubt and Depran T. in letter
considers it the same, but on reference to the description of
that species by gyllenhal (insecta europa) I find the
following characters: "thorax ante scutellum puncta due
(Nota) I am indebted to professor wiedman for the two very useful work
on "coleoptera microptera" by gravenhorst.
Any certain detailed descriptions of many north american species of the
american genus staphylinus which now constitute a large family.
impressa: anus emarginatus”. In the present species is only a single indentation at the base of the thoracic groove and immediately anterior to the scutellum, and the anus is tridentate, the middle tooth being more slender and acute. A variety in my collection is destitute of the punctured striae of the elytra.

4. B. obsea, F. (and Melsh. Catal.)
Herbst says the side of the thorax is rectilinear, not arquated. This would agree better with lurida, F.; my specimens of obscera are rectilinear only from before the middle to the base.

5. B. dentipes, Germar. This is the characteristica of Melsh.
Catalogue. But as no mere catalogue can establish a name Germar’s must be of course, retained, because it is the first name recognizable by a description.

6. B. hybernata, F. From the specimen in my collection, I am led to believe that the hybernata, F. is but a variety of the frontalis, Oliver, and that both have serrate elytra; but I have not at present the means of referring to Olivier’s work. My specimen is reddish-purple; thorax immaculate; elytra serrate, with but five green spots and the anterior thighs are armed with a prominent tooth.

7. B. Sexgullata, Nob. (Journ. Acad. Nat. Sc.) This name being preoccupied by Herbst for an American species, we change it Sexsignata.

8. B. gibbicolus, Nob. (Journ. A. N. S.) This name is preoccupied by Illiger for an European species, it must therefore be changed to

9. B. pulchella, Herbst. The volvulus, F. is probably the same species; but which of the two names has the pri-

* For this very accurately descriptive work, I am indebted to the politeness of the author.
ority I cannot now ascertain, not having the date of Herbst's volume. There is some confusion amongst the species of the small group to which this belongs, in consequence of the short descriptions of Fabricius. Herbst's description of this species cannot well be mistaken. I have found it in Pensylvania, Florida and Arkansaw. It is the ornata, of Dejean's catalogue and Germar (in a letter) considers it a new species under the name of olydonia.

10. B. ornata, F. About the size of the preceding, though perhaps a little more robust, of a much darker color and may also be distinguished from it by the thorax having the dorsal line deeply indented more especially on the posterior margin and being obtusely angulated behind the middle of the lateral edge. Dejean supposed it a new species and gave it (in Mss.) the name of multiguttata, but I think there is no doubt that it is the Fabrician species.

11. B. tubulus, F. This species is described as having but five yellow punctures on the elytra, placed 2.2.1, the latter being the largest. But it varies considerably in this respect sometimes having 8 or 9 spots, and again other specimens occur with not more than are indicated by Fabricius, if we consider the posterior larger one as being composed of two confluent ones. The rest of the description agrees precisely, and even the noted size corresponds with our insect as Fabricius says "Statura omnino B. volvuli, at duplo minor". It may indeed, be at once distinguished from pulchella by its much inferior size, very different color, and the greater regularity of its elytral spots; but the lateral edge of its thorax has a similar curvature. It is the smallest of our species of the group distinguished by the want of scutel &c. and approaches the ornata by its coloring and by the somewhat similar arrangement of the elytral spots, but differs in the regular curvature of its lateral thoracic edge. It is the volvulus of Dejean's Catalogue. Germar believed it new and gave it the name of xanthocyma; it is the culta of Weber and Dr. Harris has described it under the name of geranii.

Body with round, rather large, confluent punctures: hood a little tinged with cupreous, particularly towards the tips: tips of the elytra not narrowed, not margined: but with a slight concave curvature: labrum hardly prominent, not visible when viewed from above: antennae very short not reaching the vertex: the three basal joints together about as long as half the others combined: thorax in breadth at least twice the length with transverse confluent punctures: scutel bright green: elytra with transversely confluent punctures: serrate from near the humerus: surface obliquely undulated: beneath cupreous: antennae thighs with a prominent acute spine

Length seven twentieths of an inch

a Small and Distinct species


Head confluent punctured: green with a cupreous reflection antennae: steel-blue at base: green: labrum green: ciliate: at tip: thorax and cupreous with green confluent punctures: on some parts of the disk the punctures are sparse: scutel oval regularly concave green (x) gradually shaded into a blue: elytra along the middle: sculpture and outer margin cupreous: tip somewhat truncated: beneath green: cupreous

Length three fifths of an inch

The specimen was taken near Philadelphia it is evident - related to colebiens is as described by weber to form splendens of china: but weber's description states the former to have struck elytra: without elevated lines: the splendens has only three elevated lines on the elytra: all the decus is larger: with the tips of the elytra

(x) Elytra densely punctured: with five dilated grooves and four elevated lines the latter sparsely punctured: green
two-toothed. Neither can it be the "Striata Oliv. ass. the elytra are not slightly bilabiate, nor are their two inner elevated lines abbreviated. A variety found by my brother B. Say, in New Jersey, is much tinted with copper and is smaller, but the shell and form are the same.

I may add as closely allied to the impudita and to the "Salbisburiae ass. web, in point of coloring a specimen which I found in New Jersey, many years since and which I then described under the name of "ultramarina," but the description was mislaid and never published, the specimen is now deprived of its head and thorax the following is a description of what remains of it. Scutel orbiculat disk indented. Elytra blue on the disc, submarg. and subn. green-paling into golden towards the margin and its future, which are brilliant coppery and golden. Basal margin green-golden, surface with seven or eight series of dilated, profound punctures, the center lateral, horizontal lines with each a single series of smaller punctures. No elevated lines. Tip truncated with a slight projection at the inner angle. Beneath green-golden, with a slight coppery tinge, like coppery.

Length of the elytra two-fifths of an inch.

It is more brilliant than either the impudita or "Salbisburiae ass. from the former it is distinguished by being destitute of elevated lines on the elytra and from both by its regular series of large profound punctures.

H. B. "viridicornis" nob. this has been mistaken by an European entomologist for the aquila "viridicornis" B. but it is very different in form, which is much more like that of a true hyperbius, and the color is also different, though that of the head and thorax probably deceived him, being coppery each though much more obscure in our insect. I have taken a variety in this state, differing greatly in color so much so, that it might lead to error unless actually compared.

The color is bright green; thorax on the disk tinged with
coppery, with a common green triangle extending from the humerus to beyond the middle; beneath, the green color, is less brilliant. Another variety has the cupreous color of the thorax confined to the lateral margin, the remainder being of the color of the elytra.

I may add to the specific description that the head has an orbicular indentation between the eyes and a slightly indented line on the vertex; the scutel is altogether destitute of a transverse elevated line, it is convex and widely triangular: the elytra are minutely serrate at tip.

This species has characters in common with Buprestis & Agrilus, and it may perhaps belong to the latter.

**AGRILUS, Megerle.**

1. *A. rufficollis, F.* We may add to the Fabrician characters that the head is profoundly indented on the vertex, the indented line is continued down the front; the elytra are scabrous and at tip, as well as that of the abdomen serrate.

Var. A. Thorax obscure green.
Var. B. Thorax color of the elytra.

The great indentation of the vertex distinguishes this species from others of this country. Herbst’s figure only tends to mislead, if indeed it can be intended for this insect at all. It is too robust, and the thorax is not represented as indented and the elytra are punctured in striae, with large punctures.

3. *A. geminatus, Nob.* A numerous species, the colour of the head and thorax often resembling those of the preceding species, but the acute, arquated, elevated line at the posterior angles, is similar to that of the linearis, *F.* of Austria, which it very much resembles.

3. *A. politus, Nob.* Much like arquatus, but a little more robust and of a brilliant color. Like the other species its elytra are denticulated at tip. Having examined numerous specimens I find that it is not of a larger size than geminatus.
Rest, Contributing:

Aquilon 1 spce 3-12
Zephyr 2 spce
Meteoric 2 spa
Aspharrhion 4 spce
Michael 1 spce
Zane 1 spce


This word was published in: From the series "Philo Soc." Philadelphia, 1835, p. 163 of Vol.

Second, Heoper. [The Janet list has shown] there is no mention of 1-81 in the

J. H. M. E. Getting