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Descriptions of new species of
Lurculionites [sic.] of North America, &c.

1831.



18 NOV 1929
PURCHASED

DESCRIPTIONS

OF NEW SPECIES

OF

CURCULIONITES

OF

NORTH AMERICA,

WITH OBSERVATIONS

ON

SOME OF THE SPECIES ALREADY KNOWN.

BY

THOMAS SAY. A

NEW-HARMONY, INDIANA.

JULY, 1831.



Descriptions of north American Curculionides & an arrangement of some of our known species agreeably to the method of Schoenherr. July 1831.*

BRUCHUS, Fabr.

1, B. *4-maculatus*, F. Oliv.—Fabricius says it inhabits the island of Santa Cruz, & Olivier says it is from Carolina. The only individual I have seen was found by Mr. Barabino at Neworleans.

Olivier gives its length at three twentieths of an inch. The present specimen is considerably over one tenth, but is less than three twentieths.

2, B. *obtectus*, Dusky; base & tip of the antennæ feet & abdomen obscure rufous.

Inhab. Louisiana.

Body above blackish; with prostrate, somewhat dense, dull yellowish hairs: *antennae* gradually thicker to the tip basal half & terminal joint dull rufous, second joint nearly as long as the third: *thorax* with numerous, distant punctures; *elytra* immaculate, the striæ distinct; apical margin obsoletely rufous; *beneath* black, with prostrate hair; feet dull rufous; posterior thighs somewhat dilated, beneath blackish with a tooth near the tip & about too small ones nearer the tip; *abdomen* dull rufous, immaculate.

Length less than three twentieths of an inch.

3. B. *triangularis*, Black; *elytra* with a triangular band, in which is a black spot each side.

Inhab. Mexico.

Body black: *antennae* rufous at base: *thorax* transverse: *elytra* with slender, deep, punctured striae; a common, large triangular white band, connected along the suture with the white scutel & attenuating to the lateral edge; in the middle on each side of the suture is a black dot; posterior *thighs* with a spine, beyond which are two smaller spines.

Length nearly three twentieths of an inch.

*I am greatly indebted to this distinguished naturalist for his able work the "Dispositio Methodica Curculionidum" as well as for a knowledge of several unpublished genera of this family; my thanks are also due to Germar who has kindly furnished me with his "Coleopterorum species novae aut minus cognitae" descriptionibus illustratae, in which many new genera are instituted.

Readily distinguished by the common white triangular band of the elytra marked by two black spots. I had three specimens from Mexican seeds of the size of those of Palmetto but concave within.

4. *B. mimus*, Brown, varied with black lines & cinereous spots.

Inhab. Indiana.

Body light brown, variegated: *antennae* pale rufous: *thorax* much narrowed before, with two interrupted, elevated, black lines & one or two on each side; base rather prominent at the scutel: scutel whitish apparently bifid: elytra with black spots & abbreviated lines, which have a whitish spot at their anterior tip; a light brown line curves inwards from the humerus & passes along the third interstitial line towards the tip: *beneath* dusky or blackish: feet pale rufous; posterior thighs blackish beneath with several minute spines & four or five larger ones near the tip: posterior tibiae blackish, subsfasciate beyond the middle: *podex* yellow.

Length less than three twentieths of an inch.

5. *B. oculatus*, Brown; posterior thighs 3 or 4 toothed.

Inhab. Mexico.

body elongated, pale brown, covered on every part with short, prostrate, dense hair: *head* on the front dusky, with a slight cupreous tinge; much dilated orbits cinereous; tip of the labrum piceous: *antennae* fuscous; four basal joints honey-yellow; *thorax* with a hardly obvious, dorsal, pale line: *elytra* with acute striae, which have distant punctures rather short: *anal segment* but little oblique, more than half the length of the elytra: feet honey yellow: *posterior thighs* near the tip with about four teeth, of which the first is most prominent.

Length one fifth of an inch.

The anal segment is more nearly horizontal than any species I have seen.

6. *B. obsoletus*, Blackish, varied with cinereous hair.

Inhab. Indiana.

Body blackish cinereous, with a slight tinge of brown: *antennae* not deepy serrate: *thorax* much narrowed before

cinereous each side, a slight impressed dorsal line; base with the edge almost angulated, central lobe almost truncate; *scutel* quadrate, whitish, longitudinally divided by a dusky line: *elytra* with the interstitial lines having a slight appearance of alternating whitish & dusky; on the middle of the third interstitial line is a more obvious abbreviated whitish line: posterior thighs with a black spine, & two smaller ones.

Length over one tenth of an inch.

The whitish or cinereous markings are not very striking; on the *elytra* they may sometimes be traced into two, obsolete macular bands. I obtained many specimens from the seeds of an *Astragalus* in August, in company with *Apion segnipipes*, nob.

7. *B. musculus*, Blackish, with cinerous hair; antennae & feet rufous.

Inhab. Indiana.

Body Blackish-cinereous, with a slight tinge of brown, or black with cinerous hair: *lubrum* piceous: *antennae* rufous at base & tip, piceous in the middle: *thorax* rather long, narrowed before, somewhat cinereous each side & on a dorsal line; basal edge lobed at the *scutel*: *scutel* quadrate cinereous, with a dusky line: *elytra*, third interstitial line with an abbreviated cinereous line on its middle: *feet* rufous; anterior thighs at base, intermediate pair to the middle, black; posterior thighs with a spine, & three close set smaller ones distant from it, & with their tibiae black.

Length less than one tenth of an inch.

Resembles *obsoletus*, nob. but is a little smaller & the rufous antennae & feet distinguish it.

8. *B. transversus*, Black, with cinereous hair; interstitial spaces with transverse black lines.

Inhab. Indiana.

Body black, more or less covered with cinerous hair; *head* black: *antennae* rufous: *thorax* transverse, widely rounded before, with a scutellar lobe: *scutel* subquadrate with a dusky line: *elytra*, interstitial spaces interrupted by transverse black lines: *feet* rufous: *posterior thighs* black at base, armed with a spine near the tip.

Length over one tenth of an inch.

ANTHRIBUS, F. Sch.

Subgenus TROPIDERES, Sch.

1. *A. cornutus*, Thorax with five tubercles.

Inhab. Indiana.

Head white: *mandibles* piceous: *antennae* rufous, *clava* fuscous: *rostrum* moderate; *eyes* distant: *thorax* with two fascicles of erect hairs on the anterior edge, & three larger ones placed transversely on the middle: *elytra* somewhat variegated, with several fascicles of erect hairs on the interstitial lines; & a white, double, common, transverse spot before the middle: *feet* hairy.

Length less than one fifth of an inch.

Subgenus PHAENITHON? Schoen.

2. *A. brevicornis*, Antennae short; scutel & alternate spots on the elytra whitish.

Inhab. Mexico.

Body black-brown: head covered with prostrate whitish hair: *antennae* hardly longer than the head, fuscous; *thorax* with a transverse elevated subbasal line, rectilinear in the middle, arquated each side, reflected at the posterior angles & terminating at the lateral middle: *scutel* white: *elytra* striated; interstitial spaces convex, with alternate, blackish & whitish spots; humerus prominent & a prominence on the middle of the base: *feet* obscure piceous.

Length less than three twentieths of an inch.

The tip of the club, exhibits the appearance of a fourth joint, which however is much smaller than the others; the eyes are emarginate. These characters justify the formation of a distinct subgenus.

ATTELABUS, F. Sch.

A. pubescens, Nob. Journ. Acad. Nat. Sc. Vol. 5, p. 252.

A. rhois, Bohemann, Acta. Mosqu.

RHYNCHITES, Herbst. Schoenh.

1. *R. collaris* Fabr. The three ultimate joints of the antennae are elongated, differing in this respect from other species of the genus, it has been separated under the generic name of *Sapindus*.

The species varies so much in colour as to have given rise to several specific names; viz.

Anthrribus collaris, Fabr. Syst. Eleut.

Rhynchites angustatus, Herbst.

—.— rubricollis, Nob. Journ. Acad. Nat. Sc. & Melsh. Catal.

—.— nigripes, Melsh. quercus. Knoch in Melsh Catal.

—.— ruficollis, Germar Sp. Nov. p. 188.

The latter is very remarkable in having the thorax of the same colour as the elytra. Dejean in his Catalogue, places the species in the genus *Rhinomacer*.

2. *R. hirtus*, Fabr.

R. aeneus? Bohemann.

Doubts have been expressed of our insect being the *hirtus* of Fabr., but it agrees better with the description than any. It is also, as Fabricius says, of the stature & magnitude of *R. pubescens*.

3. *R. aeratus*, Brassy, antennae, rostrum & beneath obscure bluish.

Inhab. Pennsylvania.

Curculio aeratus, Knoch in Melsh. Catalogue.

Body brassy, punctured: *rostrum* very slightly dilating towards the tip, with an impressed line above, from the base to the middle: *front* with small punctures: *thorax* with dense punctures: *elytra* with a transverse, dilated but but not profound, common indentation; with striae of transverse, large punctures: *beneath* blackish blue.

Length nearly one tenth of an inch.

This is the smallest North American species yet known.

I have found it on the Oak in June.

Genus PTEROCOLUS, Sch.

Antennae 11-jointed, not geniculate; basal joint not much elongated; eighth joint transverse linear; 9th. and 10th. transverse subquadrate, dilated, & with the ultimate semioval one, remote, perfoliated, forming an oblong oval club: rostrum dilated at tip: head rather long behind the eyes, neck not contracted: scutel transverse subquadrate: elytra somewhat abbreviated; each rounded at tip, depressed above: podex and part of the back, naked: feet robust: thighs unarmed, dilated; tibiae unarmed, ciliate densely on the exterior edge with very short spines, and with small spines around the edge of the tip: body rounded.

This genus differs from *Rynchites* by the rounded form of the body; the shorter and depressed elytra, more divar-

icate at their tips; the rostrum is shorter and more contracted in the middle, and the origin of the antennae is nearer the middle or rather the base of the rostrum; the tibiae are ciliated with short spines &c.

Species.

P. ovatus, Fabr. (Attelabus) Syst. Eleut.

APION, Herbst.

1. *A. rostrum*, Nob. Jour. Acad. Nat. Sc.

This may very probably prove to be *A. nigrum*, Herbst.

Dr. J. F. Melsheimer informed me that it is found in abundance on the leaves of *Robinia pseud-acacia*.

2. *A. segnipipes*, Black; feet rufous, with black incisures & tarsi.

Inhab. Indiana.

Body black punctured, with prostrate white hairs; *rostrum* rather long, and very slightly angulated, slightly tapering, punctured at base: *antennae* with the 3 or 4 basal joints rufous: *thorax* with dense large punctures: *elytra* with punctured profoundly impressed striae; *feet* rufous; *thighs* at base, *coxae*, *trochanters* & *knees* black; *tibiae* black at tip: *tarsi* black with a whitish reflection at the tip of their joints.

Length about one tenth of an inch.

I obtained numbers of this species from the seeds of an *Astragalus* in August.

LAEMOSACCUS, Sch.

1. *L. plagiatus*, Fabr. Schoenh. *Curculio nephele*, Herbst

This is a well marked insect, remarkable by the very large fulvous mark on the disk of each elytron, occupying two thirds of the whole surface. The tooth of the anterior thighs is very prominent. I obtained it on the Oak in July.

THAMNOPHILUS, Schoenh.

1. *T. barbatus*, *Body* rather long and narrow, blackish brown, with confluent punctures: *rostrum* punctured, cylindrical, as long as the head and thorax, slightly broader at tip, a little curved: *thorax* with one or two slight tubercles each side before: *elytra* with the striae rather wide and deep, punctured: *thighs* with a tooth beneath.

Inhab. Pennsylvania.

Length to the tip of the rostrum three tenths of an inch.

Belongs to the Subgenus *Panus*, Schoenh.

2. *T. ohyra*, Herbst (Curculio) Natursyst. Vol. 7, p. 7.

The scutel is white; this character was probably obliterated in Herbst's specimen as he has not mentioned it.

3. *T. armicollis*, Nob. (Rynchaenus) Journ. Acad. Nat. Science. Vol. 3. p. 312.

4. *T. pandura*, Thorax with a lateral tubercle before the middle and on the posterior angle; tarsi piceous.

Inhabits United States.

Curculio pandura, Knoch in Melsh. Catalogue.

Body black, punctured: *antennae* piceous: *rostrum* slightly arquated: *thorax* with separate punctures; an angle or tubercle each side a little before the middle; contracted before the posterior angles, which are prominent: *elytra* with striae of large punctures: *tarsi* rufo-piceous.

Length over one tenth of an inch.

Much like *T. ohyra* but is much smaller, the lateral thoracic tubercle is nearer the middle & scutel is black.

5. *T. pallidus*, Pale yellowish; head & thorax tinged with rufous.

Inhab. Indiana.

Body punctured, somewhat elongate; head densely punctured, punctures not profound; *rostrum* a little dilated towards the tip, punctured: *club* ovate acute, not much elongated: *thorax* with dense, irregular, not very deep punctures, a dorsal glabrous line, & anteriorly on each side is an acute tubercle: *elytra* with impressed striae in which are oblong punctures; interstitial lines a little convex & slightly rugose with a very minute series of scales or pores, near the tip these lines are more convex basal edge somewhat elevated: *thighs*, spines acute: *postpectus* & *base of the abdomen* dusky.

Length to tip of rostrum about three twentieths of an inch.

The colour is much paler than that of the *armicollis* N. & the club is much shorter.

CHLOROPHANUS, Dalm.

C. acutus, Nob. (Curculio) Journ. Acad. Nat. Sc. Vol. 3, p. 310.

This insect also occurs in Indiana.

ITHYCERUS, Schoenh.

1. *curculionoides*, Herbst.

I have always considered the *Curculio punctatulus*, Fabr. and Oliv. synonymous with this, but Germar is of the opinion that it is a different insect.

Curculio novaeboracensis, Forster.

Genus THECESTERNUS, Nob.

Anterior part of the pectus excavated for the reception of the rostrum.

Natural Character.

Body convex, firm, unequal: *rostrum* very short, thick entire: *antennae* rather slender, inserted near the middle of the rostrum, in a deep, somewhat angulated groove; first joint oblong turbinate, a little arquated; second and third short, subturbinate, the latter shorter; fourth and eighth very short, quadrate or transverse; club rather large of which the basal joint [or two joints?] is as long again as the ultimate one, which is subacute: *eyes* a little oblique, somewhat acute before, oblong subovate: *thorax* longitudinally somewhat quadrate: *scutel* none: *elytra* connate, rigid, hardly broader at base than the thorax, narrowed at tip and concealing the podex: *pectus* anteriorly deeply excavated to receive the rostrum: *fest*, anterior pairs approximate: posterior pair distant: *thighs* not dilated: *tibiae* with a short, thick, or double spine at tip: *tarsi* simple.

Observations.

I proposed this genus when describing the species, but omitted the name. It differs from *Brachycerus*, F. & *Episus*, Billb. by the pectoral excavation; general form of the body; less robust antennae, & larger club.

Species.

T. humeralis, Nob. (*Brachycerus*.) Journ. Acad. Nat. Sciences, Vol. 5, p. 254.

GRAPHORHINUS, Sch.

1. *G. valosus*, *Body* dark cinereous: *rostrum* with a deeply impressed line, on each side of the middle of which is a short impressed line, & between the eyes is a dilated, suborbicular indentation: *thorax* with large, somewhat irregular, approximate punctures: *elytra* with the alternate lines more elevated, particularly towards the base; punctures transverse.

Length less than two-fifths of an inch.

Inhabits Missouri.

This insect was presented to me by Nuttall.

2. *G. operculatus*, Rostrum obsolete truncated; a frontal dilated puncture.

Inhab. Mexico.

Body black, covered with minute, orbicular, perlaceous scales: head with a dilated impressed puncture between the eyes, an obsolete longitudinal sulcus on the short, robust rostrum & a still less obvious one on each side: thorax canalliculate in the middle: elytra with series of rather large impressed punctures: thighs with a sinus beneath near the tip.

Length over seven-twentieths of an inch.

DERACANTHUS, Schoenh.

Subgenus Aracanthus.

D! *pallidus*, Body whitish, varied with pale brown: rostrum not longer than broad, with an impressed very obvious line from the vertex to the tip: eyes small: thorax with numerous, small punctures not close set nor very regularly placed; base not undulated: elytra with regular striae of punctures.

Inhab. U. S.

Length over one-tenth of an inch.

THYLACITES, Germ.

1. *T. microps*, Body whitish: rostrum very short & broad: eyes very small, orbicular; front with an acute impressed line: vertex & thorax a little rough with numerous slight indentations; scutell not obvious: elytra with their striae & punctures not visible, suture a little elevated: feet simple.

Inhab. Missouri.

Length less than three-twentieths of an inch.

Subgenus Strophosomus. Sch.

2. *T. tessellatus*, Nob. (Liparus) Jour. Acad. Nat. Sc.

CALLOPISTUS, Schoenh. (in litt.)

B. auricephalus, Nob. (Curculio) Jour. Acad. Nat. Sc. Vol. 3, p. 310.

TANYMECUS, Germ.

1. *T. lacaena*, Body a little cupreous, dull yellowish cinereous, densely punctured: rostrum with a raised line, tip widely indented above: antennae blackish rufous: thorax with three obsolete blackish vittae; widest a little before the middle: scutell very small, cinereous: elytra with the striae hardly impressed at base but obviously impressed towards the tip, punctures rather large, quadrate; interstitial lines flattened, tip of each with a short joint in the middle.

Length to tip of rostrum three-twentieths of an inch.

Curculio lacaena, Herbst? Natursyst.

2. *T. confusus*, Much like the preceding but is destitute of the thoracic vittae. Length to tip of the rostrum about three-tenths of an inch.

APHRASTUS, Schoenh. (in litt.)

A. taeniatus, Nob. Journ. Acad. Nat. Sc.

Elytra whitish, second and fourth interstitial lines light brown.

SITONA, Germ.

1. *S. indifferens*, *Body* black, rather thinly covered with cinereous hair: *rostrum* short, dilated, with an indented line which does not reach the tip: *thorax* cylindrical with small, irregular, hardly impressed punctures: *elytra* striate, the striae with rather large punctures: *feet* obscure piceous.

Inhab. Missouri.

Length three-twentieths of an inch.

In form somewhat like *lineellus*, Gyll.

2. *S. scissifrons*, Covered with white scales; *elytra* with black spots.

Inhab. Missouri.

Body entirely covered by minute scales, which on the sides of the *thorax* & *elytra* are white, & on their middle light brown; *head* obviously punctured & with a widely impressed line extending to the tip: *antennae* dark piceous; basal joint paler, clavate: *thorax* rather short, slightly rounded each side, obviously punctured; a much dilated brown dorsal vitta in which is a narrow white vitta, a lateral brown vitta from the eye: *elytra* with a much dilated common brownish vitta; a few blackish spots: *tibiae* with a slight rufous tinge: *tarsi* spongy beneath: eyes rounded.

Length less than one-fifth of an inch.

This much resembles the *S. lineellus* Gyll. but the nasal joint is shorter, the eye smaller, the *thorax* shorter, &c.

HADROMERUS, Schoenh.

H. hilaris, Brown varied with cinereous: *rostrum* with a deeply indented line: *antennae* and *tarsi* rufous: *thorax* and head with numerous deep punctures; the former with a dilated lateral vitta: *elytra* with an oblique cinereous arched vitta from the humerus to the middle; tip cinereous almost constituting a band: beneath with whitish scales: *feet* somewhat banded.

Length one-fifth of an inch.

Curculio hilaris? Herbst. *Natursyst.*

The male is smaller & the extremity of the oblique vitta is almost insulated so as to form a small spot in the middle of each *elytron*, surrounded by a dark line.

CLEONUS, Schoenh.

C. trivittatus, Covered with cinereous hair; *thorax* trilineate; *elytra*, suture & vitta on each blackish.

Inhab. Arkansas.

Clixus trivittatus, Nob. Jour. Acad. Nat. Sc.

Body black, densely covered by cinereous hair: head, a black lateral line from the eyes to the tip of the *rostrum*, & a carinate line above; *thorax* deeply & widely indented behind; three longitudinal blackish vittae; an abbreviated, longitudinal, slightly elevated line before, scattered punctures: *elytra* with regular series of profound punctures; a sutural double blackish vitta spotted or interrupted with cinereous; & a vitta on the middle of each *elytron* also spotted with cinereous: beneath with small black spots.

Length (total) about two-fifths of an inch.

I obtained two or three specimens near the Rocky Mountains.

HYPSONOTUS, Germ.

I. H. alternatus, *Body* piceous, nearly covered with prostrate brown hairs: *elytra* with the striae simple impressed, the hairs upon them forming alternate whitish and brownish spots; a more obvious white spot near the tip of each *elytron*: *front* & *rostrum* with an impressed line; *thorax* with the punctures

large & close set, concealed by the hairs, with a longitudinal raised line : *thighs* beneath near the tip emarginate.

Length less than half an inch.

Inhabits the North West Territory.

2. *H. imbricatus*, Nob. (Liparus) Journ. Acad. Nat. Sc.

LISTRODERES, Schoenh.

1. *L. caudatus* Nob. (Rynchaenus) Journ. Acad. Nat. Sc.

2. *L. squamiger*, *Body* covered with minute brownish cinereous scales : *rostrum* with a carinate line ; *thorax* with scattered punctures ; not flattened ; *scutel* yellowish or whitish, *elytra* with punctured striae towards the tip concealed by the scales ; the united tip obtusely rounded ; *humerus* obtuse.

Length from two-fifths to half an inch.

Inhabits Arkansaw.

Much like *caudatus* Nob. but in that species the humeral line is carinate & acute.

3. *L. porcellus*, *Body* blackish rufous, with numerous, short, robust, upright hairs ; *rostrum* broad and rather short with somewhat elevated lines & a wide indentation at base : *thorax* subcylindric : *elytra* with wide impressed striae, in which are transverse punctures ; a paler submarginal line each side & terminal spot ; *feet* dull rufous.

Inhab. U. S.

Length over one-tenth of an inch.

4. *L. sparsus*, *Body* dull drab color ; with minute scales, the surface with small dense, shallow indentations ; numerous short robust upright hairs ; *rostrum*, robust short ; *antennae* rufous : *thorax* somewhat rounded ; *scutel* small transverse : *elytra* with rather longer hairs than the *thorax* : with slender punctured striae, punctures obsolete towards the tip ; *humerus* a little prominent somewhat carinate : *feet* unarmed.

Inhab. Missouri.

Length over three-twentieths of an inch.

5. *L. lineatulus*, *Body* with a dirty yellowish cinereous covering, & with short, robust hairs : *rostrum* with two longitudinal grooves ; *antennae* rufous ; *thorax* rounded, with a transverse indented anterior line & a longitudinal obsolete, impressed one : the whole surface has a granulated appearance ; *elytra* with the striae & punctures concealed by the covering, the alternate interstitial lines prominent & distinct.

Length over one-fifth of an inch.

Very distinct from the preceding species & may be distinguished from them by its much smaller size.

BARYNOTUS, Germ.

1. *B. rigidus*, *Body* dirty brown, with remote, robust, upright hairs : *rostrum* short, thick, transversely indented between the eyes ; *thorax* a little indented longitudinally ; transverse, as broad in the middle as the base of the *elytra* ; *elytra* with the striae obtuse, slightly impressed, punctured ; interstitial lines having the hairs distant & regular.

Inhab. Connecticut.

Length less than one-fifth of an inch.

2. *B. erinaceus*, Rather slender; thorax rounded, somewhat distant from the abdomen.

Inhab. U. S.

Body covered with very minute, oppressed, orbicular, dark brown scales: *rostrum* robust, moderate; *mandibles* exerted arquated simple, acute, unarmed, nearly half as long as the *rostrum*: *thorax* rough, the scales & their intervals exhibiting the irregularity of a sanded surface; hairs numerous; interval between the thorax & abdomen widely contracted: *elytra* with punctured striae and rigid equi-distant black hairs on the interstitial lines; posterior declivity nearly vertical.

Length over one-fifth of an inch.

The mandibles are naked & very prominent; the thorax is rounded & its surface is rough & punctured.

3. *B. granulatus*, Brown, thorax obtusely granulated and with a pale vitta.

Inhab. Indiana.

Body dull brown with short raised hairs: head impressed between the eyes: *thorax* with very obtuse granulations, a longitudinal slender impressed dorsal line in a dull yellowish vitta: *elytra* a little elevated on the basal edge, striae concave, much dilated, punctured; punctures wide, not very deeply impressed, interstitial lines not so wide as the striae, with hairs; suture a little pale.

Length about one-fourth of an inch.

The surface of the thorax exhibits the appearance of obtuse little elevated granulations and the profile view shews irregular punctures or interrupted rugae.

LEPYRUS, Germ.

L. geminatus, *Body* dusky: *rostrum* rather short: *antennae* a little robust: *thorax* with a yellowish vitta each side: *elytra* with the alternate interstitial lines light brown, a small white spot in the middle of each.

This is the analogue of the *L. colon* F. of Europe, and so closely allied to it as to be easily mistaken for it. But the body is a little more robust; the *rostrum* is a little shorter and the *antennae* are more robust.

A specimen was sent to me by Mr. Barabino from Louisiana, I obtained one in Missouri.

HYLOBIUS, Germ.

H. pales, Herbst, *Pissodes macellus*, Germar Sp. Novae p. 319.

PHYTONOMUS, Schoenh.

P. trivittatus, Blackish brown with numerous scale like hairs.

Inhab. North West Territory.

Body blackish-brown, with numerous, robust hairs almost resembling scales, which are longer in three yellowish metallic, thoracic vittae of which the lateral ones are broader and terminate in a spot on the humerus; the vittae and spot, are pale brownish cinereous: *antennae* rufous; *elytra* with large costal spots, interstitial lines obsoletely alternating with blackish and pale brown-cinereous; suture behind the middle also pale brown cinereous; thighs beneath near the tip emarginate: anterior tibiae a little incurved at tip.

Length one-fifth of an inch.

2. *P. comptus*, *Elytra* with subquadrate, brown spots.

Inhab. U. S.

Body cinereous-olivaceous, covered with small scales; *rostrum* shorter than the head and thorax, rather narrower at base: *antennae* and *feet* rufous; *thorax* somewhat rounded, with a much dilated, brown, somewhat metallic vitta:

scutel small triangular: *elytra* with slightly impressed, but punctured striae, interstitial lines flat, with more or less numerous brown quadrate spots, particularly near the suture, where they are alternate.

Length much over three-twentieths of an inch.

PERITELUS, Germ.

1. *P. chrysorrhæus*, *Body* covered with dense scales and having sparse, short rigid, inclined hairs; *thorax* nearly obicular: *head*, the line of the eyes raised and chesnut colour; *elytra* paler behind, or with a very oblique brown band behind the middle; the striae simple impressed lines; impunctured.

Length over three-twentieths of an inch.

Inhab. Pennsylvania.

Subgenus AGRAPHUS. Schoenh. [in litt.]

Scutel distinct.

2. *P. bellicus*, *Body* black; *rostrum* short, broad, with an impressed line at base; *antennae* first joint rather longer than the others taken together, and the unarmed feet dull rufous: *thorax* rather small, with a slight indented line and numerous very short and very robust yellowish hairs: scutel minute: *elytra* convex; striae hardly impressed, but with regular series of punctures; the whole surface with minute, close set, hardly impressed points, furnishing very short, yellowish, very robust hairs.

Inhabits Florida.

Length nearly three-tenths of an inch.

Peritelus leucophœus, of Dejean, *Agraphus leuc.* Schoenh. but I believe it has not been described.

CYCLOMUS, Sch.

Subgenus OPHRYASTES, Germ.

Clava five jointed; eyes narrowed before.

1. *C. vittatus*, nob. (Liparus) Jour. Acad. Nat. Sc. Vol. 3, p. 316.

2. *C. sulcirostris*, Nob. [Liparus] Journ. Acad. Nat. Sc. Vol. 3, p. 318.

LIXUS, F. Schoenh.

1. *L. marginatus*, Black, covered with minute cinereous hairs; *thorax* impressed; *elytra*, region of the scutel and middle of the base indented.

Inhab. U. S.

Body black, covered with short minute robust recurved hairs, punctured; *antennae* rufous, club dusky; *thorax* a little convex each side, behind the middle of the side rectilinear, a little contracted before, with an indented line above, more profound, near the base; with dilated, confluent, slightly impressed punctures not deeply sinuated at base, with regular series of punctures: *elytra* region of the scutel indented subacute: abdomen dull fulvous behind.

Length from the origin of the rostrum nearly seven-twentieths of an inch.

The hair detains a ferruginous powder. It is found on the lower Missouri. It also occurs in the Atlantic states. With my first description of this species I gave it the name of impressus, but in the Curcul. dispos. method. Schoenherr quotes the same name for a very different and large species of S. America from Sahlberg.

2. *L. concavus*, Base of the thorax and of the elytra with a common dilated indentation.

Inhab. Indiana.

Thorax convex each side, much contracted before, with very small punctures; dorsal indentation obsolete near the anterior margin and in the middle, profound at base: *elytra* with regular punctured striae, not rugose; base with a dilated common deep indentation equalling that of the thorax, and another smaller indentation on the middle of the base: *thighs* unarmed.

Length over half an inch.

Common, and is the largest species I have met with in this country. The hair of the body detains a yellowish ferruginous dust which often gives the whole insect that colour. It is smaller than the *angustatus* F. the thorax is much more convex each side, the elytra are less abruptly contracted each side at base, &c.

3. *L. lateralis*, Thorax laterally cinereous; elytra with a transverse basal groove.

Inhab. Arkansas.

Body rather slender; head punctured between the eyes: rostrum but little arquated punctured between the eyes, short: thorax with rather large profound distant punctures on each side, cinereous; a dorsal indented line; sides rectilinear on the posterior three-fourths, and rather suddenly contracted on the anterior fourth: elytra with regular series of punctures; somewhat indented about the scutellum; basal margin with a groove, basal edge much arquated.

Length seven-twentieths of an inch.

4. *L. musculus*, Thorax indented before and behind the middle and with rather small punctures.

Inhab. Louisiana.

Body black or blackish piceous, with short white hairs: head between the eyes a little indented: rostrum slightly arquated, punctures at its lateral base nearly as large as those of the thorax; *thorax* with rather small but dense punctures, with a large longitudinal depression on the back, a little impressed and more obvious before the middle and at the base: elytra with series of punctures which at tip are smaller and placed in striae: region of the scutellum indented.

Length over seven-twentieths of an inch.

It is smaller than *L. bardane*, F. not so densely clothed with hairs, the elytral punctures are more obvious; the thoracic punctures are a little smaller; that species has not the thoracic indentations. It has the rostrum a little longer and more arquated than in the preceding; the thorax has not such large and profound punctures, on the side is slightly and regularly curved, not abruptly contracted before, &c.

This species was sent to me by Mr. J. Barabino of New Orleans.

PISSODES, Germ.

P. strobi, Peck. [Rynchaenus] Journal Mass. Agr. Soc. Jan. 1817.

P. nemorensis, Germar Species Novae p 318.

Dr. Harris sent me this insect as the *P. strobi*. or White pine Weevil of Professor Peck, whose name having the priority must be adopted.

ERIRHINUS, Schoenh.

E. mucidus, *Body* black-brown with short prostrate yellowish hairs: rostrum slender, linear, arquated, punctured, much longer than the head and thorax: antennae rufous: elytra with rather wide, impressed, densely punctured striae; hairs arranged in small spots.

Length one-fourth of an inch.

Resembles *E. vorax*, Gyl. but the thorax is more rounded and the elytra have a more tessellated appearance.

ANTHONOMUS, Germ.

1. *A. quadrigibbus*, Ferruginous; elytra with about four tubercles.

Inhab. U. S.

Curculio quadrigibbus, Melsh. Catalogue.

Body dull ferruginous; rostrum more than half the length of the body; thorax with three obsolete whitish lines: *pleura* bilineate, of which one is more distinct: *elytra* with double series of punctures, the interstitial lines alternately elevated, the two inner ones on each with two or three compressed elevations, of which the posterior one on the inner line is more prominent; posterior declivity paler: anterior thighs two toothed, the posterior tooth prominent.

Length [exclusive of the rostrum] less than three-twentieths of an inch.

I have taken this species on the *Crataegus*.

2. *A. musculus*, Dull rufous: scutel and elytral spotted bands whitish.

Inhab. U. S.

Curculio varians, Melsh. Catal.

Body more or less dull rufous, or piceous, punctured: head piceous: rostrum with elevated lines: *antennae* rufous; club dusky: thorax piceous, very much crowded with punctures; small recurved distant whitish hairs: scutel oval white: *elytra* with dilated impressed striae of large punctures; rufous with the edge piceous; two or three undulated, macular, whitish bands of short hairs: beneath piceous: feet rufous.

Length including the rostrum one-tenth of an inch.

Var. *A.* Obscure piceous, almost black; bands obvious.

This varies considerably in its depth of coloring.

Subgenus, ODONTOPUS, Nob.

Eyes approximate.

3. *A. calceutus*, Spine of the anterior thighs robust, denticulated before.

Inhab. Indiana.

Body black: *antennae* piceous; clava darker: thorax very densely punctured, rather large, much narrowed before: scutel longitudinal, oblong, sublinear: *elytra* with profoundly impressed, punctured striae, interstitial lines flattened, densely punctured; anterior thigh with a very prominent robust tooth; anterior to which are small denticulations; intermediate thighs with a small tooth; posterior pair with the tooth obsolete: tibiae, anterior pair much arquated.

Length nearly three-twentieths of an inch.

This is not uncommon. With the form and habit of the insects of this genus it has approximate eyes.

ERODISCUS, Schoen.

E. myrmecodes, Black, scutel and line on pectus and postpectus whitish.

Inhab. U. S.

Body black, with numerous slender upright hairs; thorax very convex above: scutel cinereous: *elytra* convex with slightly impressed striae, punctured: thighs clavate, emarginate and with a large compressed tooth: tibiae arquated at base: anterior pair mucronate at tip; pectus and postpectus with a longitudinal white line.

Length three-twentieths of an inch.

Curculio myrmex, Herbst. Natursyst.

In appearance it has a slight resemblance to a *Formica*.

BALANINUS, Germ.

1. *B. proboscoides*, Fabr. (*Rynchaenus*) Rostrum as long again as the body. This seems to be *Curculio Daviesii*, Swederus in Transactions of the Stockholm Society, 1787, and it is probable that the latter name is prior to that of Fabr.

2. *B. nasicus*, Rostrum not so long as the body or hardly longer, not thicker at base, but proceeding abruptly from the head, rectilinear to the middle, piceous.

Inhab. Pennsylvania.

It is remarkable by having the rostrum at base hardly thicker than in the middle, in consequence of which it appears to proceed abruptly from the head without any gradation.

It is the *Curculio nucum* of Melsh. Catalogue.

3. *B. rectus*, Rostrum rectilinear or very slightly recurved to near the tip where it curves downward; antennae very slender.

Inhab. Pennsylvania.

This is distinguishable by the rectilinear or slightly recurved rostrum.

4. *B. nasutus*, Body robust; scutel elongated white.

Inhab. Pennsylvania.

This species differs from *proboscideus*, F. in being more robust and in having the scutel longer. Schoenherr has proposed the name of *rostratus* for this insect, (in litt.)

TYLOMUS, Schoenh.

T. lineaticollis, Say. [*Rynchaenus*] Journ. Acad. Nat. Sc. Vol. 3, p. 313.

Var. a. much smaller.

Length exclusive of the rostrum less than one-fifth of an inch.

It differs also considerably in the lineations of the thorax, and the alternate elevated, interstitial lines of the elytra are less obvious and not so acutely edged. I have named it provisionally *palmicollis*.

ORCHESTES, Illig.

1. *O. ephippiatus*, Blackish piceous; elytra each with two yellowish spots.

Inhab. Indiana.

Body blackish, more or less tinged with piceous, densely punctured: base of the rostrum piceous: elytra striate punctured, a large double yellowish hairy, somewhat common spot before the middle and a transverse abbreviated common band of yellowish hair behind the middle, both on a piceous surface; feet and antennae rufous.

Length over one-tenth of an inch.

A very distinct species.

2. *O. pallicornis*, Black, antennae rufous with a black tip.

Inhab. Indiana.

Body black, densely punctured: rostrum lineated and punctured; antennae dull rufous, the club darker black: thorax confluent punctured: elytra with punctured striae, the interstitial lines somewhat rough and flat: thighs with a short acute tooth.

Length one-tenth of an inch.

Var. A. Tarsi piceous.

This species is very abundant.

MADARUS Schoenh.

M. undulatus Nob. [Rynchaenus] Journ. Acad. Nat. Sc.

The thorax varies from sanguineous to black.

BARIDIUS, Schoenh.

1. *B. trinotatus*, Covered with white hairs; a black dot on the scutel and near the posterior angle of the thorax.

Inhab. U. S.

Curculio trinotatus, } Melsh. Catal.
 —:—*Pensylvanicus* K. }

Body black, covered with rather short, robust, linear, white prostrate hairs: thorax with the hairs pointing towards the longitudinal middle; at base on each side is a black dot, scutel black: elytra with obvious striae: interstitial lines flat and each with about three series of the short hairs.

Length three twentieths of an inch.

The covering of white hairs, with the three denuded spots distinguish this species. I have obtained it in Indiana as well as in Pennsylvania.

2. *B. picumnus*, Herbst. Naturyst.

Vol. 7, p. 30, pl. 99, f. 9. This is a common species. The third joint of the antennae is hardly longer than the fourth. The covering of hairs is more dense than in the preceding species.

3. *B. penicellus* Herbst. Naturyst. Vol. 7; p. 29, pl. 99, f. 6 F.

Much like the preceding but larger and the third joint of the antennae is as long again as the fourth. I described it under the name of *amicthus* but I have little doubt that it is the species described by Herbst. Genus *Toxerus* Sch. ? *holosericeus* Sch. Dej.

4. *B. undatus*, Black; elytra with two undulations.

Inhab. Mexico.

Body black: head with small punctures, sparse on the vertex, more dense on the rostrum: rostrum arquated: thorax a little compressed each side on the anterior margin; with rather large confluent lateral punctures and smaller sparse ones on the disk: elytra with capillary impunctured striae, becoming rather dilated at tip; interstitial spaces flat, with numerous transverse lines, a dilated indentation or undulation before the middle, and rather behind the middle, a less obvious indentation near the tip.

Length over one fifth of an inch.

Var. A. Body dark brassy polished; undulations of the elytra obsolete.

Length less than three twentieths of an inch.

The pectoral groove is very distinct, but the antennae are too robust, and the club is too obtuse to be placed in the genus *Centrinus*, and the fusiform club of *Madarus* will not permit a reference to that genus.

5. *B. striatus*, Interstitial lines hardly wider than the striae and with a single series of punctures.

Inhab. U. S.

Body black, punctured: rostrum a little prominent at the insertion of the antennae on each side; more or less transversely indented between the eyes: antennae dark piceous inserted beyond the middle of the rostrum; second joint rather long; third not longer than the fourth; club obtuse; thorax subconic with approximate orbicular punctures and a glabrous middle line; basal edge deeply sinuous

elytra with deep punctured striae; interstitial lines hardly broader than the striae and each with a single series of rounded punctures: anal tip naked, densely punctured: pectus slightly indented: anterior feet not very distant.

Length one fifth of an inch.

This is the true *striatus* of Melsheimer's Catalogue; the following species which I formerly confounded with it, is different.

6. *B. interstitialis*, Nob. (Rynchaenus) Journ. Acad. Nat. Sc. 3, p. 314.

Much like the preceding, but the thorax is more rounded, being more abruptly contracted before & the punctures are much smaller. The interstitial lines are broader & their punctures have a transverse rugulous appearance.

7. *B. transversus*, Thorax at the scutel obtusely lobed; scutel transverse.

Inhab. Missouri.

Body black, punctured: *head* transversely indented between the eyes: *antennae* obscure piceous, inserted beyond the middle of the rostrum; third joint but little longer than the fourth: club ovate: *thorax* rather abruptly contracted before; punctures numerous, rather dense; middle lobe of the base very obtusely rounded: *elytra* with deep, punctured striae; interstitial lines with close set, almost confluent punctures; third line with more than one series; exterior & posterior edges piceous: *tibiae* a little tinged with piceous: *anal segment* naked, punctured.

Length over one fifth of an inch.

In the form of the thorax it resembles *interstitialis*, Nob. but the punctures are much larger, the posterior lobe is more rounded, & the punctures of the interstitial lines are rounded.

CRYPTORHYNCHUS, Illig.

1. *C. anaglypticus*. Thorax bilineate each side; elytra with elevated lines; a fulvous spot on each at base.

Inhab. U. S.

Curculio anaglypticus Knock in Melsh. Catal.

Body blackish piceous, punctured; *eyes* small; *antennae* piceous; *rostrum* sulcated; *thorax* lobed at the eyes; subinequal, somewhat rugose; two whitish longitudinal lines on each side diverging before & behind with numerous minute cinereous hairs, & with two or three oblique uniting lines: *elytra* triangular much wider at base than the thorax & sub acute at tip, each with four elevated acute striae, the exterior ones united at tip; interstitial grooves dilated, concave, with a double series of transverse punctures, an oblique, fulvous, oval spot at the humeral base, tip brown; epipleura a series of punctures, base hirsute with a double series; *feet* varied with cinereous hair; thighs with a robust, prominent spine beneath near the middle, & a smaller one nearer the tip.

Length from the front to anus less than one fifth of an inch.

Found many specimens ascending a hickory tree (*Juglans*) in the fruit of which they deposit their eggs, in the latter part of June & beginning of July.

2. *C. elegans*, Piceous brownish; elytra with a paler, more or less dilated space behind.

Inhab. U. S.

Curculio elegans, Melsh. Catal.

Body dull piceous, more or less varied with brown or blackish: *rostrum* sulcated, carinate, piceous: *antennae* suffous: *thorax* lobed at the eyes; punctured; an obsolete, oblique, cinereous line each side preceding to the posterior angles: *elytra* with four somewhat elevated, acute lines, the exterior ones uniting behind; interstitial spaces wide, with double series of punctures, obsolete behind; behind the middle is a more or less dilated common space, narrower at the suture than on the lateral margin; on this spot the inner elevated

line is interrupted, & the line is also depressed or interrupted towards the base ;
 thighs two toothed, somewhat annulated with piceous & blackish.

Length less than one fifth of an inch.

Var. A. Somewhat cinerous.

Var. B. Paler piceous ; larger.

I have obtained this species in June on *Pinus rigida*. The body is more oblong than that of *anaglypticus* ; the humerus is less prominent. It occurred in New Jersey, Florida, & the varieties in Missouri. Can this be *C. aratus*, Germar? His description does not altogether agree with my specimens.

3. *C. foveolatus*, Black, with large, profound punctures ; elytra with yellowish spots.

Inhab. U. S.

Curculio foveolatus, Knock in Melsh. Catal.

Body black, with dilated punctures ; head with dense, small punctures ; a frontal indentation, and yellow spot ; rostrum robust, moderate, arquated, punctured like the head : antennae jointed ; first joint hardly reaching the eyes ; thorax with three small yellowish spots & one before ; elytra with regular series of large quadrate punctures ; several small yellowish spots & a large, irregular one behind : feet unarmed.

Length less than one fifth of an inch.

This insect differs so essentially from the characters of this genus as given by Schoenherr that it may be separated under the following name & characters
 Genus *Tyloderma*, Antennae rather short & robust, eleven jointed ; rostrum moderate, rather robust, arquated ; pectus grooved ; postpectus entire ; thorax lobed at the eyes ; tarsi spongy beneath : elytra covering the tip of the abdomen.

From *Cryptorhynchus* it is distinguished by the number of joints in the antennae, & in this respect it agrees with *Lyprus*, *Tapinotus* & *Ulosomus* Sch. but the former has the tarsi compressed & not spongy beneath ; *Tapinotus* has the elytra shorter than the abdomen & in *Ulosomus* the recipient groove is extended upon the postpectus. I have not seen the insect which forms this latter genus, but its characters seem to agree better with the above described than any other.

4. *C. bisignatus*, Elytra with an oblique whitish spot rather before the middle. Blackish brown : body covered with small scales, which are more erect on the thorax ; thorax extended on the posterior middle at the scutel, & acute : elytra with about four elevated lines & intermediate double series of punctures ; an oblique, oval, whitish spot rather before the middle.

Inhab. Indiana.

Length less than three twentieths of an inch.

5. *C. posticatus*, Nob. Journ. Acad. Nat.

6. *C. parochus*, Herbst, (*Curculio*) Naturyst.

Varies in size. I have a specimen from Missouri, of which the length is nearly one fourth of an inch.

The recipient groove in this species extends upon the postpectus & terminates between the intermediate feet.

7. *C. argula*, Fabr. (*Rhynchaenus*) Syst. Eleut.

Curculio nenuphar, Herbst Naturyst.

R cerasi, Peck, Jour. Mass. Agr. Soc. Jan. 1819.

This also varies much in size, & depredates on the plumb & peach & other stone fruits. My kinsman the late excellent Wm Bartram informed me that it also destroys the European Walnut in this country.

SUBGENUS CAMPTORHINUS, Sch.

8. *C. tubulatus*, Thorax tubular before ; interstitial lines with a series of hairy punctures.

Inhab. Indiana.

Body black, punctured ; *rostrum* rather slender, arquated ; between the eyes indented : *thorax* densely punctured, anteriorly abruptly contracted so as to be almost tubular ; *elytra* with deeply impressed, punctured striae ; interstitial lines flattened & with a series of punctures, each furnishing a recurved, whitish hair.

Length under one fifth of an inch.

I place this small species in the present subgenus, from the character of the eyes which are very large, remote above & closely approaching beneath.

CEUTORHYNCHUS, Schupp.

1. *C. acephalus*, Nob. (Falciger) Journ. Acad. Nat. Sc. 3, p. 309.

The common whitish line at base of the elytra is rather less obvious than that of *C. pericarpus*, F.

2. *C. cretura*, Herbst, (Curculio) Naturyst. 7, p. 70, pl. 100. fig. 5, C.

I mentioned this species under the name of 4- spinosus in the Journ. Acad. Nat. Sc. 3, p. 310.

3. *C. triangularis*, Thorax with two obtuse tubercles ; elytra with a common subtriangular, whitish spot at base.

Inhab. Indiana.

Body robust, short : densely punctured : *antennae* bright rufous, club blackish : *rostrum* with somewhat elevated lines ; *thorax* with dense, rather large punctures ; a longitudinal indented line in which are white hairs ; an obtuse tubercle each side a little behind the middle : *elytra* with deeply impressed striae, & rather large punctures ; interstitial lines transversely rugous ; at base is a common elongated whitish triangular spot ; lateral edge, behind the humerus, white : *beneath* with scale like, white hairs : *thighs* unarmed.

Length about three twentieths of an inch.

This is longer than *pericarpus*, F. which it much resembles, but the common spot is much more dilated behind & triangular.

4. *C. inaequalis*, Thorax 4-tuberculate, & bidentate before.

Inhab. Indiana.

Body brown, short & robust : *thorax* with an indented line, which so indents the anterior edge as to exhibit two denticulations in that part ; each side of the middle is an obtuse rather large tubercle, & still more lateral & a little posterior is a less obtuse tubercle ; *elytra* with the alternate interstitial lines more elevated.

Length over one tenth of an inch.

I obtained many specimens resting upon a newly constructed fence in the spring.

MONONYCHUS, Schupp.

M. vulpeculus, Fabr. Schoenh.

On the flowers of the *Ceanothus americanus*, L. & *Verbascum thapsus*, L. in July.

ZYGOPS, Schoenh.

1. *Z. quercus*, *Body* black, covered with white scales ; *rostrum* a little curved

towards the base : *front* between the eyes very narrow : *elytra* striated, at tip a little reflected : *thighs* not obviously emarginated, nor toothed.

Length over one tenth of an inch.

This the *Curculio quercus*, Melsh. Catal.

Belongs to the subgenus *Coptorus*, Sch.

2. *Z. operculatus*, Nob. (*Cryptorhynchus*) Journ. Acad. Nat. Sc.

3. *Z. oculus*, Nob. (*Cryptocephalus*) Journ. Acad. Nat. Sc.

CENTRINUS, Schoenh.

C. scutellum album. Punctured ; with scales ; scutel white.

Inhab. U. S.

Curculio scutellum album. Knock in Melsh. Catal.

Body black, densely punctured, & with short pale yellowish or whitish scales : *head* minutely punctured : *rostrum* long, punctured, with a short, impressed line at base : *antennae* piceous : *thorax* with dense orbicular punctures covering the whole surface ; the tip of the posterior middle wite at the scutel : *scutel* white : *elytra* with deeply impressed striae ; interstitial lines flat, broad, densely punctured : *beneath* with whitish metallic scales, much more dense than on the superior surface.

Length three twentieths of an inch.

Var. A. Over one fifth of an inch, the rostrum is more rectilinear towards the tip.

Var. C. *Elytra* with a slight piceous tinge.

I have taken this insect in Pennsylvania, Indiana & Missouri, The Variety is from Arkansaw.

SIONUS, Clairv.

C. scrophularia, Auct. My specimen is so much like the European individuals that it can hardly be considered to vary from them.

RHYNCHOPHORUS, Herbst.

1. *R. praepotens*, Thorax with three black vittae ; *elytra* each with two.

Inhab. Arkansaw.

Body black, covered with dense, prostrate, cinereous hairs : *rostrum* shorter than the head & thorax : *thorax* with three black vittae, extended behind at the scutel : *elytra* with double series of punctures ; a black vitta on the middle of each, & a narrower subsutural one.

Length more than three fifths of an inch.

This is a fine insect.

2. *R. interstitialis*, Thorax nearly as long as the *elytra*; interstitial lines with a series of punctures.

Inhab. U. S.

Body black brown, with large punctures : *rostrum* linear, a little curved, punctures large at base, smaller at tip ; base grooved above ; *head* punctured, small : *antennae* rufous : *thorax* almost as long as the *elytra*, with double series of punctures ; interstitial lines not rounded and with a series of small punctures : *thighs* unarmed ; *tibiae* with hair inside, and mucronate at tip.

Length less than one fourth of an inch.

3. *R. pertinax*, Thorax with three vittae ; *elytra* regularly striate.

Inhab. Florida.

Calandra pertinax, Olivier. Ins., Schoenh.

Body black, more or less covered with a dense, dull yellowish crust ; *rostrum* arquated, compressed ; with an elongated groove at base, above attenuated

at the tip; *thorax* particularly covered with the crust, which is punctured, leaving only three elevated, impunctured vittae, of which the intermediate one is wider before the middle and the lateral ones behind the middle: *elytra* with slender, acute striae, in which are very small punctures; interstitial lines equal, regular, a little convex.

Length nearly eleven twentieths of an inch.

4. *R. truncatus*, Thorax with three vittae; *elytra* with the alternate interstitial lines more obvious.

Inhab. Missouri.

Body black, partially covered with a dirty cinereous crust; punctured: *rostrum* arquated, compressed, with an elongated groove at base above, attenuated at tip: *thorax* with three elevated, punctured vittae, of which the intermediate one is dilated suboval before the middle, and the lateral ones have an obvious branch extending to the posterior angles: *elytra* almost truncate behind; striae numerous; interstitial lines slightly punctured, the alternate ones more obvious; two or three striae between the interstitial lines.

Length half an inch.

Much like *R. pertinax*, but the broader thoracic vittae, the more numerous striae, unequal interstitial lines and almost truncated *elytra*, distinguish it.

5. *R. cicatricosus*, Thorax with three vittae; *elytra* with an elevated line & obsolete dilated indentations.

Inhab. Louisiana.

Body black, partially covered with a dirty cinereous crust or pellicle; *rostrum* arquated, compressed, with a slight groove at base above; *thorax* with three elevated, dilated, irregular, impunctured vittae, the lateral ones have an obvious branch extending to the posterior angles: *elytra* with numerous striae, a more obvious, elevated, subsutural, impunctured, interstitial line; numerous dilated, obsolete dots or slight undulations.

Length nearly nine twentieths of an inch.

Resembles the preceding as respects the number of the striae of the *elytra*, but their surface is rendered a little irregular by indented dots or undulations which are obsolete; the thoracic vittae are a little truncated at tip.

6. *R. venatus*, Thorax trilineate, and with discoidal punctures; *elytra* with capillary striae; surface a little unequal.

Inhab. U. S.

Body black opaque, more or less, and particularly the thorax, covered with a dull cinereous deposite; *rostrum* with discoidal punctures at base; compressed, a little arquated; a dilated impressed line at base above; *thorax* with discoidal, equal punctures; trilineate, the intermediate line slender, the lateral ones undulated, a little broader, punctured: *elytra* with distinct, acute striae, punctures large but not profound, obsolete, excepting each side and at base; interstitial lines alternately and very slightly more prominent; surface slightly unequal.

Length over three tenths of an inch.

Smaller than the preceding species, and the thoracic elevated lines are much more slender.

7. *R. rectus*, Thorax with three abbreviated raised lines, and dense discoidal punctures; *elytra* with series of punctures.

Inhab. U. S.

Body black, opaque, covered with a dull cinereous coating: *rostrum* compressed, arquated, punctured at base, and with a dilated, impressed line at base above; *antennae* piceous: *thorax* with close set, discoidal punctures; three elevated lines or narrow vittae, of which the intermediate one is abbreviated into an irregular spot before the middle, or almost obliterated by the punctures behind, the lateral ones are rectilinear, a little oblique and obliterated before by

the punctures : *scutel* polished : *elytra* with regular series of rather large punctures, the four interstitial lines next the suture, on each, more elevated than those of the middle.

Length about three tenths of an inch.

In comparison with *R. venatus*, the thorax is much more densely punctured, and the lateral vittae are rectilinear.

8. *R. immunis*, Naked ; thorax profoundly punctured, excepting on the middle and each side of the middle.

Inhab. Louisiana.

Body black, slightly polished, not covered by any deposit : *rostrum* compressed, arquated, with minute punctures at base, and a profound impressed line at base above : *antennae* piceous ; *thorax* with numerous profound punctures ; a broad impunctured, longitudinal, hardly raised space each side of the middle, extending to the anterior and posterior margins, and a transverse impunctured space before the middle : *scutel* polished : *elytra* with regular, somewhat double series of punctures ; interstitial lines regular, convex, alternately a little wider, and wider than the diameter of the punctures.

Length over three tenths of an inch.

The raised surfaces of the thorax on each side of the middle, and a little before the middle, are but little elevated, impunctured ; the thoracic punctures are profound and not dilated, particularly a little group on the middle of the anterior margin, and a more extensive double one behind the middle.

9. *R. placidus*, Thorax densely punctured ; *elytra* with punctured striae ; feet dull rufous.

Inhab. U. S.

Body black, punctured : *rostrum* arquated, compressed, piceous towards the base ; with an impressed, punctured line ; *antennae* piceous : *thorax* with dense punctures, destitute of obvious elevations : *scutel* concave, polished : *elytra* with series of punctures rather wider or as wide as the interstitial lines, which also have a series of small punctures ; tip dull piceous : *feet* rufous, with black incisures.

Length about three tenths of an inch.

In general shape it resembles *R. immunis*, N. but the thorax has not very obvious elevations and is more generally punctured ; the punctures of the elytral series are larger & the interstitial lines have a series of small punctures ; the feet also are rufous.

10. *R. inaequalis*, Thorax with numerous discoidal punctures ; *elytra* with the punctures in the series remote.

Inhab. U. S.

Body black, more or less covered with a dirty brown pigment or crust, punctured ; *rostrum* moderate, compressed, arquated, with an impressed line at base ; *thorax* with discoidal punctures and from one to three slight elevations : *elytra* with obvious striae, in which are remote punctures ; interstitial lines with oblong, longitudinal punctures ; sutural line with a series of small close set punctures.

Length nearly one fourth of an inch.

The elytral punctures are remote in the striae, and those of the interstitial lines are much elongated.

11. *R. compressirostris*, Nob. (Calandra) Journ. Acad. Nat. Sc. 1823. Amer. Ent. Vol. 1. pl. 9.

Germar Coleopt. Sp. Nov. 1824.

COSSONUS, Clairv.

1. *C. corticola*, Black; thorax impressed behind; rostrum with an indented line between the eyes, and another on the middle of the rostrum.

Inhab. U. S.

Curculio corticola, Melsh. Catal.

Body deep black, immaculate, punctured; *head*, punctures minute and remote upon the vertex and becoming larger and more dense towards the tip of the rostrum; a profoundly indented, dilated line between the eyes; rostrum dilated towards the tip, piceous: thorax with a transverse obtusely indented line on the anterior sub margin; punctures large separate profound orbicular, minute upon the anterior margin and confluent upon the posterior and lateral margins; middle of the base widely indented and with a carinate line in the indentation: elytra profoundly striate, striae with large profound transverse punctures.

Length, base of rostrum to tip of elytra more than three twentieths of an inch.

A species equally common in Missouri and Pennsylvania. I have observed it to inhabit in considerable numbers under the loose bark of yellow Pine trees in October.

2. *C. platalea*, Thorax impressed behind; rostrum punctured; thorax rather short.

Inhab. U. S.

Head punctured, a little indented transversely between the eyes; *rostrum* dilated towards the tip, punctured: antennae piceous; thorax with the punctures not very profound, distant, irregular; a basal indentation, with a slight, obtuse carina in the middle of the indentation; rather short, much rounded on the sides; elytra, striae with large punctures; tarsi obscure piceous.

Length nearly one fourth of an inch.

The thorax is proportionally shorter than that of the *corticola*, the punctures are less deeply impressed, and the rostrum is not obviously indented longitudinally. It varies in having the tibiae obscure piceous.

DRYOPHORUS, Schupp.

D. corticalis, Thorax with dilated punctures; elytra with dilated striae.

This is so much like *D. lymexylon* Fabr. that it is considered the same: but on comparing with my European specimens, I find it smaller and the punctures of the head are obsolete, whereas in the European specimens they are large and obvious. This is the *Curculio corticalis*, Payk. of Melsh. Catalogue.

SUPPLEMENT.

ERIRHINUS, Sch.

1. *E. ephippiatus*, *Body* yellowish-rufous, with numerous prostrate hairs: *thorax* with a slightly indented, longitudinal line: *elytra* with rather wide impressed striae, containing large punctures; near the base a common transverse black spot, connected along the suture with another transverse, triangular; black spot: *beneath*, excepting the feet, dusky: *thighs* unarmed.

Inhab. Indiana.

Length one tenth of an inch.

2. *E. rufous*, *Body* pale rufous, with numerous, oblong whitish, prostrate scales: *rostrum* longer than the head & thorax, arquated, linear: *elytra* with impressed striae: suture, near the scutel, indented: *scutel* not very obvious.

Inhab. Missouri.

Length one tenth of an inch.

ANTHONOMUS, Germ.

1. *A. erythropterus*, *Body* Black-brown: *rostrum* very slightly curved, as long as the head & thorax, thickly punctured: *antennæ* rufous: *head* not obviously punctured; with white, prostrate hair beneath; a puncture rather above the line of the eyes: *thorax* densely punctured: *scutel* with prostrate white hair, rounded: *elytra* beyond the middle & excepting at the suture, dull rufous; with impressed, punctured striae; & with scattered, rather short hairs each side: *stethidium* with prostrate, white hair.

Inhab. Pennsylvania.

Length over one tenth of an inch.

Curculio erythropterus, Melsh, Catal.

Mr. Schöenherr informs me that Dejean has given to this species the name of *suturalis*.

2. *A. signatus*, *Body* with numerous, prostrate, white hairs: *rostrum* longer than the head & thorax, slightly arquated, linear, lineated: *scutel* oval: *elytra* sanguineous, with punctured, impressed striae; region of the scutel to the middle of the suture, & band of three large, unequal spots behind the middle, brown.

Inhab. U. S.

Length less than one tenth of an inch.

I adopt the name proposed by Schoenherr, in preference to that of sanguinipennis, under which I described it.

BALANINUS, Germ.

B. constrictus, Nob. (Rynchænus) Journ. Acad. Nat. Sc. Vol. 3, p. 313.

TYCHIUS, Germ. Sch.

1. *T. aratus*, *Body* entirely covered with pale olivaceous, dense, elongated or rounded scales: *rostrum* as long as the head & thorax, linear; scales like robust hairs; transversely indented over the insertion of the antennæ; a longitudinal impressed line; tip naked, rufous: *thorax* with the hair-like scales converging backwards to the dorsal line: *elytra* with indented striæ, punctures are not visible; with densely imbricated, rounded scales: middle of the interstitial lines with a series of prostrate scale like hairs: *thighs* unarmed, emarginate.

Inhab Missouri.

Length three twentieths of an inch.

Can this be *C. penicillus*, Herbst?

2 *T. amoenus*, *Body* dark brownish, with minute scales: *rostrum* somewhat arquated, as long as the head & thorax, dull rufous: *thorax* narrowed considerably before; base not undulated: *elytra* varied with whitish: *feet* unarmed, dull rufous: *tarsi* black.

Inhab. U. S.

Length one tenth of an inch.

BARIDIUS, Sch.

1. *B. nigrinus*, *Body* black, densely punctured: *rostrum* arquated, linear; as long as the head & thorax: *thorax* with rather large, dense punctures, dilated & rounded, at the scutel: *scutel* as wide as long, rounded behind: *elytra* with impressed, narrow, punctured striæ, & much broader flat interstitial lines, on which are regular, dilated, transverse punctures.

Inhab. Pennsylvania.

Curculio nigrinus; Melsh. Catal.

Length one tenth of an inch.

2. *B. interstitialis*, Nob. (Rynchænus.) Journ. Acad. Nat. Sc. Vol. 3, p. 314.

3. *B. scolopax*, *Body* dark chesnut: *rostrum* longer than the head & thorax, slightly curved, linear: *thorax* conic, with small, numerous punctures: *elytra* deeply im-

pressed, not obviously punctured, a little shorter than the abdomen.

Inhab. Missouri

Length over one tenth of an inch.

4. *B. acutipennis*, *Body* brassy, highly polished, punctured: *rostrum* as long as the head & thorax, arquated, linear: *thorax*, punctures profound but not close set; base undulated. *elytra* with acute, deeply impressed, impunctured striae, which, on the posterior declivity are dilated so as to make the interstitial lines acute, and elevated; tip of the *elytra* on the middle with an elevated, acute tooth.

Inhab. Mexico.

Length one tenth of an inch.

CRYPTORHYNCHUS, Illig.

1. *C. retentus*, *Body* covered by very short, dense, prostrate hair: *rostrum* longer than the head and thorax; a little arquated, punctured & on the sides lineated: *thorax* with two whitish undulated vittae: *scutel* orbicular: *elytra* with four elevated, acute, interrupted lines, between which are double series of impressed punctures; elevated lines obsolete on the depressed tip: *thighs* emarginate towards the tip & bidentate.

Inhab. Mississippi.

Length less than three tenths of an inch.

It seems to be related to *C. obtentus*, Herbst?

1. *C. lineaticollis*, Nob. (*Rynchænus*) Journ. Acad. Nat. Sc. Vol. 3, p. 313—As this has evidently the pectoral groove it cannot belong to the genus *Tylomus*, the anterior feet also are distant.

3 *C. palmacollis*, Thorax with numerous small grooves.

Inhab. U. S.

Rostrum longer than the head & thorax, with elevated lines: *antennae* sanguineous: *thorax* with numerous small grooves converging at the dorsal line: *elytra* with double series of large punctures, the intervening lines elevated, acute: *thighs* with an acute tooth.

Inhab. U. S.

Length one fifth of an inch.

Allied to *lineaticollis*, N. but the punctures of the *elytra*

are larger ; body smaller.

4. *C. cribricollis*, *Body* black ; with numerous, very short hairs : *rostrum* as long as the head & thorax, transversely indented between the eyes : *antennæ* rufous : *thorax* much narrower before : the whole surface covered by large concave punctures, without any very flat space between them : *elytra* much wider than the thorax, with rather wide, impressed striæ, in which are close set punctures.

Inhab. Mississippi.

Length nearly three twentieths of an inch.

5. *C. obliquus*, *Body* covered with orbicular scales, which are dusky, black & white : *thorax* with three distinct black dots, placed transversely : *scutel* small, black : *elytra* triangular ; region of the scutel, extending from the humerus to the suture, dusky, in which are about two black spots ; then a very oblique cinereous band ; then a dusky band on the middle ; then a cinereous band ; tip dusky ; with punctured striæ.

Inhab. Louisiana.

Length less than one fourth of an inch.

Benckebear informs me that Dejean has given the name of *umbrosus* to this species.

6. *C. ferratus*, *Body* black, with minute, orbicular scales : *thorax* confluent punctured : *rostrum* not quite as long as the head & thorax, cylindric, hardly arquated : *elytra* striate, not visibly punctured, with numerous, yellowish-brown, small, unequal spots ; interstitial lines rounded, somewhat unequally elevated.

Inhab. Louisiana.

Length less than three twentieths, of an inch.

BAGOUS, Germ.

1. *B. mamillatus*, Cinereous ; *elytra* tuberculate.

Inhab. Missouri.

Body cinereous : *elytra*, each with two tubercles behind the middle, placed obliquely, a smaller one on the middle & the humerus with a small tubercle : *thighs* clavate : *tibiae* much arquated towards the tip, & at tip acute, with

rather long, rigid hair on their inner side.

Length nearly three twentieths of an inch.

2 *B. simplex*, Covered with dusky, somewhat olivaceous, orbicular scales: *rostrum* shorter than the head & thorax: *thorax* with a slight appearance of an impressed band on the middle?; *elytra* with impressed striæ; punctures not visible; striæ obsolete on the posterior declivity, excepting the two exterior ones; humerus rather prominent: *tibiæ*, intermediate pair more arquated.

Inhab. U. S.

Length over one tenth of an inch.

Schoenherr informs me that Dejean has given the name of *egenus*, to this species.

3. *B. æreus*, *Body* dull brassy: *rostrum* short, thick: *thorax* not obviously punctured above, lateral punctures not deeply impressed: *scutel* distinct: *elytra* with striæ of punctures at base, none beyond the middle: *feet* rufous: *thighs* slender.

Inhab. U. S.

Length one tenth of an inch.

Schoenherr has separated this species under the generic name of *Analeis*. Dejean proposed for it the specific name of *æreus*, I formerly described it under the name of *semi-punctatus*.

TYLODES, Sch.

Subgenus *Acalles*, Sch.

T. clavatus, *Body* brown, covered with short upright, clavate bristles: *rostrum* moderate, arquated: *thorax* with the punctures visible: *elytra* with striæ of punctures, the clavate bristles on the interstitial lines.

Inhab. Florida.

Length nearly one tenth of an inch.

CEUTORHYNCHUS, Schupp.

C. curtus, *Body* short, robust, blackish: *rostrum* as long as the thorax, arquated, cylindrical: *thorax* narrowed before, with rather large, numerous, impressed punctures; a transverse, impressed line on the anterior margin; & a longitudinal, impressed line, more obvious at base; each side rather behind the middle is a smaller, subacute tubercle:

elytra, region of the scutel impressed ; striæ profound & as wide as the interstitial lines: *thighs* rather slender, unarmed.

Inhab. U. S.

Length less than one tenth of an inch.

CLEOGONUS, Sch.

C. sedentarius, *Body* with minute scales, of a blackish or dusky colour, but with a few irregular, small, whitish patches, of which the largest is on the posterior declivity of the *elytra*, extending by two branches to the tip : *thorax* with rather large punctures : scutel small, rounded, white : *elytra*, striæ hardly impressed, with very large, not close set, longitudinal punctures : *thighs* with a white annulus near the tip : *tarsi* with silvery hairs, sericeous.

Inhab. Florida.

Length less than one fifth of an inch.

COSSONUS, Clairv.

C. multiforus, *Body* blackish-chestnut : rostrum moderate, rather robust, a little arquated, with large punctures, &, with the *antennæ*, rufous : *thorax* long, with very large, crowded punctures : *elytra* with striæ of large punctures, wider than the interstitial lines : *feet* simple, rufous.

Inhab. Mexico.

Length over one tenth of an inch.

RHYNCHOLUS, Creutz. Sch.

C. latinus, *Body* glabrous, blackish chestnut : rostrum broad, short, a little narrower in the middle, confluent punctured : *thorax* with numerous, profound, not very dense punctures ; somewhat depressed ; sides regularly arquated ; *elytra*, striae about equal to the interstitial lines, impressed ; punctures regular, profound, dense : *thighs* abruptly clavate, unarmed.

Inhab. Florida.

Length one tenth of an inch.

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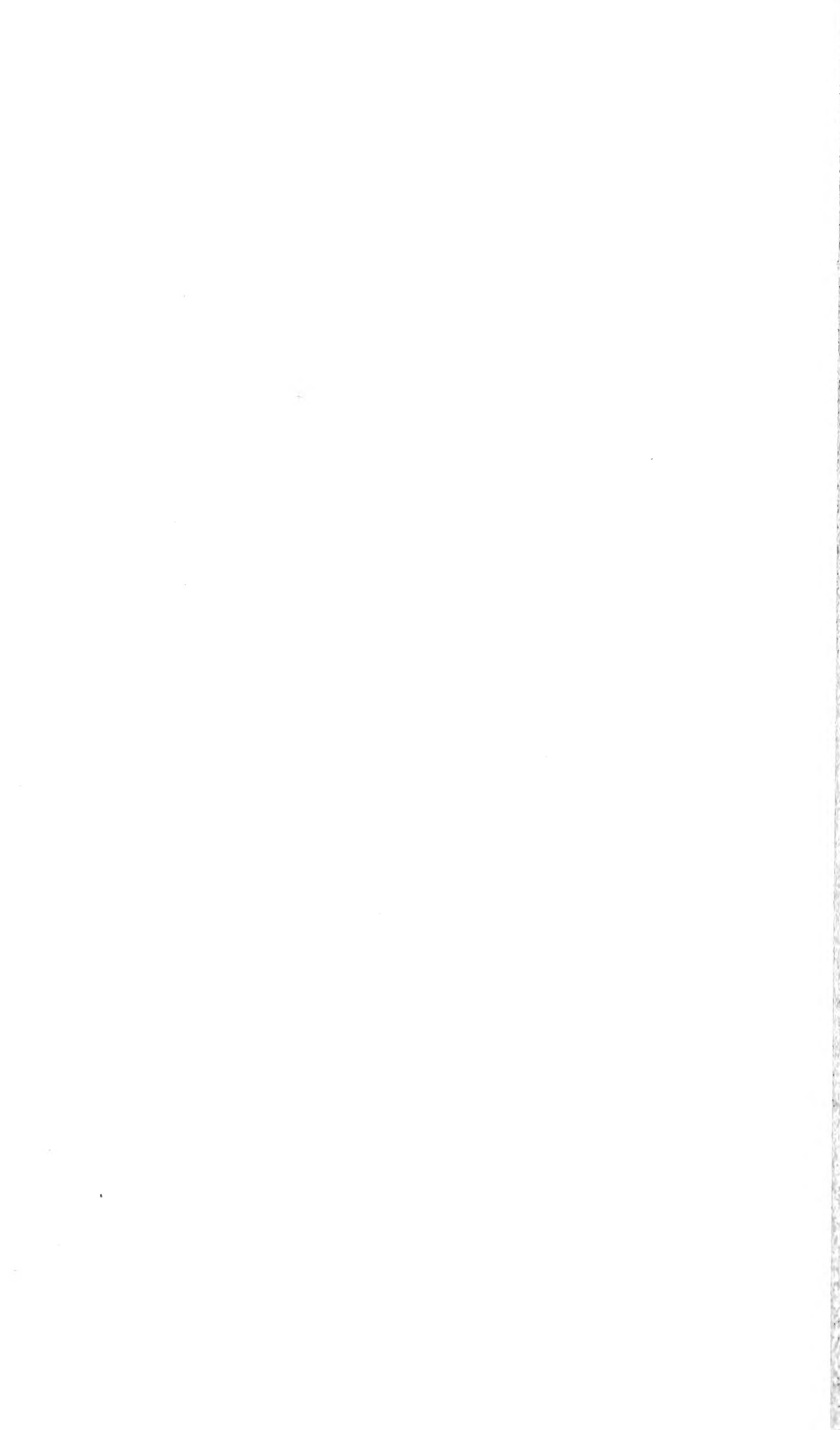
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