ARTICLE XIV.

Descriptions of new North American Insects, and Observations on some already described. By Thomas Say. Read November 2. 1832.

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, cylindric, 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.

A. cylindriformis, Say, (Manticora) Journ. Acad. Nat. Sc. 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 a lobed 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 antennæ. 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

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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.

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.

CICINDELA, Linn.

- I. C. unicolor, Dejean. 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 touch of white on the tip of the elytra.
- 2. C. marginata, Fabr., Syst. Eleut. 1, 241, No. 48. Dejean has described this species under the name of variegata, Sp. Gen. 1, 84—see also vol. 2, 414.
- 3. C. unipunctata, Fabr., varies in having a very small obscure yellowish spot, half way between the ordinary spot and the tip, on the margin.
- 4. C. vulgaris, Say, Trans. Amer. Philos. Soc. 1818. Since described by Dejean under the name of obliquata, Sp. Gen. 1, 72, but corrected vol. 2, Supp. 414.
- 5. C. hirticollis, Say, Trans. Amer. Philos. Soc. 1818. Since described by Dejean with the name of *repanda*, Sp. Gen. 1, 74, but corrected vol. 2, 414.
- 6. 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.
- 7. C. purpurca, Oliv., Ins. 33, pl. 3, f. 34. Say, Trans. Amer. Philos. Soc. 1818, p. 419. C. marginalis, Fabr., 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.

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

9. C. 12-guttata, Dej. 1 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 tibiæ simple.

Natural character—Head large, wider than the thorax, contracted behind at the junction 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 and minute; labium at tip with two equal membranaceous lobes and a lateral robust seta; palpi very small and feeble, terminal joint somewhat shorter and more slender than the preceding one; mentum transverse, simple; destitute of auricles: thorax cylindrical: truncate before and behind; clytra 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 congeners; the simple anterior tibiae 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 Bembidium, Bon.

A. helluonis. 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.

CASNONIA, Latr.

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

SPHERACRA, Say.

Elytra entire; tibiae emarginate; terminal joint of the tarsi profoundly bilobated; nails simple; head as long behind the eyes as before them; thorax subcylindric; antennae much shorter than the body; basal joint much shorter than the head, joints excepting the second not very unequal in length, subcylindric; 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. Inhab. Carolina. Mus. Mr Bosc.

"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.

Odacantha dorsalis, Fabr., Syst. Eleuth. 1, 229.

In my specimen the head only is black, or rather of 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.

1. C. platicollis, Say, (Lebia) Trans. Amer. Philos. Soc. vol. 2, new series.

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 striae 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 striae; lateral margin

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obscure rufous; tip truncate, without any appearance of sinuation: beneath obscure rufous, punctured; feet rufous; thighs and trochanters 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.

3. C. pilosus, Say, Trans. Amer. Philos. Soc. Since described by Dejean, under the name of pubescens, Sp. Gen. 1, p. 215, but corrected in vol. 2, Suppl. p. 446.

CALLEIDA, Dej.

1. C. viridipennis, Say, (Cymindis) Trans. Amer. Philos. Soc.

This species has been since described by Dejean, under the name of marginata, 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 states, but as I have found it myself but once (in the state of Ohio), I should suppose it is rare.
 - 3. C. purpurea, Say, (Cymindis) Trans. Amer. Philos. Soc.
- 4. C. decora, Fabr. Say, (Cymindis) Trans. Amer. Philos. Soc. Dej., Sp. Gen. 1, 224.

LEBIA, Latr., Dej.

- 1. L. ornata, Say, Trans. Amer. Philos. Soc. Since described by Dejean under the name of analis, Spec. Gen. 1, 265, and corrected, 2, Supp. 452.
- 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. fuscata, Dej. varies in having the head nearly black, the tho-

rax yellowish ferruginous, and the elytra paler brown, with the yellowish spots, particularly the terminal, almost obsolete.

BRACHINUS, Weber.

B. stygicornis. Ferruginous; autennae black; elytra blackish blue.—Inhab. Missouri.

Body ferruginous, with short hairs: head with irregular punctures: each side between the antennae, becoming irregular, but slight; lineations near the eyes: antennae 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 quarry, where they were hybernating. It differs from *cyanipennis*, Say, found at the same locality, by the different colour of the antennae, &c.

Can this be the *janus*, or is the *quadripennis*, 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 subequidistant punctures, and the fourth interstitial line has five or six punctures, subequal, excepting the terminal one which is more distant.
- 2. C. quadrimaculata, 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 rufous. The interstitial lines are

altogether destitute of punctures. I have a variety in my collection, of which the elytra are entirely of a rufous colour and even paler than the terminal spots usually appear; these spots are of course not visible.

3. C. viridis, Say, Trans. Amer. Philos. Soc., has been since described by Dejean under the name of rostrata, Sp. Gen. 1, 419, but corrected vol. 2, Supp. 4738.

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

CARABUS, Linn.

- 1. C. vinetus, 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 clevatis tribus," renders this conclusion highly probable.
- 2. C. ligatus, Germar, Sp. Novæ, 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. taedatus, L.?

CALOSOMA, Weber.

- C. luxatum, Say, Jour. Acad. Nat. Sc. 3, 149. Dej., Sp. Gen.
 196.
- 2. C. laeve, 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. ealidum, 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 to 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. Arkansaw, Missouri and the Rocky Mountains. I therefore have ventured to separate it as a distinct species.

NOTHIOPHILUS, Dumer.

1. N. semistriatus, Say. Closely allied to N. aquatieus, F., and biguttatus, F., partaking of the characters of both. Dejean states that it "ne diffère peut-etre pas de l'une des especes d'Europe," but he does not inform us which of the species; indeed they are all so closely

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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. N. 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 clytra 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. Amer. Philos. Soc. This species has been referred to this genus by Dejean; the palpi are not sufficiently securiform 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 confluently punctured; in the middle tinged with bronze; lateral edges dark purplish; antennae 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 striae; interstitial spaces flattened, punc-

tuated, sericeous; rather dull green with a slight violaceous reflection; exterior and apicial 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; antennae at base and feet ferruginous; elytra violaceous.—Inhab. Mexico.

Pubescent; head impunctured, brassy-green, polished; two obsolete indentations between the antennae; labrum transversely narrow, truncated, and with the palpi dull rufo-ferruginous: untennae 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 angulated, almost rounded; elytra bluish violaceous, with punctured striae; interstitial spaces pubescent, depressed, and minutely granulated, heneath blackish; feet rufo-ferruginous.—Length half an inch.

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

5. C. soceatus. 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 antennae, and an obsolete transverse one between the eyes; antennae pubescent, blackish, three basal joints dark piecous; palpi piecous; thorax short; lateral margin regularly arquated; posterior angles rounded; impressed lines dilated; elytra with punctured striae: interstitial spaces minutely granulated, depressed; beneath blackish; fect rufo-ferruginous, joints and tarsi blackish-piecous.—Length nearly half an inch.

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

Of this genus I have sixteen North American described species.

OODES, 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 antennae; antennae reddish brown, three basal joints honey yellow; palpi honey yellow; mandibles piceous; thorax narrowed before, smooth, dorsal line distinct, not extended on the margins; basal lines distinct, oblique; region of the posterior angles a little, but widely, depressed, rufous or sanguineous, and by transmitted light it appears reticulated; impunctured; posterior angles rounded, but not obtusely so; greatest width a little behind the middle; elytra with the striae 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 subquadrate 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 gregarius, 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 show 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 chalybæus, 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. Amer. 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, Bonclli.

- 1. A. decentis, Say, (Feronia) Trans. Amer. Philos. Soc. Has been recently described by Dejean under the name of gagates.
- 2. A. cincticollis, Say, (Feronia) Trans. Amer. Philos. Soc. Since described by Germar under the name of blandus, Sp. Novæ, p. 12, and recently by Dejean by the name of corvinus, Sp. Gen. 3, p. 109.
- 3. A. extensicollis, Say, (Feronia) Trans. Amer. Philos. Soc., is also referred by Dejean to this genus.
- 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; tibiæ and tarsi piceous; thorax subquadrate; elytra with three punctures on the third interstitial line.—Inhab. Indiana.

Body black, polished, glabrous, with a few, rather long, marginal Vol. IV.—5 F

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 rugous; posterior angles very obtuse; anterior and posterior margins subequally broad; elytra with acutely impressed striae, regularly punctured; punctures small, obsolete towards the tip; third interstitial line with three punctures, two at the third stria and the terminal one at the second stria; interstitial lines much depressed; tibiæ, 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. suturale. 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; eoxae piceous.—Length three tenths of an inch.

This is a brilliant species, equalling in this respect the 8-punctatum, Fabr., and errans, Nob. and but little inferior to eupripenne, Nob., all of which, together with nutans, Nob., belonging to this genus, although I referred them to the including genus Feronia, Latr. The eupripenne, Nob., is equal in splendour, though not in magnitude, to the 6-punctatum, Fabr. In comparison with parum punctatum, F., the form is more robust, thorax more brilliant, wider, and is as wide at base as anteriorly; the interstitial spaces also are much more flattened.

2. A. orbieollis. Black; thorax rounded; third interstitial line with three punctures.—Inhab. Mexico.

Body black, polished, impunctured; antennae——, basal joint and palpi piecous; 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; clytra with well impressed striae, which are crenate, not punctured; interstitial lines convex, the third from the suture with three equidistant punctures; feet piecous.—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. punctiforme, Say, but it is a little more elongated, the thoracic lines are much less distinct, &c.

- 3. A. nutans, Say, (Feronia) Trans. Amer. Philos. Soc. Since described by Dejean with the name of striatopunctatum.
- 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. punctiforme, Say, (Feronia) Trans. Amer. Philos. Soc. I have an individual that has four punctures on the third interstitial space, as Dejean describes his albicrus to have.
- 6. A. obsoletum, Say, (Feronia) Trans. Amer. Philos. Soc. Since described by Dejean by the name of luctuosum, Sp. Gen. 3, 172.
- 7. A. limbatum, Say, (Feronia) Trans. Amer. Philos. Soc. Since described by Dejean by the name of palliatum, Sp. Gen. 3, 174.

OLISTHOPUS, Dejean.

- 1. O. parmatus, Say, (Feronia) Trans. Amer. Philos. Soc. Dej. Sp. Gen. 3, p. 181.
- 2. O. cinetus. 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, suborbicular and sparsely punctured; elytra dull reddish brown, with a slight perlaceous 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 parmatus, Say. It is more slender.

FERONIA, Latr., Dej.

POECILUS, Bon.

1. F. convexieollis, Say, resembles F. ehaleites, 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 impunetured; 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 punc-

ture 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 arquated.

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

3. F. obscura. Black; tibiae and tarsi dark rufous; elytral striae obsolete on 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 arquated; elytra striate; the striae not distinctly punctured, obsolete on the lateral submargin, and not so obvious at tip as on the disk; marginal occllated punctures about seventeen; near the tip rather slightly sinuate; third interstitial tripunctured, 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 five or six 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

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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. deparea. Reddish-brown; thorax punctured on the anterior and posterior margins.—Inhab. Mexico.

Body reddish brown, rather pale; head much darker, tinged with blackish, impunctured; antennae 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 William 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 cyancscens; 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.) permunda. Black, with a pearlaceous reflection; third interstitial line three-punctured.—Inhab. Indiana.

Body black; antennae piccous, dull honey-yellow towards the tip, distinctly compressed;—joints, in profile a little narrowed to the base; palpi piccous, not at all securiform, 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 arquated: posterior angles reetangular; 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. parallelus, Duftschm.. or A. metallicus, Fabr.

MOLOPS, Bonelli.

S. F. constricta, Say, Journ. Acad. Nat. Sciences.

STOMIS, Clairv., Dej.

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

Body black, apterous, polished; head impunctured; impressed lines between the antennae very obvious; antennae blackish piecous to the fifth joint, which with the others are dull rufous; first joint hardly as long as the third; labrum a little prominent, piecous, widely but not deeply emarginated before; palpi dull rufous, not very widely truncated at tip; labial not securiform; 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 excurved near the posterior angle; basal lines distinctly indented and dilated: base considerably wider than the peduncle; elytra somewhat depressed, ovateoval; surface composed of very minute granules; striae slender, deeply impressed, impunctured; third interstitial 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 William 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.

P. avidus, Say, (Zabrus) Journ. Acad. Nat. Sc.

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.

- 1. A. musculis, Say, (Feronia) Trans. Amer. Philos. Soc.—Dej. Sp. Gen. 3, 477.
 - 2. A. basillaris, Say, (Feronia) Trans. Amer. Philos. Soc.
- 3. A. impuncticollis, Say, (Feronia) Trans. Amer. Philos. Soc. Dejean thinks it the same as A. trivialis, Duftschm., but I have not yet compared it.
 - 4. A. angustata, Say, (Feronia) Trans. Amer. Philos. Soc.
 - 5. A. ohesa, Say, (Feronia) Trans. Amer. Philos. Soc.
- 6. A. impunctata, Say, (Feronia) Trans. Amer. 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.

7. 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 fuscous, 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 eapillary striae; interstitial lines depressed, hardly convex: fect pieeous black; tibiac and tarsi a little paler.—Length nearly three tenths of an inch.

Resembles A. impuneticollis, 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.

8. A. scra. Greenish black; three basal joints of the antennae yellowish.—Inhab. Mexico.

Antennae fuseous: first, second, third and base of the fourth joints yellowish: thorax impunetured, basal angles reetangular, with the oblique line not deeply impressed: basal lines rather deep, abbreviated, definite, impunetured; dorsal line distinct; clytra with the striae impunetured, 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. impuncticollis, N. The colours of the antennae as strongly contrast, as those of A. vulgaris, F.

9. A. furtiva. Pale; thorax punctured at base; elytra with punetured striae.—Inhab. Indiana.

Body honey-yellow, more or less tinged with dusky: autennae, 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

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

10. A.? grossa. Alternate interstitial spaces punctured.—Inhab. N. W. Territory.

Body short, robust, convex, blackish piceous; head—; 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. Pennsylvanieus, Dej., is a common insect. But it is not confined to Pennyslvania, 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.

P. caliginosus, Fabr. Dejean refers this large species to Pangus, which he makes a division of his genus Selenophorus.

ANISODACTYLUS, Dej.

1. A. dilatatus. Black; thorax transverse quadrate, 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, striae profound, impunctured; interstitial spaces depressed; tip very obtusely sinuous; abdomen, terminal and anal segments above punctured.—Length less than half an inch.

This species is closely allied to the A. caenus, 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 William Bennett, and was presented to me by Mr Maclure.

- 2. A. Baltimoriensis, Say, (Harpalus) Trans. Amer. 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.
- 3. A. rustieus, Say, (Harpalus) Trans. Amer. Philos. Soc.; Dej. Spec.; A. merulus? Germar.
- 4. A. caenus, Say, (Harpalus) Trans. Amer. Philos. Soc.; Dejean Spec.
- 5. A. agricolus, Say, (Harpalus) Trans. Amer. Philos. Soc.; Dej. Spec.

- 6. A. carbonarius, Say, (Harpalus) Trans. Amer. Philos. Soc.
- 7. A. lactus? Dej. An insect is found in this vicinity, which I have referred, but very doubtfully, to the lactus. 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.

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.
- 2. H. viridis, Say, Trans. Amer. Philos. Soc. Subsequently described by Dejean under the name of assimilis.
- 3. H. Mexicanus, Dej. Sp. Gen. This appears to be a common species. Mr Maclure has recently sent me specimens by William 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.
- 5. H. terminatus, Say, (Feronia) Trans. Amer. Philos. Soc. Dejean, Sp. Gen., refers this species to the present genus. The anterior pairs of the tarsi of the male are clothed with dense hairs beneath.
- 6. H. amputatus. Elytra greenish, truncate at tip.—Inhab. N. W. Territory.

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 obsoletely 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. acneus, F., which has the elytra decidedly sinuate at tip, and even abruptly so.

7. H. oereatus. Black green: impunctured: fect pale yellowish.—Inhab. Mexico.

Body very dark green, impunctured; head black, with hardly any appearance of green; antennae 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 honey-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 piccous; tip deeply and rather obtusely sinuous; beneath black. the greenish tinge hardly perceptible; feet yellowish; tursi 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 Amara 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.

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It must resemble closely H. agilis, Dej., of which it may possibly be a variety.

It was obtained by William 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; antennae fuscous, three basal joints and labrum honey-yellow; mandibles piceous, black at tip; thorax rather convex, a little narrowed behind gradually; 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 excurved; 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 striae, less profound towards the margin; rudimental striae 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. ochropezus, 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. partiarius, Say, (Trechus) Trans. Amer. 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. Barabino.

- 2. A. eonjunctus, Say, (Trechus) Trans. Amer. Philos. Soc. Since described by Dejean under the name of misellus.
- 3. A. rupestris, Say, (Treehus) Trans. Amer. Philos. Soc. Since described by Dejean under the name of tantillus.
- 4. A. debilipes. Piceous black; base of the antennae and feet pale yellowish.—Inhab. Indiana.

Body very dark piceous, almost black; head impunctured; between the antennae on each side a dilated very obvious indentation; antennae 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 piccous; rudimental striae none, but instead of it is a puncture at base of the second striae: feet pale yellow.—Length less than three twentieths of an inch.

5. A. obsoletus. Dark piceous; striae of the elytra obsolete.—Inhab. Mexico.

Body dark piceous, impunctured; antennae, labrum and palpi honeyyellow: 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 apicial 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.*

^{*} 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.

BEMBIDIUM, Latr.

- 1. B. maequale, 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.
- 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.
- 4. B. laevigatum, Say, Trans. Amer. Philos. Soc. The basal thoracic lines are much dilated.
- 5. B. coxendix, Say, Journ. Acad. Nat. Sc. 3, 151. Antennae 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. dorsale, 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.
- 7. B. tetracolum, Say, Trans. Amer. Philos. Soc. Allied most closely to Peryphus rupestris, Illig, than which it is somewhat larger.
- 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; antennae 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 clevated 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, quadrate, 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 stria; 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 Peryphus, 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 stria rectilinear.—Inhab. Missouri.

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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. semifasciatum. Greenish black; elytra each with four spots; third interstitial space two-punctured.—Inhab. Mexico.

Head metallic green; two impressed lines between the antennae very distinct; antennae 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 honeyyellow 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 pro-

bably belongs to Lopha. The sutural stria is impressed from the middle of the tip. It is somewhat bronzed.

13. B. ephippiatum. Pale testaceous; elytra with punctured striae and a large common blackish spot.—Inhab. Indiana.

Body pale testaceous or honey-yellow; antennae paler than the head, a little darker towards the tip; palpi colour of the antennae; 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 *proximum*, 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, divaricating 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 honeyyellow; 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 the 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, divaricating 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 William Bennett in the river beyond Vera Cruz, and, together with the two following, presented to me by Mr William 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.

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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.

COLYMBETES, Claire.

- 1. C. tacniolis, 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; antennae and palpi 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 Vcra Cruz.

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

3. C. fenestralis, Say, Trans. Amer. Philos. Soc. Since described by Germar under the name of biguttulus, Sp. Insect., p. 29.

4. C. interrogatus, Fabr. Syst. Elent. 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, Say.

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; posterior feet natatory, 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 sentel and the emargination of the palpi is confined to the labial. The name is derived from the words copto I cut, and tome joint or articulation, in allusion to the form of the palpi.

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; clytra 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 William Bennett, and presented to me by Mr William Maclure. It cannot be the Dytiscus circumscriptus, Germ., which is "breviter ovali."

LACCOPHILUS, Leach.

L. maculosus, Say, Trans. Amer. Philos. Soc. Since described, by Germar, also under the name of maculosus, Sp. Gen., p. 30.

HYPHIDRUS, Latr.

H. punctatus, Say, (Laccophilus) Journal of the Acad. Nat. Sc.

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, impressed, subsutural stria, and about two other hardly obvious ones near the middle; bifid yellowish lines at base near the tip; feet dark honey-yellow.—Length less than one fifth of an inch.

This species and the two following were taken by William 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; striae 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

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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 honeyyellow; beneath black; pectus, fect 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 William Bennett, and presented to me by Mr William 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 obsoletely 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. Amer. Philos. Soc. vol. 2, new series. The genus is allied to Noterus. Latr., but the labial palpi are much more dilated, and have no appearance of emargination.

GYRINUS. Linn.

- 1. G. emarginatus, Say, Trans. Amer. Philos. Soc. 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 anterior lateral, posterior lateral and medial impressed lines very distinct; etytra 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.

4. G. parcus. Black; feet honey-yellow.—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 semioval 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 elypeus 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; clytra 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 *latieollis*, 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 testacci," but in my specimens the tibiae and tarsi are piceous. He says "coleoptera depilia." but my specimens certainly have prostrate hairs on the clytra 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 *laetulus*. Fam. 1st.

5. S. inversus. Black; dorsal thoracic punctures three.—Inhab. Indiana.

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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; terugm 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 termination. Fam. 1st.

6. S. dimidiatus. Blackish; elytra and margins of abdominal segments reddish brown; feet pale.—Inhab. United States.

Body piceous black; head oval black, with two punctures between the eyes, two punctures on the posterior canthus 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. taehiniformis. 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; antennae 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. apicialis. Black; terminal joint of the antennae and abdomen towards the tip, rufous.—Inhab. United States.

Body black, polished, punctured; head with numerous punctures, smooth in the middle; antennae with the terminal joint yellowish-rufous; mandibles piecous; palpi with the terminal joint rather long. slender, piecous; thorax with numerous not crowded punctures, with a longitudinal, dilated, glabrous line; scutel, punctures minute, dense; elytra with a subsutural line and numerous small punctures furnishing hairs; abdomen towards the tip dull rufous; feet piecous-black.—Length nearly two fifths of an inch. Fam. 3d.

- 9. S. eyanipennis, 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 Gravenhorst 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 Knoch, 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 laevi" 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 Astrapaeus, 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 Astrapaeus, 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; antennae 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 five or six 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 honeyyellow, irregularly not profoundly punctured; pectus rufous; feet honeyyellow; abdomen piceous black.—Length one fourth of an inch.

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

3. X. hamatus. Piceous; antennae, elytra and feet yellowish.—Inhab. United States.

Head piceous-black, ovate, with sparse, profound punctures, wanting on the longitudinal middle and immediately in a line behind the eye; antennae 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. similipenne. Black; members rufous or yellowish.—Inhab. Mexico.

Body black, polished, hairy, densely punctured; antennae reddish brown, first 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; antennae piceous; first joint obconic, not longer than the second and third together, which are equal; 4-10 joints moniliform; last joint ovate acute; palpi pale piceous; terminal joint minute, that of the labial longer; thorax oblong-quadrate; angles rounded; glabrous line none; elytra black piceous, punctures not

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deeply impressed; sutural stria distinct; feet rufous; thighs robust, particularly the anterior, 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, first 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; antennae 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 subglobular; labrum very short at tip punctured and setous, emarginate in the middle; mandibles piceous, prominent, strongly dentate in the middle; palpi, maxillary prominent, pale piceous, terminal joint conic acute, as large at base as the preceding joint, labial 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 rufo-ferruginous posterior margins .- Length less than two fifths of an inch.

Found near Engineer 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. United States.

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; clytra 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 clytra confined to the basal margin and sometimes obsolete.

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

6. L. sphaericolle. Blackish; thorax orbicular, convex; antennae long.—Inhab. Indiana.

Body black piceous; head with the carina of the antennae a little elevated, abrupt before; antennae much thicker towards the tip. rather longer than to the base of the thorax, first joint hardly longer than the second and third together; fuscous, three basal joints honey-yellow, fourth and terminal joints obscure honey-yellow; larger joints hardly longer than broad; mandibles bifid at tip, and with the palpi piecous; neck distinct; thorax nearly orbicular, a little wider before the middle and narrower behind; convex, with sparse black hairs; elytra with scattered, upright hairs; subsutural stria deeply indented, particularly towards the base; tip truncate not sinuate; taken together, transverse quadrate; 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 thorax, black piceous, quadrate, almost lobed at the posterior angles; antennae 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 margins 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. United States.

Body piceous; head with close set, discoidal punctures; large, ovate or subquadrate; tips of the carinae of the antennae, base of the antennae and palpi paler; palpi with the terminal joint very small; antennae 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 honeyyellow.—Length less than three twentieths of an inch.

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

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.

PAEDERUS, Fabr.

1. P. discopunctatus. Yellowish; abdomen black at tip.—Inhab. United States.

Body elongated, dull honey-yellow, punctured; head with close set. discoidal punctures; subquadrate, obtuse before; antennae 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. cinetus. Black; tips of the elytra obscure rufous.—Inhab. United States.

Body elongated, black with a slight tinge of piceous, and with discoidal punctures; head obtuse before; antennae 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. United States.

Body piceous black; head longitudinally wrinkled; antennae and palpi piceous; labrum large, bidentate in the middle. piceous, rounded each side; thorax smaller than the head, longitudinally wrinkled, convex, with a longitudinal, glabrous line; elytra with numerous, minute, hairy punctures; a subsutural impressed line; posterior margin dull

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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. orbieulatus, Payk., and the wrinkles of the head and thorax are larger and more obvious.

STENUS, Latr.

1. S. geniculatus. Black; antennae and feet whitish.—Inhab. United States.

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; antennae 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 fuseipes, Grav., but it is much larger, with pale feet, &c:

2. S. eolon. Black; elytra with a rufous dot; feet pale beneath.—Inhab. Indiana.

Body black, with large, dense, not very profound punctures; *clytra* with the punctures towards the suture longitudinally confluent; a sublunate or triangular, dull rufous spot rather behind the middle of each elytrum; *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.

3. S. stygieus. Grayish black, immaculate.—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 scutel indented; tergum of a more unmixed black than the anterior part of the body; feet immaculate.—Length nearly three twentieths of an inch.

Resembles bupthalmus, Schr., but may be distinguisued by the more obvious indentations of the head.

4. S. femoratus. Grayish black; thighs rufous.—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 seutel 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. inequal.—Inhab. Missouri.

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 piccous.—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 antennae are not so remarkably larger than the others.

OXYPORUS. Fabr.

O. stygieus. Black; tarsi rufous.—Inhab. Indiana.

Body black, polished; antennae 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; feel blackish piceous; tarsi pale rufous.—Length three tenths of an inch.

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

OXYTELUS, Grav.

1. O. sculptus. Blackish; five lined; elytra rufous; feet pale.—Inhab. Pennsylvania.

Body piceous-black, punctured; head indented, with numerous, small punctures above; mouth piceous; antennae fuscous, 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 subsutural 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 piceus, 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-rufo." These differences of character, indicate a difference of species.—It is the Aleochara sculpta of Melsheimer's Catalogue.

2. O. rugulosus. Black; longitudinally 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 honeyyellow at base; *palpi* dull honeyyellow; *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 carinutus 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 piecous: antennae pale, towards the tip brownish; thorax, angles almost rounded: elytra yellowish white, with a common fuliginous disk; fect 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 erowded punctures; two longitudinal indentations between the antennae: antennae, 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

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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 attenuate to the tip; antennae 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 artificiales (Coleopt. Micropt., p. 134) datos respiceremus. Habitu autem toto, et, exceptis ultimis palporum articulis, partibus etiam singulis cum Oxytelis hujus familiae plane congruit. Certo systematis naturalis nullam haberemus rationem, cum hoc micropteron Tachinis adjungeremus. Oxytelus autem, sicut huc usque determinati erant, ob characteres per systema artificiale constitutos, haud adsociari potest. Eodem ergo jure, quo Astrapaei genus olim a Staphylino disjungebatur, quibus attamen simillimum est, hoc etiam insectum genus novum, ab Oxytelis separatum, conderet, nisi regula systematis naturalis, i. e. character totus externus scu 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 unequal; antennae 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 dorsal impressed line; posterior or rather lateral triangular yellow spot, and on the lateral margin of each segment; thighs testaceous; tibiae and 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. marginatum. Piceous, punctured; antennae and 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 and a longitudinal impressed line each side at base; antennae rufous at base, red brown obscure at tip with cinereous hair; palpi rufous; thorax transverse subquadrate, punctures not crowded; posterior edge obscurely piceous; elytra longitudinally quadrate, 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 striae: feet piceous, paler towards the tip; tergum obscurely rufous on the margin, and 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 and profound punctures; antennae piceous, brown, the three basal joints, labrum and palpi honeyyellow; 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 the posterior margins of the segments; fect 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. Very closely allied to atricapillus, and cinetus, Grav.
- 2. T. obsoletus. Black; thorax, curve on the elytra, segment margins and 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 and 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 Chinquotege Island.

3. T. trimaculatus. Yellowish; head and three elytral spots blackish; tergum rufous.—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; seutel piceous; elytra, with a few remote punctures on the basal half, and 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, and thence by a narrow and 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 sanguineous; 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, and feet yellowish.—Inhab. Indiana.

Body black; mouth yellowish; palpi pale yellow; antennac fuscous. three basal joints yellowish; fourth joint piceous; thorax posterior margin, and lateral margin dilating towards the posterior angles, honey-yellow; scutel piceous; elytra with an appearance of striae at tip; a sutural impressed stria, near which is a series of distant punctures, and another near the middle and a submarginal one; pale yellowish, a dilated oval blued black spot extends from before the middle to the tip. does not attain to the suture and is confluent with a blackish marginal line, which does not reach the humerus; tergum, segments on their posterior margins, obscure piceous; fect 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 and posterior margins of the abdominal segments, rufous.—Inhab. Indiana.

Body black; antennae brownish, base and 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, and the elytra are immaculate.

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TACHYPORUS, Grav.

1. T. fumipennis. Black; margin of the thorax and 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; scutcl black; elytra fuliginous, a wide part of the base and 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 and clytra margined with dull yellowish obscure.—Inhab. United States.

Body blackish piceous, somewhat sericeous; mouth and antennae dull yellowish; the latter pale brownish towards the middle; palpi, penultimate joint thick; last joint much shorter and acicular; thorux dilated, convex, lateral and basal margins dull yellowish; elytra, basal and 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 and elytra are sometimes almost obsolete.

3. T. jocosus. Black; thorax, elytra, feet and mouth yellowish.—Inhab. Indiana.

Head black piceous, polished, convex, impunctured; antennae honey-yellow (six ultimate joints wanting in the specimen); palpi honey-yellow, terminal joint acicular; thorax polished, impunctured, yellowish: anterior and posterior margins blackish; scutet blackish; elytra yellowish, with very fine, prostrate hairs; region of the scutet blackish; tergum, posterior margins of the segments yellowish; longer than the elytra (in the preserved state); fect pale yellow.—Length one tenth of an inch.

4. T. ventriculus. Black; thorax each side and elytral margin piceous.—Inhab. Pennsylvania.

Body black, with a slight piceous tinge, polished; antennae dull

yellowish, dusky towards the tip; mouth dull yellowish; palpa filiform; thorax piceous on the lateral margin, gradually shading to the general blackish colour; elytra on the lateral margin and 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 erussus, Grav.. as his description does not indicate it.

5. T. opicus. Blackish; feet, base of the thorax and of the clytra obscure reddish brown.—Inhab. Missouri.

Body deep black brown, somewhat sericeous; head black; antennae at base and tip pale reddish brown; palpi pale reddish brown: thorax convex; a narrow, obscure, red brown posterier 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. acaudus. Abbreviated; honey-yellowish; thorax paler each side.—Inhab. Indiana.

Body honey-yellow, polished; head black piecous; antennae fuscous. four basal joints obscure yellowish; palpi yellowish, last joint acicular: thorax honey-yellowish, more dusky on the disk and at base. and paler, somewhat translucent on the lateral margin; clytra 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 *jocosus*, N.. but is wider in proportion to its length, without taking into consideration the extraordinary brevity of the abdomen.

7. T. faber. Thorax and 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 and base near the scutel a little dusky; region of the scutel somewhat indented; tergum wider and more depressed than in most species, paler towards the tip; beneath reddish brown; fect yellowish; tibiae a little spinous.—Length about one twelfth of an inch.

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

Much reform seems requisite in this and the preceding genera.

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

ALEOCHARA, Grav.

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

Body black; head opaque; labrum piceous; thorax orbicular, truncated before for the reception of the head, opaque; elytra ferruginous, length hardly exceeding the breadth; scutcl black, opaque; 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 and feet dull rufous.—Inhab. Pennsylvania.

Body piceous black, obviously punctured; head black, with numerous punctures, sparse in front and more dense behind; before the antennae triangularly earinate, dull piceous; antennae dark reddish brown, three basal joints honey-yellow; mouth dull honey-yellow; thorax with very numerous punctures, rather larger towards the base and 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.

4. A. fasciata. Yellow; head, band of the elytra and 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; antennae at base pale yellow; thorax sparsely and 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 Melsh. Catal.

5. A. indentata. Yellowish; head, thoracic disk, elytral spot and middle of the tergum, black.—Inhab. Pennsylvania.

Head not obviously punctured; eyes not remarkably large or prominent; antennae reddish brown, pale at base; mouth honeyyellow; thorax dull yellowish, dusky in the middle; a longitudinal impressed line, and an indentation on the middle of the base; elytra with small, numerous punctures; yellowish with the sutural edge and 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; postpeetus and middle of the venter black; feet whitish.—Length one fifteenth of an inch.

Var. a. Thorax with the dusky disk obsolete.

Resembles the diehroa, Grav., in having the indentation on the Vol. IV.—5 S

middle of the base, but it differs in many respects, and obviously in colouring.

6. A. 4-punctata. Thorax rufous, with four punctures placed

transversely.—Inhab. Missouri and Indiana.

Head piceous black, with one puncture on the inner orbit, and 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 and in the region of the scutel; tergum black; feet pale piceous.—Length over or about one tenth of an inch.

The depression, almost or quite amounting to an indentation at the 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 ou the basal half; abdomen black; feet pale piceous.