

*Descriptions of COLEOPTEROUS INSECTS collected in the late Expedition to the Rocky Mountains, performed by order of Mr. Calhoun, Secretary of War, under the command of Major Long. By THOMAS SAY, Zoologist to the Expedition.*

[READ OCTOBER 22, 1823. Concluded.]

### ALTICA, *Geoff. Latr.*

1. *A. gibbitarsa*. Rufous; antennæ black; elytra green; thorax spotted.

Inhabits Missouri.

*Body* rufous, glabrous, ovate: *head* with an impressed, frontal line: *antennæ* blackish: *thorax* three-spotted; dorsal spot double; lateral ones smaller and rounded: *scutel* purplish-bronze: *elytra* green, polished; punctures obsolete, irregular: *beneath* yellowish-rufous: *thighs* rufous: *tibia* and *tarsi* blackish; terminal joint of the posterior tarsi very gibbous, almost spherical near the claws.

Length less than one-fourth of an inch.

2. *A. vians*. Thorax yellowish, with a transverse, black spot; head and elytra black.

Inhabits the United States.

*Altica vians*. Knoch in Melsh. Catal.

*Head* black: *thorax* yellowish; a transverse, black spot, not undulated, occupying nearly all the disk: *elytra* greenish-black, with minute, equidistant punctures: *beneath* black: *pectus*, on each

side, excepting a small black spot, yellowish: *venter* margined with rufous: terminal joint of the posterior tarsi gibbous near the claws.

Length nearly one-fourth of an inch.

3. *A. scripticollis*. Black; thorax yellowish, with a transverse, undulated spot; venter yellow.

Inhabits Missouri.

*Body* oval, black, glabrous, minutely punctured: *head* with a transverse, rufous, frontal spot, and another very small one at the base of each antenna: *thorax* yellow; a transverse, undulated spot occupying more than two-thirds of the transverse diameter: *scutel* impunctured, rounded at tip: *elytra* black, immaculate: *pectus* yellowish: *venter* pale yellowish; terminal joint of the posterior tarsi gibbous near the claws.

Length nearly one-fourth of an inch.

Very like the preceding, but may be distinguished by the frontal spot, and by the undulated, litterate form of the thoracic spot.

4. *A. triangularis*. Black; thorax yellowish, with three black points placed triangularly.

Inhabits Missouri.

*Body* oval, black, glabrous: *thorax* yellowish, with three black points placed triangularly, the two anterior ones orbicular, the posterior one linear, very short: *elytra* violaceous-black, and, as well as the thorax, minutely punctured: *pectus*, excepting the origin of the feet, yellow; terminal joint of the tarsi simple.

Length about one-fourth of an inch.

Remarkable by the triangular position of the black thoracic points.

5. *A. bimarginata*. Blue; thorax with an impressed, transverse line; elytra with a much elevated line near the margin.

Inhabits Missouri.

*Body* oblong-oval, blue, minutely punctured: *antennæ* black: *thorax* with an impressed, transverse, rectilinear line behind the middle, attaining the lateral margins, and another impressed line before, which is interrupted in the middle and abbreviated each side: *elytra* with an elevated, submarginal line each side, originating on the humerus, and nearly parallel with the exterior edge.

Length from one-fifth to one fourth of an inch.

The posterior thighs are much less dilated than those of *collaris*, Fabr.

6. *A. 5-vittata*. Yellowish; thorax four or five-spotted; elytra five-lined.

Inhabits Missouri.

*Body* oblong-oval, yellowish, glabrous: *antennæ* black; three basal joints rufous beneath: *thorax* with an abbreviated, black line on the middle of the posterior submargin, and a semicircular series of four equal, equidistant, suborbicular, black spots; posterior edge concave at the scutel: *scutel* black: *elytra* with a common sutural fillet; each elytron with a fillet originating at the humerus, and terminating near the tip, and another marginal, less

dilated fillet confluent with the sutural vitta at tip; region of the origin of the posterior feet black: *thighs* rufous: *tarsi*, and a line on the superior edge of the two anterior pairs of thighs, together with a line on the inferior edge of the tibia, black.

Length more than three-tenths of an inch.

The arrangement of the lines of the elytra are similar to those of *A. caroliniana*, Fabr. The head is sometimes black at base, and the two intermediate thoracic dots are confluent.

Found in considerable numbers on the common Elder (*SAMBUCUS*,) and some other plants. On the evening of the 16th of June, I observed great numbers of these flying in a south-east direction from near St. Louis, obliquely across the Mississippi towards an island, the wind at the same time blowing moderately from the eastward; the subsequent evening, about the same hour, they returned by the same route reversed, the wind directly opposing them; both of these days were very warm. During our progress up the Missouri river, I observed, several times, similar migrations of this species.

7. *A. nana*. Cupreous or brassy, polished; beneath blackish; antennæ and feet rufous; elytra striate.

Inhabits the United States.

*Body* green, cupreous or golden, polished, punctured: *head* impunctured: *antennæ* rufous; second joint nearly as long as the third: *eyes* brown: *tho-*

*rax* with numerous irregular, large punctures; a transverse, impressed, conspicuous, rectilinear line behind the middle, near the lateral margin abruptly reflected backwards, and terminating at the basal edge; edge blue: *scutel* violaceous: *elytra* with impressed striæ, in which are large, profound, quadrate punctures; edge blue: *beneath* black: *feet* rufous.

Length about one-tenth of an inch.

Seems to be closely allied to *A. helxines*, but the posterior thighs are never black, as those of that insect are described to be.

8. *A. picta*. Sanguineous; elytra blue; postpectus and venter black.

Inhabits the United States.

*A. sanguinicollis*? Melsh. Catal.

*Body* ovate: *head* sanguineous: *eyes* brown: *antennæ* fuscous, pale at base: *thorax* sanguineous; posterior angles very obtusely rounded: *scutel* dark violaceous, rounded at tip: *elytra* blue, polished, with minute, distant punctures: *postpectus* and *venter* deep black: *feet* pale rufous: *posterior thighs* piceous each side and above.

Length one-tenth of an inch.

A beautiful little species.

9. *A. senilis*. Pale yellow; elytra green; suture and exterior edge yellowish.

Inhabits Missouri.

*Body* pale yellow, punctured: *eyes* fuscous: *antennæ* a little dusky at tip: *thorax*, punctures in-

distinct; an indented, transverse line near the base: *scutel* subacute at tip: *elytra* green; a common sutural fillet, exterior and terminal edges, and epipleura, yellowish; punctures irregularly disposed: *posterior thighs* but little dilated.

Length less than three-twentieths of an inch.

10. *A. centralis*. Black; thorax with a yellow lateral spot; *elytra* with a large common rufous spot.

Inhabits Missouri Territory.

*Body* oval-orbicular, deep black, polished, with short dense hairs: *antennæ* and *palpi* pale yellowish: *thorax*, lateral margins yellow: *elytra* with a large, oblong, common, rufous spot on the middle: *thighs* at tip, *tibia* and *tarsi*, pale rufous.

Length rather more than one-tenth of an inch.

11. *A. uniguttata*. Black; thorax rufous, with a black spot; *elytra* black; two vittæ and margin yellow.

Inhabits the United States.

*Body* black, impunctured: *front* rufous: *thorax* rufous; a large, black, central spot, sometimes connected with a smaller one each side, yellowish or pale: *elytra*, with obsolete punctures, black; two equal, yellowish vittæ joining at the tip, of which one is subsutural, and the other originating on the humerus; exterior edge yellowish: *pectus* yellow: *venter*, margin rufous: *feet* rufous: *tarsi* black.

Length more than one-fourth of an inch.

Var. a. Feet black; front black.

The variety is from near the Rocky Mountains. This species is related to *A. 5-vittata*, to *caroliniana*, Fabr. and also to *horticola*, and probably to *glabrata*, Fabr.

### TRIPLAX, Latr. (Regné Animal.)

1. *T. thoracica*. Pale rufous; elytra black.

Inhabits the United States.

*Ips bicolor*. Melsh. Catal.

*Body* pale rufous, punctured; *eyes* and *antennæ*, excepting the basal joints, black: *elytra* with regular series of deeply impressed punctures; interstitial lines with a somewhat regular, undulated series of smaller punctures.

Length one-fifth of an inch.

I change the name given by Mr. Melsheimer, as it is pre-occupied in this genus.

2. *T. sanguinipennis*. Black; elytra and abdomen rufous.

Inhabits the United States.

*Tritoma bicolor*. Melsh. Catal.

*Body* black, minutely and rather distantly punctured: *antennæ*, intermediate joints pale rufous: *palpi* whitish: *elytra* pale rufous, with punctured striæ: *abdomen* pale rufous.

Length less than one-fifth of an inch.

The word *bicolor* is pre-occupied in this genus.

3. *T. biguttata*. Black, with a spot at the base of each elytron; beneath yellowish.

Inhabits the United States.

*Tritoma biguttatum.* Knoch in Melsh. Catal.

*Body* punctured, black, yellowish beneath: *head* dull piceous, darker on the disk: *elytra* with punctured, slightly impressed striæ, each with a large, basal, yellowish-rufous spot extending from the scutel to the humeral angle, and hardly attaining the middle of the elytron.

Length less than three-twentieths of an inch.

A common species.

### PHALACRUS, *Payk. Latr.*

1. *P. pallipes.* Piceous-black, polished; antennæ, palpi and feet testaceous.

Inhabits Missouri.

*Body* deep piceous-black, highly polished, immaculate: *antennæ* and *palpi* pale testaceous; terminal joint of the former much largest, abruptly narrowed at tip: *thorax* with minute, obsolete punctures each side; angles acute; an obsolete, indented spot at the posterior angle; base dilated somewhat in the region of the scutel: *elytra* with obsolete, remote series of punctures, rather more distinct near the external margin; two impunctured striæ near the suture on each elytron: *pectus* and *venter* with a few yellow hairs: *feet* pale testaceous, with scattered hairs.

Length not quite one-tenth of an inch.

In considerable numbers on plants near the



Konza village. The elytra appear perfectly smooth and polished to the eye, and to an ordinary magnifier.

2. *P. penicillatus*. Black, glabrous, oval; thighs ciliate at tip.

Inhabits the United States.

*Body* oval, entirely deep black, glabrous, impunctured, polished: *antennæ* piceous-black, with sparse, short setæ; terminal joints with cinereous, short pubescence: *thorax* minutely punctured; angles subacute: *elytra*, humeral angle subacute, with obsolete, distant series of punctures, and an impressed stria near the suture: *thighs* ciliate at the inferior tip: *tibia* piceous, black: *venter* with reflected hairs.

Rather larger than the preceding species.

Found near Engineer Cantonment.

It differs from *pallipes* in its differently coloured feet, and ciliate tip of the thighs. In many parts of the United States, this species is found in the seed vessels of such plants of wheat as are destroyed by the parasitic vegetable called *Smut*.

### AGATHIDIUM, *Illig. Latr.*

*A. pallidum*. Body yellowish-testaceous; elytra with very minute, transverse lines.

Inhabits Missouri.

*Body* oval, convex, yellowish-testaceous, glabrous: *head* with a few hairs beneath the edge:

*eyes* prominent, hemispherical, black: *palpi* subulate: *antennæ* hirsute, clavate; club oblong, perfoliate; second joint of the club minute: *thorax* impunctured: *scutel* minute: *elytra* rugose in transverse, very minute lines: *thighs* with very minute spines above: *tibia* with prominent, rigid spines.

Length more than three-twentieths of an inch.

A single specimen occurred under wood, at Engineer Cantonment.

## COCCINELLA.

1. *C. undulata*. Black; exterior margin of the thorax, and undulated exterior margin and spot of the elytra, yellowish.

Inhabits Missouri.

*Body* deep black, punctured: *head* slightly hairy before; punctures obsolete: *antennæ* yellowish-testaceous: *thorax* with acute punctures; lateral margin white: *scutel* triangular; tip acute: *elytra*, punctures dilated, slightly indented; a large white spot on the centre of each, and an undulated, white exterior margin; undulations three: *feet* yellowish-testaceous, piceous at base.

Length rather more than one-tenth of an inch.

Var. a. Undulated margin interrupted into three spots.

Var. b. Central spot of each elytron extended backward, and confluent with the tip of the margin.

2. *C. mali*. Elytra brownish red; each with seven black spots, and a common one on the scutel.

Inhabits North America.

*C. mali*. Melsh. Catal.

*Head* black; two white spots between the eyes: *thorax* black; two small white spots at the base, and a white lateral margin including a black spot; anterior edge yellow; spots on the elytra placed 1, 3, 3, and a common one at the base: *beneath* black; margin of the abdomen fulvous: *feet* testaceous: *thighs* black.

Length seven-twentieths of an inch.

Var. a. Spots of the elytra surrounded with a whitish areola.

*Varietas ocellata*. Melsh. Catal.

Var. b. Ground colour of the elytra whitish.

*C. ocellata*. Melsh. Catal.

3. *C. parenthesis*. Elytra pale yellowish, each with a spot; posterior lunule and common spot at base.

*Coccinella parenthesis*. Melsh. Catal.

„ *5-notata*. Knoch in Melsh. Catal.

Inhabits the United States.

*Head* black; labrum testaceous; a white, abbreviated, frontal line, and a spot near each eye: *thorax* black; a square spot at base; anterior and lateral margin, and abbreviated, acute line before. white: *elytra* with a humeral, black spot; a common one near the base connected with the scutel;

a large lunule, occupying the posterior half of the elytron, sometimes interrupted into two distinct spots: *beneath* black.

Length one-fifth of an inch.

4. *C. tibialis*. Elytra pale yellowish-red, with a common spot near the base, and six black spots on each.

Inhabits Missouri.

*Head* black; frontal spot, and all before the eyes, white: *thorax* black; anterior and lateral margins white, so branched as almost to inclose a black spot on each side: *elytra* pale orange; spots placed 1, 2, 2, 1: *beneath* black: *venter* margined with pale orange: *tibia* and *tarsi* testaceous.

Length more than one fifth of an inch.

5. *C. bioculata*. Elytra red; each with a black spot on the middle.

Inhabits the United States.

*Head* black; orbits white: *thorax* black; a large marginal spot; anterior margin, and two spots at the base, white: *elytra* reddish; a transverse, oval, black spot on the middle of each, sometimes included in an obsolete, white areola: *beneath* black: *venter* margined with rufous.

Length one-fifth of an inch.

The anterior margin of the thorax is sometimes black like the disk, and the basal spots are wanting.

6. *C. albifrons*. Elytra yellow; suture and two spots on each, black; head and anterior part of the thorax whitish.

Inhabits Missouri.

*Head* yellowish: *thorax* black; anterior and lateral margins, and abbreviated line before, white: *elytra*, with the suture, tip, outer edge, and two spots, black; spots placed one near the humerus, and the other behind the middle.

Length less than one-fifth of an inch.

Taken on the Missouri by Mr. T. Nuttall.

7. *C. abdominalis*. White; thorax with seven, *elytra* each with eight black spots.

Inhabits Arkansas.

Yellowish-white: *head* immaculate: *thorax* with seven black spots placed 2, 5; the anterior ones, placed on the middle, oblong, oblique, slightly undulated, and nearly confluent at tip with the posterior intermediate one: *elytra* 8-spotted; spots small, placed 4 near the base, 3 on the middle, and 1 near the tip: *postpectus* dusky: *venter* testaceous: *feet* pale.

Length one-fifth of an inch.

8. *C. humeralis*. Black; *elytra* with a humeral spot, and one behind the middle, red.

Inhabits Arkansas.

*Body* deep black: *head*, a white spot each side between the eyes: *antennæ* and *palpi* pale: *thorax*, an obsolete, whitish, lateral margin and anterior angle: *elytra*, a large, oval, yellowish-red, humeral spot, and an orbicular, red, subsutural one on each, rather behind the middle.

Length more than three-twentieths of an inch.

Two specimens were obtained near the Rocky Mountains.

9. *C. 20-maculata*. Whitish; thorax with five, elytra each with nine black spots.

Inhabits Missouri.

*Coccinella 20-maculata*. Knoch in Melsh. Cat.

Yellowish-white: *thorax* with four rather large, equal, black dots placed in a semicircular series, and enclosing near the base a smaller, obsolete dot: *elytra*, each with nine spots placed 2, 3, 3, 1, the two central ones confluent: *postpectus* and *venter*, excepting the terminal segment, black.

Length one-tenth of an inch.

### ENDOMYCHUS, *Fabr. Latr.*

*E. biguttatus*. Black; elytra sanguineous, with two black spots.

Inhabits the United States.

*Head, thorax, and scutel* black, impunctured; two impressed, longitudinal, abbreviated lines, one on each side at the base of the thorax: *elytra* sanguineous, with numerous small, irregular punctures, and two orbicular, black spots, the smaller one placed behind the humerus, and the other, large, placed behind the middle, touching the margin.

Length near one-fifth of an inch.

PSELAPHUS, *Herbst. Latr.*

1. *P. carinatus*. Reddish-brown; elytra rectilinearly truncated; tergum tricarinate, and with an elevated edge; anterior tibia arcuated.

Inhabits the United States.

*Body* with short hairs: *head* deeply indented on the front; vertex with two small indentations: *maxillary palpi* with the three last joints dilated; the ultimate one triangular or cordate, being widely emarginate at tip; the inner lobe somewhat mucronate; penultimate joint also large and triangular, with a slender spine or seta as long as the joint placed on the exterior angle; antepenultimate joint rounded, with a spine on the exterior side, similar and equal to that of the other joint: *thorax* rounded, somewhat angulated on the middle of the side, punctured: *elytra* not quite half the length of the abdomen; minutely punctured, with two obtuse, elevated lines on each, obsolete before the tip, and with an impressed groove between them: *tergum* rather darker than the elytra, carinated along the middle, and with an abbreviated, carinate line each side at base; edge elevated: *anterior tibia* somewhat arcuated, gibbous before in the middle.

Length less than one-tenth of an inch.

This species is not uncommon, and is often found under the loose bark of the yellow pine: it

is referrible to the genus *CTENISTES*, *Reich.* The elytra are terminated by a straight line like those of the *dresdensis*. It seems probable that the cordate, terminal joint of the maxillary palpi, and the two elongated spines of the preceding joints, may be peculiar to one sex, as a specimen in my collection has but a single spine, and the terminal joint is acute and not dilated.

2. *P. riparius*. Reddish-brown; elytra rectilinearly truncated, half the length of the tergum; tergum simple; anterior tibia rectilinear.

Inhabits Missouri.

*Vertex* convex, with an impressed line each side: *antennæ*, joints from the third to the eighth, inclusive, subequal; ninth a little larger, but hardly longer; tenth transversely oval, double the size of the preceding one; eleventh still wider, and nearly double the length of the two preceding ones conjunctly: *maxillary palpi* unarmed; terminal joint conic-securiform: *thorax* narrowed behind, not closely applied to the elytra; with a longitudinal, impressed line; sides not angulated in the middle, but indented on the margin: *elytra* half the length of the abdomen; humeral tubercle oblong: *anterior tibia* rectilinear: *tergum* convex, simple.

Length more than one-twentieth of an inch.

A little smaller than the preceding. It probably belongs to the genus *BRYAXIS* of Leach.



3. *P. dentatus*. Elytra nearly rectilinearly truncated, half the length of the tergum; tergum simple; anterior tibia arcuated.

Inhabits the United States.

*Head* blackish; a small indentation above each antenna: *antennæ* rufous; joints, from the third to the eighth, inclusive, subequal; ninth a little larger, but hardly longer; tenth transverse, double the size of the preceding one; eleventh oval, wider than the tenth, and as long as the 8th, 9th and 10th conjunctly: *thorax* nearly orbicular, slightly prominent on the sides, blackish; an oval indentation at base, and an orbicular one each side: *elytra* reddish-brown, nearly half the length of the abdomen; humeral tubercle oblong; an impressed line on each elytron obsolete behind: *tergum* convex, simple, blackish: *anterior tibia* a little arcuated.

Length one-twentieth of an inch.

Var. a. Reddish-brown.

Smaller than either of the preceding species.