DESCRIPTIONS

OF

NEW SPECIES OF NORTH AMERICAN

INSECTS,

FGUND IN LOUISIANA BY JOSEPH BARABINO.

BY

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MARCH 183).

INDIANA.

Printed at the School Press, New-Marmony.

COLEOPTERA.

CHLENIUS, Bonelli.

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: antennæ reddish brown, three basal joints pale yellow with rufous incisures: labrum and mandibles honey-yellow, the latter black at tip: palpi yellow; terminal joints honey yellow: therax 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 arguated, 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 striæ; interstitial spaces flattened, punctured, sericeous; rather dull green with a slight violaccous 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.

oodes, Bonelli.

O? purallelus, black; thoracic angles rufous; feet piccous.

Inhab. Louisiana.

Body black, very slightly tinged with piceous: head with but a slightly impressed point between the antennæ: antenna reddish brown, three basal joints honey yellow: pulpi 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 strice continued parallel to the tip, well impressed, minutely punctured; interstitial spaces depressed, third with a single slight puncture on its posterior fifth from the base: beneath black: posterior angles of the pectus, epipleura and fect piceous: unterior tursi 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 clytra are hardly perceptibly sinuous near the tip.

The specimen is a doubtful congener of the O. helopoides, Fabr. than which the body is somewhat more clougated, the thorax is more gradually narrowed before. It has at first sight more the appearance of the Harpalus terminatus or Calathus gregarious, Say. The intermediate tarsi are somewhat dilated, the anterior tarsi are not widely dilated

and the terminal joint is as large as the preceding one. I place it in this genus provisionally, more specimens may shew this arrangement to be incorrect. 'The parallelism of the striæ of the elytra to their termination is a remarkable character, even more obvious than in the helopoides.

DYTISCUS.

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 antennæ yellowish: thorax honey yellow; posterior margin black, which is more dilated on the middle half: clytra 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 piecous black: pectus and anterior feet yellowish; terminal joints of the tarsi piecous: posterior pairs of feet piecous; intermediate thighs dull yellow: venter each side with obsolete piecous spots.

Length less than half an inch.

NOTERUS, Latr.

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

Head and thorax honey yellow: eyes black: palpi not deeply emarginate: elytra black, punctured; at tip obso-

letely piceous, very obliquely and slightly truncate; acute: beneath honey yellow, or piceous.

Length one-tenth of an inch.

CUPES, Fabr.

C. cinerea, Brownish-cinereous; elytra with fuscous spots and undulations.

Inhabits Indiana, Ohio and Louisiana.

Body pale brownish-cinereous: head on each side above the eyes with a series of three tubercles, of which the posterior one is convex, the middle one is most prominent and acute, and the anterior one is at the superior base of the antennæ: eyes prominent, black, polished; antennæ nearly as long as the body, robust: thorax with a carinate line on the middle, widely impressed each side, and with four indentations on the anterior margin; anterior angles emarginate: elytra with elevated lines and intervening series of large regular punctures, several abbreviated dark reddish brown lines and spots which form about three undulated bands, of which one is near the base, one on the middle and one near the tip: venter paler, somewhat testaceous.

Length over seven-twentieths of an inch

This is the second species, of this rare genus, that has been yet discovered; I obtained numerous specimens, in the vicinity of New-Harmony, Indiana, and one near Springfield, Ohio; and the specimen from Mr. Barabino proves that it inhabits a considerable portion of the Union. The species is widely different from the *capitata*, which I have not yet found in this region.

HYDROPHILUS, Fabr.

H. castus, Oblong-oval, black; palpi rufous; thorax with an oblique line each side before.

Inhab. Louisiana.

Body black polished: head with a dilated hardly impressed oblique line each side before, in which are scattered punctures with short hairs; another narrower impressed line nearer the eye: antennæ, first joint of the club with an acute, ciliated process; second joint triangular, small, the interior angle prominent, acute; terminal joint subovate, rounded at tip: palpi rufous, last joint hardly as long as the preceding one: labrum slightly and very widely emarginate, the anterior edge piceous, and about two small punctures on the middle: thorax with a rather slender arquated line each side before, and laterally with a few scattered slightly impressed punctures: scutel rather large: clytra with four striae of impressed punctures and an approximate marginal one: feet, excepting the base of the thighs piceous.

Length nearly three fifths of an inch.

The whole surface is covered with very minute, crouded punctures, not at all visible without a pretty good lens.

TROX, Fabr.

1. T. alternatus, Elytra with cinereous, elevated lines, interrupted by black spots.

Inhab. U.S.

Body black, or black slightly tinged with brown: head bituberculate: thorax with obtuse, elevated, interrupted lines, irregularly punctured; posterior angles obtusely dentate: scutel, posterior margin cinereous: clytra striate with dilated punctures; alternate interstitial lines more elevated, cinereous, interrupted by black spots.

Length over half an inch.

This species is readily known by the cinereous and black alternation of the more elevated interstitial spaces. A variety occurs of which the elytral punctures are much less dilated, and the thorax is less deeply sculptured. I have found the species in Pennsylvania; Nuttall obtained it in Arkansaw and Mr. Barabino sent me an individual taken near New Orleans.

A lable attached to a specimen in my cabinet, states that it cannot be the *ercnutus*. Oliv., with which I am now unacquainted.

TENEBRIO, L. Latr.

T. rufinasus. Suboval, black; head before, antenna and feet ferruginous.

Inhab. Louisiana.

Body oval a little oblong; densely punctured: head on the anterior part obscure rufous: antenna obscure feruginous, joints transverse, subtriangular or conic: pulpi and mentum ferruginous: thorax regularly punctured; basal edge undulated; basal angles rectangular: scutch densely punctured: thytra with regular series of punctures; interstitial spaces slightly convex, particularly the lateral ones, and with three or four irregular series of small punctures: beneath ferruginous, punctured.

Length over one-fifth of an inch.

GEDEMERA, Oliv.

CE. apicialis, Pale reddish-brown, elytra black at tip and with four elevated lines.

Inhab. U.S.

Body rufo-testaceous, densely punctured: eyes obviously emarginate: mandibles black at tip: thorax dilated each side before the middle, narrower behind: elytra with four narrow, slightly elevated lines, on each side of which is a series of more obvious punctures, third line obsolete before the middle; tip black: postpectus, abdomen and feet black, a little sericeous: wings blackish.

Length about half an inch.

I have found it in Pennsylvania and other parts of the Union, the same as this from Mr. Barabino.

ACANTHOCINUS, Meg.

A. quadrigibbus, Antennæ annulate; thorax four tubereled; elytra with a cinereous spot on each.

Inhab. Louisiana.

Body dark brownish, when closely examined, varied with ferruginous and cinereous, short, prostrate hairs: antennæ hardly longer than the body, blackish, the joints, excepting the basal ones, reddish cinereous at their bases; basal joint clavate: head before remotely punctured; be-

hind the eyes small numerous punctures: labrum dull honey-yellow: thorax with distant punctures; four tubercles nearly in a transverse line, and a longitudinal elevated
line: elytra quadrigibbous at base; inner gibbosity extended into a longitudinal elevated line, gradually declining
and terminating before the tip; numerous, distant, profound punctures; a dilated, undulated, cinereous spot before the middle; a sutural series of alternate, quadrate,
small brown and cinereous spots, nearly opposite; tip
emarginate: thighs clavate.

Length less than three-fifths of an inch.

ALTICA, Geof.

1. A. mellicollis, Head black; thorax yellowish; elytra blue.

Inhab. Louisiana.

Head blue-black, with rather large punctures each side, between the antennæ convex, dark piceous; antennæ black brown, three basal joints honey-yellow beneath: palpi black: thorax pale honey-yellow, punctures not obvious; scutcl impunctured: elytra with numerous, small, distant punctures, not profound, dark violaceous-blue: pectus yellowish: postpectus blackish: venter blackish, last segment dull yellow: thighs honey-yellow; tibiæ black, yellowish at base: tarsi black.

Length nearly one-fifth of an inch.

Related to collaris Illig. and collata Fabr., particularly the latter, from which it may be distinguished by its blue clytra, and immaculate face.

scymnus, Herbst.

S. terminatus, Black; clytra at tip yellowish. Inhab. Louisiana.

Body black, polished, punctured: head honey-yellow; antennæ, club not much dilated, with numerous short hairs: thorax with numerous short hairs; lateral margin honey-yellow: scutel acute behind: clytra at tip yellowish: beneath piceous black: pectus, feet and venter behind honey-yellow.

Length about two-twentieths of an inch.

HEMIPTERA.

PENTATOMA, Oliv. Latr.

P. maculiventris, Hemelytra with a line at tip; venter with five series of black points.

Inhab. U. S.

Body yellowish or pale brownish, with dense, rather large punctures: thorax acutely angulated each side behind the middle; edge granulated before the middle: hemelytra having an abbreviated fuscous line at tip of the membranous portion: ditenine, first joint short; 2d longer than the third: tergum on the lateral margin with a blackish dot on each incisure: beneath yellowish: feel immaculate; thighs sometimes having numerous minute blackish points; anterior tibiae with an obvious spine over the slight emargination: venter with five obvious series of small black dots.

Length less than two-fifths of an inch.

This is a common insect in many parts of the Union. The anterior central angle of the venter is produced between the bases of the posterior feet as in Acanthosoma of Curtis; but it does not agree with that genus in the more essential characters of the antennæ and tarsi.

BELOSTOMA, Latr.

B. fluminea, Fuscous; head, before the eyes attenuated; feet spotted.

Inhab. U. S.

Body rather long ovate, fuscous: head rapidly tapering from the anterior canthus of the eyes to the tip, forming in that part an equilateral triangle, of which the tip is obtuse, but less than one fourth the breadth of the space between the eyes; the anterior lobe or nasus hardly reaches the line between the anterior canthi of the eyes: thorax a little emarginate before, and less obviously so on each side; posterior to the transverse suture and a narrow lateral margin, paler: tibiæ and tarsi each with three black spots or interrupted annulations.

Length from seven-tenths to four-fifths of an inch.

This species is no doubt related to B. rustica, Fabr., but he describes the thorax of that species as being white before. Like that species the female carries her eggs on her back. Stoll's figure of the rustica represents it of a short ovate form. I purchased a specimen taken at New-Haven, one was sent to me from Georgia by Mr. Oemler

of Savannah and it is found in Pennsylvania and in Indiana and Louisiana. It has an extensive range.

As the larger North American species does not appear to have been noticed, I will add a description of it.

B. grisea, Oblong-oval; head before the eyes very short not attenuated; beneath with three blackish vittæ.

Inhab. U. S.

Body oblong-suboval, slightly wider behind the middle, grayish-brown varied with fuscous or blackish, particularly on each side of the disks of the thorax and scutel: head between the eyes hardly tapering from the base to the tip; from the anterior canthus of the eyes to the tip shorter than broad, not narrowed: thorax, lateral edge rectilinear: pectus and postpectus yellow, with three broad black vittæ, which become more dilated, brown and less obvious on the abdomen: feet obsoletely subannulate.

Length two inches and one fifth; greatest breadth less than nine-tenths of an inch.

Occurs in many parts of the Union. I received a specimen many years since, from Dr. F. V. Melsheimer labeled Nepa grisca, which name I retain. It differs from the preceding in magnitude, in the form of the anterior part of the head, &c. It is much like the B. grandis, Linn. but is hardly half as large, and if Stoll's figure of that insect has any pretensions to accuracy, it is in other respects quite distinct. In that figure the greatest breadth is at the base of the elytra, &c.

It inhabits from Canada to Florida.

corixia, Geoff. Latr.

C. calva, Thorax eight or nine lined; lines of the hemelytra subequal.

Inhab. U. S.

Body above glabrous, polished, pale yellowish, with transverse, black lines: head immaculate, the posterior angle distinct: thorax with eight or nine black, transverse lines: hemelytra with numerous, undulated or angulated black transverse lines more or less bifid and inosculated; those of the anterior inner portion not larger than the others; lateral groove and all beneath yellowish-white.

Length less than one-fifth of an inch.

Quite distinct from the interrupta and alternata, Nob. which are both minutely rugulous.

HYMENOPTERA.

FORMICA.

1st cubital cellule without recurrent nervure.

1. F. mellea. Honey-yellow; scale truncate. Inhab. Louisiana.

Body entirely honey-yellow: eyes rather prominent, black, short oval: wings very slightly tinted with yellow; nervures yellow: scale robust, broad, truncate, and having a slight tubercle each side before, less than half the height of the abdomen and not higher than the length of its base.

Length nine-twentieths of an inch. (Male.)

The small discoidal cellule, so distinct in the wing of F. rufa, F., does not exist in this species.

POLISTES, Latr.

1. P. metrica, Ferruginous; abdomen black; wings dark violaceous.

Inhab. U. S.

Body ferruginous: antennæ fuscous; Ist and 2d joints ferruginous beneath; 5 or 6 last joints fulvous beneath: hypostoma with a few distant yellow short hairs; not sericeous; at the middle of the tip a little prominent: thorax with a black dorsal line abbreviated behind, each side of which is an obsolete line confluent behind, exterior to which at base is a black line attenuated before and abbreviated: wings dark violaceous: feet black; tibiæ within, excepting the posterior pair, knees and tarsi yellowish: abdomen black; first segment obsoletely piceous each side and on the posterior edge; second segment also with obscure ferruginous on the side, sometimes obsolete.

Length over four-fifths of an inch.

Resembles the annularis, Fabr. but the ferruginous colour is more prevalent; the hypostoma is not sericeous, and a little more prominent in the middle; the basal abdominal segment is somewhat larger and destitute of the annulation.

I have obtained it abundantly in Indiana and Mr. Barabino sent it to me from New-Orleans.

ANTHOPHORA, Latr.

A. frontata, Thorax with yellowish hair; hypostoma basal joint of the antennæ beneath and spot at base and near the tip of the mandibles, yellow.

Inhab. Louisiana.

[Male.] Body black: hypostoma yellow and with yellow hair: antenna with the inferior longitudinal half of the basal joint yellow and with dense yellow hair: nasus yellow, with yellow hair: labrum black, covered by the hair of the nasus: mundibles with a yellow oval spot at base and a slender obsolete one near the tip: maxillæ with an obsolete yellowish spot before the palpi: palpi with a few rigid hairs; terminal joint one-third the length of the preceding joint: *longue* ferruginous: *rertex* in the middle having a few yellow hairs: thorax with dense, long, yellow hair: wing scale black: wings with a slight dusky tint; nervures black, exterior recurrent nervure entering the outer cubital cellule directly opposite to the outer nervure of the cellule: tergum hairy: hairs black. rather long; a few yellow hairs towards the middle of the first segment: anterior feet with yellow hair on the posterior edge: hind feet, hairs not much elongated.

Length half an inch.

Differs from the *abrupta* Nob. in being less robust, the hair of the thorax being pale yellow, and the mandibles having a white spot near their tips.

MEGATCHILE, Latr.

M. policaris [Female.] Anterior tarsi dilated, deeply ciliated, appendage rather long; spines of the anterior coxe yellow.

Inhab. Louisiana.

Body not very hairy, black: wings with a slight fuliginous tint, particularly at tip: tergum oblong subquadrate: anal segment with a sinus in the tip, each side of which are small inequalities of the edge: anterior feet, coxæ with prominent yellow spines, rufous on the exterior tip; thighs yellow, black at tip and base; tibia: black, yellow within and at tip, on the posterior tip a very short, acute spine; tarsi much dilated and deeply ciliated behind, yellow white, covered in their greatest part by a yellow broad scale, which is honey yellow at tip; nails honey yellow: intermediate tarsi cordate, the lobes of one side more prominent.

Length eleven-twentieths of an ineli.

It differs in many respects from the M. latimanus, Nob. (Western Quarterly Reporter) which has the spines of the anterior coxe black; the appendage of the anterior tarsi shorter &c. but it is perfectly congeneric with it, as well as with Anthophora lagopoda, Fabr., if I may judge by the similarity of the anterior feet, though it certainly approaches Steles in the paucity of the ventral hair. The maxillary palpi of latimanus have the second joint rather longer than the first.

XYLOCOPA, Latr.

X. carolina, Fabr. This species was referred by Fabricius to the genus Centris and is even now generally considered as belonging to that genus. But doubting the accuracy of that arrangement, I found on examination, that the labial palpi are rectilinear, the terminal joints being in a right line with the others and the maxillary palpi are six-jointed. The mandibles have only one large tooth, which is on the inner side. The circumstance of Fabricius referring to Drury's fig. 1, pl. 43, of Vol. 1 for nombus virgineus, Linn. leads me to suppose that he had this species also in view in that description. But as that description in the Syst. Piez. p. 346, agrees very well with one of our largest and finest species of Bombus, rather than introduce a new name, I would transfer the quotation of Drury's figure to the description of X. carolina, (Centris) F. &c.

I add the following description of it, which I formerly drew out, with the name of valida, under the belief that the carolina is really a Centris and therefore altogether different.

Blackish; a prominent, compressed, obtuse tubercle between the antennæ; thorax hairy.

Inhab. U.S.

[Female.] Body black, tinged with purplish: head with close set, discoidal punctures; an obvious, compressed tubercle between the antennæ, rounded at its tip: labrum conic: thorax tinged with greenish; with pale yellow

hair, except on the middle: wings fuliginous, sub-opake at tip: tergum tinted with very obscure green; basal joint covered with pale yellow hairs: pleura beneath the wing, with yellow hairs.

Length about four-fifths of an inch.

[Male.] Nasus white. The tubercle of the head is very distinct. Common in this Union.

The male may be distinguished by their larger and more approximate eyes and white nasus. It varies in having the hair of the thorax and of the first abdominal segment, almost ferruginous.

DIPTERA.

TRYPETA, Meig.

T. trifasciata, Green; wings with three bands. Inhab. Louisiana.

Body brassy-green, polished: vertex greenish: front pale ferruginous, pruinose: antennæ: hypostoma dark fivid, pruinose: mouth pale ferruginous: stethidium entirely brassy-greenish: wings yellow-white, a blackish band on the middle obsolete at the thinner margin, and not including the smaller transverse nervure, but a little anterior to it; a broader and not quite parallel band midway to the tip, including the larger transverse nervure and an equally broad band at tip not arquated: tergum purplish towards the tip: poisers pale vellowish: feet pale honey-yellow.

Length less than one-fifth of an inch.