

ARTICLE III.

Materials towards a History of the Coleoptera Longicornia of the United States.

By S. S. Haldeman. Read January 17, 1845.

THE distinguishing characters of the insects to be brought under consideration in this paper are, the length of the antennæ, the emargination of the eyes, and the possession of four articulations (the third of which is bilobed,) to all the tarsi. They feed upon vegetable matter both in the larva and perfect state, and are consequently most usually found in woods.

This tribe contains, with the exception of the Lamellicornia, or beetles, the largest individuals among the Coleoptera; and when we take their size and beauty into consideration, it appears singular that they should have escaped the special notice of entomologists for so long a period; for although Fabricius, Olivier, and others, had made us acquainted with a large number of species, a detailed account of the genera was wanting, until M. Serville published his "Nouvelle Classification," in the year 1832. Since then, various authors have added to the genera, so that by this time there must be about four hundred, and who can doubt that, in judicious hands, farther subdivisions could be made with advantage. The genera I have ventured to present as new, are such as I cannot satisfactorily refer to the descriptions to which I have access; and as the general facies is frequently the most striking generic character, I have, in consequence of the meagreness of my own collection, laboured under the disadvantage of having to identify, in nearly every instance, from the characters as laid down in the books, and these frequently admit of a latitude of construction which the specimens themselves will not justify.

Many of the species whose names stand under the different genera have not been seen, or, at least, not recognised by me; so that the genus has been inferred upon the evidence of the specific description; and when this has not been satisfactory, the species have been allowed to remain where they were first placed by their describers. It may have happened, in a few instances, that the same species has been placed under more than one generic and specific name; and it is not unlikely that some of Mr. Kirby's species have been redescribed, as I did not receive the entomological volume of the Fauna Boreali-Americana in time to study it with the specimens. The names will, however, be found in their proper place in the following pages.

I have followed Dejean's Catalogue throughout, on account of its extent, and the number of North American species noted in it. Unfortunately its author thought it sufficient to catalogue a species to secure the citation of it; an assumption which, if allowed, will require the presence of an American entomologist in Paris (or wherever a catalogue might be published,) before he dare name the insects of his own country. But besides the inability of the world at large to know to what object a mere catalogue name refers, there might be an occasional risk of a species already described appearing under a new name, and of this name being afterwards appropriated to a really new species subsequently described by another author. Moreover, the specimens themselves might be exchanged or displaced, as M. Deshayes asserts to have been the case with Lamarek's shells, of which the labels in this author's own handwriting have ceased to be the best evidence.* Under such circumstances, it becomes impossible that the great body of entomologists should admit the authority of an onerous law, which must place the descriptive portion of the science in the hands of a few, whilst the great majority are converted into mere collectors. Count Dejean does not, in fact, follow his own rule of catalogue priority, many North American Coleoptera having been previously known in Germany, through Professor Knoch, and the Reverend F. V. Melsheimer, in whose catalogue they were named and published, but not characterised, in the year 1806. It is probable that the names given to our insects by Knoch are better known here through the entomologists of German descent, than those of Dejean; and as they have the priority, and the insects themselves are, in many instances, preserved in a national museum,† I have preferred them.

For most of the references to Dejean's Catalogue I am indebted to the kindness of Major John Le Conte, and his son, Dr. John L. Le Conte, from whom that author received many of our species; these gentlemen having placed their collection and drawings‡ at my disposal. The Melsheimer collection was opened to me with equal liberality, by its present possessor, Dr. F. E. Melsheimer. I have, by these means, been enabled to establish a pretty full concordance between Dejean, Say, and Melsheimer; and also between them and the older authors.

The southern localities are mostly due to Professor N. M. Hentz, from whom I received a collection several years ago. Some of these were numbered in accordance with the collection of the Boston Society of Natural History, which has enabled me to make an occasional reference to that collection.§

In the preparation of this paper it was necessary to consult various authorities, and these I have generally cited at length, that those who feel inclined to traverse the same field may be spared the trouble of collecting and arranging this portion of the materials.

* Des envois considérables ayant été adressés au Muséum, on s'empressa de les mettre en ordre, et on rejeta tous les individus de l'ancienne collection qui pouvaient être remplacés par de plus beaux; on ne fit malheureusement pas attention que les cartons sur lesquels ils étaient fixés, portaient le nom spécifique écrit de la main de Lamarek, et qu'en les ôtant on perdait le moyen de vérifier à l'avenir la validité des espèces établies dans ces genres difficiles par ce grand naturalist.—*Lamarck*, VI., 527. *Desh. note.*

† That of Berlin, which contains Knoch's collection, including many North American species received through the elder Melsheimer.

‡ I have admitted several of Dejean's species into my list on the strength of these drawings, adding the size; and, in a few instances, I have added such characters as they appeared to justify.

§ This collection, as I have been informed, has been almost entirely destroyed; and that of Say has shared a similar fate.

Many a one has probably been deterred from entering upon the study of various branches of natural science from the scattered state of the materials, and the consequent difficulty of making a commencement; and unfortunately, the voluminous notes of reference in the possession of those who make special study of peculiar departments are too seldom given to the public, because they are supposed to be within the reach of all. The objects, however, to which the naturalist devotes his attention, have become so multifarious, and are divided to such an extent among different hands, that every assistance which can be afforded must have its value. Species mentioned incidentally should be followed by a reference, and much would be gained if every catalogue were an index.

The North American forms of the Longicornia seem to have a nearer relation to those of Europe than to those of South America; the same genera being mostly found in both regions, to which some of the northern forms are almost entirely confined, as *Oberea*, *Rhagium*, *Pachyta*, *Strangalia*, and *Leptura*. The Prionida are most fully represented in the western hemisphere; the genera *Elaphidion*, *Desmocerus*, *Tetraopes*, *Dorcaschema*, and others, are strictly North American forms, whilst the extensive European apterous genus, *Dorcadion*, is perhaps entirely unknown here. Among the genera common to North and South America may be mentioned *Mallodon*, *Callichroma*, *Eburia*, *Amniscus*, *Oncideres*, *Hippopsis*, *Amphionycha*, and *Distenia*.

The number of species found in Massachusetts, according to Dr. Harris' Catalogue, (1835,) is ninety-one, but there are probably upwards of one hundred now known to inhabit that state.	100
Melsheimer's Catalogue, (1806,) contains one hundred and twenty names, some of which belong to varieties. The species now known to inhabit Pennsylvania may be set down at	132
Species in the United States,	270
Species in France,	180
Species in England,	64
Species common to Europe and North America as follows:	5
<i>Criocephalus rusticus</i> .	
<i>Hylotrupes baiulus</i> .	
<i>Phymatodes variabilis</i> .	
<i>Clytus gazella</i> .	
<i>Callidium sanguineum</i> ?	
<i>Monohammus sutor</i> ?	
<i>Pachyta sexmaculata</i> .	

But as rigid comparisons have not usually been made, and as our own presumed non-descripts could not be readily compared with European analogues, it will probably be found that a number of the latter have been redescribed here, under new names, as in the case of *Clytus gazella*. *Monohammus dentator* has been caught alive in England, in 1806, (Tr. Ent. Soc., London, i. 84,) but the occurrence of a single individual is not sufficient to make the species a native.

The following table is intended approximately to indicate the proportion of species contained in a selection of ten European and American genera.

Genera.	France.	G. Brit.	Europe.	Common to Eu. and N. Am.	N. Amer.	Mass.	Penna.
MALLODON, . . .	. . .	. . .	0 . . .	. . .	4 . . .	0 . . .	0
PRIONUS, . . .	1 . . .	1 . . .	2 . . .	. . .	8 . . .	. . .	. . .
ELAPHIDION, . . .	. . .	. . .	0 . . .	. . .	12 . . .	4 . . .	8
CALLIDIUM, . . .	6 . . .	7 . . .	18 . . .	1 . . .	9 . . .	4 . . .	4
CLYTUS, . . .	15 . . .	5 . . .	18 . . .	1 . . .	30 . . .	13 . . .	13
DORCADION, . . .	6 . . .	0 . . .	44 . . .	. . .	1?*. . .	. . .	. . .
OBEREA, . . .	4 . . .	0 . . .	8 . . .	. . .	8 . . .	. . .	5
TOXOTUS, . . .	3 . . .	2 . . .	5 . . .	. . .	9 . . .	1 . . .	4
PACHYTA, . . .	7 . . .	4 . . .	20 . . .	. . .	9 . . .	5 . . .	5
LEPTURA, . . .	13 . . .	18 . . .	25 . . .	1 . . .	25 . . .	8? . . .	8

PRIONIDÆ.

MALLODON, *Serville*. Ann. Ent. Soc., France, i. 176.

1. *M. MELANOPUS*, *Lin.* Fabr. Syst. El., ii. 264. Drury, i., pl. 38, fig. 2.

Head thickly pitted above, a deep, transverse groove behind the clypeus; mandibles remarkably robust, carinate above and laterally: prothorax obsoletely denticulate, and subparallel laterally, flattened and minutely punctured above, except along the otherwise absent dorsal line, on each side of which, before the middle, is a large, slightly elevated, smooth facet, sparsely covered with larger punctures than those of the general surface, and bounded anteriorly by a transverse indentation; a larger longitudinal indentation (narrowest before) lies near the outer margin, bounded, exteriorly by a short, smooth, elevated line having a few punctures, and interiorly by a longer one, which extends backwards and inwards towards the posterior margin. 10—18" long.

All the North American species of this tropical form appear to be confined to the southern states.

2. *M. SIMPLICICOLLE*, *Dupont*. Dej. Cat.

Dark castaneous, approaching to black: head thickly punctured, except along the impressed frontal line; mandibles not remarkably prominent, ecarinate and thickly punctured above, a strong tooth near the tip: prothorax narrowing anteriorly, finely denticulate anteriorly; dorsal line impressed; upper surface rather regular, with numerous small, scattered punctures, becoming scabrous laterally, and having a slight ridge in the posterior angles, and a short, impressed line posteriorly, converging towards the margin of the scutel: scutel polished, medial line impressed anteriorly, with an irregular row of submarginal punctures. 2" long.

VAR. bi-impressum. Bears a close resemblance to the preceding, but differs in having a shallow impression, with an included posterior indentation between the eyes and frontal line; pronotum with the dorsal line indistinct, a shallow fovea before the middle, and nearer to the dorsal line than to the outer margin, bounded exteriorly by an irregular row of large punctures, posterior to which there is a small fovea; posterior impressed lines wanting: metasternum clothed with short, prostrate hair. 18" long.

This may be the male of *simplicolle*. The characters are drawn from a single specimen in the cabinet of the Reverend Dr. Morris.

* *Monoleima*, *Say*.

3. *M. SPINIBARBE*, *Fabr.*

Bears some resemblance to *M. melanopus*, but the mandibles are less robust: prothorax narrow anteriorly, and strongly dentate laterally; above with two facets separated externally by a row of deep punctures from an elevated longitudinal line, exterior to which is a similar shorter one curving outwards towards the posterior angle.

14—20" long. Inhabits Brazil and the United States.

4. *M. DASYSTOMUS*, *Say.* Journ. Acad. Nat. Sci., iii. 326.

Prothorax obsoletely denticulate, sides subparallel, convex in the middle; densely punctured above, dorsal line impunctured, a smooth, lozenge-shaped facet each side of it, exterior to which is a longitudinal raised line, interrupted in the middle, another very short one outside of it, and a larger transverse one along the middle of the base.

14" long; 4 wide. ♂ Inhabits Carolina in June and July, under oak bark.—Hentz.

ORTHOSOMA, *Serv.* Ann. Ent., i. 154.

5. *O. CYLINDRICUM*, *F.*, ii. 261. Oliv., pl. 1, fig. 6. Harris, Injurious Insects of Mass., p. 80.6. *O. CILIPES*, *Say.* (*Prionus.*) Journ. Acad. N. Sc., iii. 328. [Mallodon?]

DEROBRACHUS, *Serv.* Ann. Ent., i. 154.

7. *D. BREVICOLLIS*, *Serv.* Ib. 155. Hab. Georgia. Cab. Le Conte, Hald.

PRIONUS, *Geoff.* Serv. Ann. Ent., i., 191. R. A., pl. 66, f. 4.

8. *P. IMERICORNIS*, *Linn.* Pal. Beauv. Ins. pl. 36, f. 2. Car. Jun. Alab.9. *P. BREVICORNIS*, *F.* ii. 260.10. *P. POCULARIUS*, *Dalm.* Schœn. Syn., iii. App. 148.11. *P. LÆVIGATUS*, *Harris.* Trans. Nat. Hist. Soc., Hartford, i. 83.12. *P. EMARGINATUS*, *Say.* Journ. Acad. Nat. Sci., iii., 327.13. *P. PALPARIS*, *Say.* Id.

CERAMBYCIDÆ.

PURPURICENUS, *Serv.* Ann. Ent., ii. 568.

14. *P. HUMERALIS*, *Fabr.* Syst. El. ii. 274. Oliv., pl. 67, fig. 141.15. *P. AXILLARIS.*

Black, base, to near the middle of the elytra, brownish-orange. 6—9" long. Hab. Pennsylvania.

Lamia axillaris, *Knoch.* Mels. Cat. No. 757.

In size and form this species resembles *P. kœhleri* of Europe. The scutel is black, the posterior margin of the yellow of the elytra is irregular, and the band narrowest at the suture.

CALLICHROMA, *Latr.* R. A., pl. 65, fig. 8.

16. *C. ELEGANS*, *Fabr.*, ii. 269. Oliv., pl. 5, fig. 35.

Probably *C. splendida*, *Dej.* Cat. Fabricius gives "Cajennæ" as the habitat of his species, but Dr. Le Conte has specimens from Georgia.

17. *C. SOLITARIUS*, Say. (Cerambyx.) Journ. Acad. N. Sc., iii. 410.

STENOCORUS, Fabr.

18. *S. LONGIPES*, Say. Journ. Acad. Nat. Sc., iii. 426.

EBURIA, Serv. Ann. Ent., iii. 8.

19. *E. QUADRIGEMINATA*, Say. Journ. Acad., v. 275.

CERASPHORUS, Serv. Ann. Ent., iii. 10.

20. *C. GARGANICUS*, Fabr. Syst. El., ii. 305. Harris, 81.

21. *C. QUADRISPINOSUS*.

Pale yellowish-brown, scutellum with yellowish hair, elytra immaculate.

C. quadrispinosus, Dej. Cat. Boston Collection, No. 559? Size and appearance of *C. garganicus*. In Dr. Le Conte's specimen there is a little tubercle on each side of the pronotum behind, which is wanting in mine. The larva lives in the sound wood of trees of the genus *Carya*, the perfect insect appearing in the spring. Inhabits Pennsylvania, where I have found but a single individual: also Carolina and Alabama, according to Mr. Hentz.

ELAPHIDION, Serv. Ann. Ent. iii. 66.

22. *E. PULVERULENTUM*, Lin. Gm. p. 1857, No. 306. Mels. Cat. 791.

14''' long, 4½ wide. Black, uniformly covered with dull, olivaceous, prostrate hair: a short, narrow facet along the dorsal line: elytra with a reddish reflexion. *Enaphalodes lecontei*? Dejean.

23. *E. MARILANDICUM*, F., ii. 306. Oliv., iv., pl. 70, fig. 5. Drury, i. pl. 41, fig. 6—multicolor? Turton, L. ii. 334.

11—12''' long; 3—3½ wide. Inhabits Massachusetts: Pennsylvania, in July: Carolina, June—September. Flies at night. This is our largest species, with the exception of the preceding. The colour is dark-reddish-brown, covered with scattered tufts of short gray hair: pronotum scabrous, with numerous dilated punctures; a circular or elongate facet along the posterior portion of the dorsal line, and a small facet upon each side before the middle, the three forming an equilateral triangle. Elytra strongly punctured. The frontal line is impressed or obsolete, and the dorsal facets are sometimes wanting.

24. *E. RUFULUM*.

General appearance of *marilandicum*: rufous, with a tolerably uniform clothing of pale, ochraceous hair: antennæ ochraceous: a small tubercle each side of the dorsal line, which latter suddenly widens into a triangular facet near the posterior margin.

11''' long.

25. *E. ASPERSUM*.

Robust, reddish-brown, thickly sprinkled with small whitish spots; antennæ slightly armed; prothorax subglobular, transverse; femora subclavate.

8''' long; 2 wide. Cab. Le Conte.

Head large, frontal line impressed, and continued as a smooth line over the vertex; antennæ rather robust, clothed with short prostrate hairs, and slightly armed from the third to the sixth or seventh articulation: prothorax pretty uniformly clothed, median line smooth and polished, bi-abbreviated, and widest posteriorly, a smooth tuber-

ele each side before the middle, in contact with a small tuft anterior to it; two or three tufts towards the posterior angles: scutel concave, clothed with flavous hair: elytra with rather fine, dilated, impressed punctures, and small, irregularly scattered tufts over the entire surface.

Allied to *vicinum* and *nebulosum*.

26. E. TRUNCATUM.

Robust; reddish-brown, thickly and finely sprinkled with tufts of whitish hair; elytra short, subparallel, mutic, and slightly truncate at tip.

6" long; $1\frac{1}{2}$ wide. Cab. Melsheimer.

Mandibles black, palpi rufous, post-clypeus with whitish hair extending in a narrow line to the inner base of the antennæ; frontal line obsolete; antennæ yellowish-brown, shorter than the body, third, fourth, and fifth articulations slightly armed: a conspicuous whitish dot at the anterior edge of the pronotum, and a single one upon the middle of each side; dorsal facet very short, widest posteriorly: elytra very slightly truncated, and having a minute sutural spine.

Intermediate between *aspersum* and *villosum*.

27. E. MURICATUM.

Reddish-brown, very slightly dotted; head large, spines of the antennæ very large, that of the third articulation nearly equalling the fourth articulation in length.

6" long; $1\frac{1}{2}$ wide. Carolina, Massachusetts.—Hentz.

Stenocorus muriaticus? Say. Hentz. Boston Coll., 562. Antennæ with three or four of the articulations armed: prothorax as wide as long, dorsal line smooth, with two indistinct tubercles on each side: elytra mucronate.

Characterized from a very imperfect specimen received from Professor Hentz, with the above name and reference. Not having noticed the trivial name among Say's papers, it is possible that the citation was made from memory, with *mucronatus* in view. It may eventually prove to be Say's *rigidus*.

28. E. VICINUM.

Reddish-brown, femora mutic, spines of the third, fourth, fifth and sixth articulations of the antennæ very short.

9" long; $2\frac{1}{2}$ wide. Inhabits Pennsylvania.

Mandibles and eyes black; antennæ hairy; front concave; a tuft of hair between the eyes, and extending along the orbits above: prothorax transverse, a small yellowish spot of hair laterally, numerous dilated punctures above; dorsal line a wide, smooth ridge slightly bi-abbreviated, widest posteriorly, and narrowed in the middle, so as to be almost interrupted; four facets above arranged in a quadrangle, two small circular ones before the middle, and two short, linear, longitudinal ones slightly converging backwards to the posterior margin: scutel yellowish, with dense hair: elytra subparallel, with small scattered tufts of yellowish hair, and numerous dilated impressed punctures, arranged in tolerably regular series, and becoming obsolete on the apical third; apex separately emarginate and bi-spinose, exterior spine longest.

Allied to *mucronatum*, but the external, apical angles of the elytra are more suddenly rounded, the femora mutic, and the antennæ armed with much smaller spines. It is a rather robust species, with a large prothorax.

29. E. MUCRONATUM, Say. Journ. Acad. N. Sc., iii. 427. E. nebulosum, Dej. Mels. Cat., 750.

Antennæ robust, three—four spined, first spine two-thirds the length of the following articulation: elytra tapering rather rapidly towards the tip: femora bi-mucronate at tip.

7" long; 2 wide. Inhabits Pennsylvania.

Allied to *villosum*, but distinguished by the greater size, tapering elytra, mucronate femora, and armature of the antennæ, the spines being larger than in any of the species I have seen, except in *muricatum*.

VAR. *vestitum*. More thickly clothed, rather smaller, and with the elytra but slightly tapering towards the apex. Pennsylvania—June.

30. *E. VILLOSUM*, *Fabr.*, ii. 311. *E. putator*, *Peck*. Harris, Injurious Ins. of Mass., 81. *E. villosum*? and *pruinatum*? *Dej.*

The larva feeds upon the living wood of the genera *Quercus*, *Carya*, and *Castanea*; and, in one instance, I raised an individual, apparently of this species, from a larva taken from the dead trunk of a small abies. It appears in Pennsylvania in May and June.

31. *E. PUSILLUM*.

Reddish-brown; uniformly and sparsely clothed with short, prostrate, yellowish hair; prothorax longer than wide, swelled laterally; elytra elongate, parallel, each with a narrow emargination. $5\frac{1}{2}$ " long; $1\frac{1}{4}$ wide.

Antennæ pale-rufous, armature feeble; dorsal line, and an additional one, each side of it, obscurely marked with yellowish down; scutell yellowish: elytra slender, parallel, outer posterior angle obliquely truncate; tip narrow; finely emarginate, with a short, equal, sutural, and external spine: beneath, and feet, dull rufous.

An individual, numbered 746 in Melsheimer's Catalogue, which I believe to belong to this species, is there named *bidens*, of Fabricius, but it differs from the latter, as characterised, in wanting two spines to each articulation of the antennæ, besides being much more slender than the insect, as figured by Olivier. I am not acquainted with any species possessing this peculiarity. The Melsheimer specimen is a little more than six lines long, and has a few small scattered tufts of hair upon the elytra.

32. *E. RIGIDUS*, *Say*. (*Stenocorus*.) Journ. Acad. N. Sc., V. 274.

33. *E. BIDENS*, *Fabr.* Oliv., pl. 17, Capr. fig. 125. Encyc., V. 306. "Antennarum articulis bispinosis." "Il ressemble beaucoup au *spinicorne*. (Oliv., pl. 17, fig. 130.) Les antennes sont testacées, un peu plus longues que le corps, munies de deux petites épines à l'extrémité de chaque article."—*Encyc.*

*ANOPLIUM.

Like *Elaphidion*, but having the antennæ and elytra unarmed, and the pubescence uniform.

34. *A. PUBESCENS*.

Pale yellowish-brown, robust, subcylindric, elytra nearly parallel, entire at tip.

7" long; 2 wide. Inhabits Pennsylvania.

Stenocorus pubescens, Mels. Cat., No. 751. Head pubescent, with an impressed longitudinal line throughout; eyes and tip of the mandibles black: prothorax with a smooth lateral indistinct tubercle, and one upon the dorsal line behind the middle: scutell triangular, yellow pubescent: elytra covered with impressed punctures, which are particularly obvious at the base; femora mutic.

35. *A. UNICOLOR*.

Slender, reddish-brown, with a sparse and very uniform clothing of yellowish hair.

4—6" long; 1 wide. Inhabits Pennsylvania.

Saperda unicolor, No. 781, and *S. scutellata*, No. 779, Mels. Cat. Antennæ slender, basal articulation slightly curved, frontal line impressed between them: prothorax with the sides projecting, and having a tendency to form an angle in the middle: scutel yellowish, concave: elytra sparsely clothed, the hairs arising from numerous impressed punctures; tip obsoletely emarginate.

Distinguished by its slender form, uniform tint, and slightly emarginate elytra.

TRAGIDION, *Serv.* Ann. Ent., iii. 89.

36. *T. LYNCEUM*, *Fabr.* Syst. El., ii. 344. Ent. Syst., ii. 329. Oliv., pl. 14, fig. 97.
Coquus, *Fabr.*, ii. 300. *Melsheimeri*, *German Species*.

The transverse band near the base of the elytra is sometimes interrupted at the suture so as to leave two fulvous spots. Professor Germar (*Revue Zool.*, 1839, p. 330,) refers his specimen to the genus *Anoplistes*, *Serv.*, Ann. Ent. Soc., France, ii. 570, probably because the armature of the prothorax cannot be readily distinguished through the dense clothing of hair.

CALLIDINÆ.

CRIOCEPHALUS, *Mulsant.* Longic. de France, p. 63.

37. *C. AGRESTIS*, *Kirby.* (*Callidium.*) N. Z. 170.

Dull brownish-black, beneath black with cinereous pubescence; pronotum with three conspicuous foveæ.
 10" long; 2 wide. Inhabits Maryland and Virginia.

Criocephalum foveicollis, *Dejean Cat.*, p. 354. Head with a deeply impressed line between the antennæ: pronotum flattened; posterior two-thirds of the dorsal line impressed, and spreading laterally so as to form a wide furrow, somewhat foveolate near the posterior margin; a large conspicuous fovea or indentation upon each side of the dorsal line and lateral limb, and a slight inconspicuous impression in the posterior angles: elytra with three longitudinal ribs; one medial, the second intermediate between this and the suture, and the third submarginal; the marginal space being narrowest, and the submarginal one widest; the outer and inner costæ curve towards each other and meet near the apex of the elytra, and near this angle the medial costa curves to the inner one; a very short, obsolete, subsutural costa joins the scutel.

38. *C. RUSTICUS*, *Fabr.* *C. obsoletum*, *Randall.*

Dorsal marks and elytral costæ obsolete, scutellar costæ upon the suture.
 9—10" long. Inhabits Europe and North America.

ASEMUM, *Esch.* *Serv.* Ann. Ent., iii. 79.

39. *A. MÆSTUM.*

Black, finely scabrous; elytra striate, with the intervals elevated into costæ.
 6" long; 1½ wide. Inhabits Pennsylvania.

Head finely punctured, a wide indentation between the antennæ: prothorax brownish pubescent; with a wide, faint, dorsal fovea: elytra with two approximate elevated medial costæ, meeting posteriorly, an indistinct one between these, another upon the suture, and a submarginal one obsolete anteriorly: scutel with a medial impressed line.

VAR. obsoletum. Striæ and Costæ of the elytra indistinct. *Cab. Le Conte.*

VAR. brunneum. Pale-brown. *Cab. Le Conte.*

This species is probably allied to *striatum*, of Europe.

40. A. SUBSTRIATUM.

Black, punctured, slightly pubescent; elytra indistinctly striate, with about three inconspicuous costæ.

6''' long. Inhabits Massachusetts.

Callidium substriatum, *Germar*, MS. Bost. Coll. 576. Prothorax subequal, narrowed anteriorly: elytra with the sides regularly convex, and having three obsolete approximate central costæ, the outer ones united posteriorly.

41. A. JUVENCUM.

Dull reddish-brown; prothorax transverse, dilated laterally, a large fovea upon each side above; elytra obsoletely striate, dull fulvo-sericeous.

7''' long; 2 wide. Cab. Le Conte.

Criocephalum juvenum, *Dej.* Cat. Head slightly clothed with short hair; antennæ very short; front slightly indented between the antennæ, mandibles and tip of the palpi black: prothorax inflated laterally, sides very convex, minutely scabrous, partially clothed, especially in the foveæ: under parts polished.

Closely allied to *substriatum*, but the prothorax is rather wider than the base of the elytra, whilst in that species it is slightly narrower, and converges forwards in a straight line, corresponding with the sides of the head.

42. A. FUSCUM.

Testaceous, eyes black, metasternum and postcoxæ piceous; prothorax equal; elytra parallel, with obsolete elevated lines.

4''' long. Inhabits Pennsylvania.

Callidium fuscum, *Mels.* Cat., No. 820.

HYLOTRUPES, *Serv.* Ann. Ent., iii. 77.

43. H. BAIULUS, *Lin.* Fabr. Syst. El., ii. 33.

Inhabits Europe and America.

VAR. *bullatus*. Shining black; head large; prothorax very large, transverse; elytra very pale yellowish-brown, translucent. 8''' long; $2\frac{3}{4}$ wide.

General character of *H. bajalus*, but may be distinct. The elytra are discoloured, and the head and prothorax abnormally enlarged. The dorsal facets are also larger. It is clothed with a similar white down, including the tufts upon the elytra. Characterized from a female in Mr. Le Conte's cabinet.

ARHOPALUS, *Serv.* Ann. Ent. iii. 77.

44. A. FULMINANS, *Fabr.* Syst. El., ii. 346. *Angulatus*, *F.*, ii. 350.

CALLIDIUM, *Fabr.* *Serv.* Ann. Ent., iii. 77.

45. C. ANDRÆ.

Rubro-testaceous, elytra varied with black; antennæ black, varied with reddish: head one-half the diameter of the thorax, medial line beneath, black: frontal line impressed: pronotum flattened; posterior angles with a large, prominent tubercle, having a wide depression anterior to it; an obsolete medial tubercle anteriorly; elytra flattened; humeri very prominent; three curved elevated lines, the two exterior ones interrupted; anterior por-

tion of the intermediate one rectilinear and oblique, confluent with the interior one, which is the shortest, all of them abbreviated at one-third the distance from the apex of the elytra: clavus of the femora blue-black.

10 lines long; 3 wide. Georgia. Cab. Le Conte.

Belongs to the genus *Physocnemum*. Named by Dejean from the resemblance the lines on the elytra bear to a St. Andrew's cross.

46. *C. VIOLACEUM*, *Lin.* Fabr. Syst. El., ii. 335. Harris, p. 83.

Judging from drawings in the possession of Mr. Le Conte, I think *C. cyanellum* and *ianthinum*, *Dej.*, are varieties of this species.

47. *C. LIGNEUM*, *Fabr.* Syst. El., ii. 341. Oliv., pl. 70, fig. 79.

48. *C. AMÆNUM*, *Say.* Journ. Acad., iii. 413. (*Phymatodes variabilis*?)

49. *C. FULVIPENNE*, *Say.* Journ. Acad., iii. 414. [*Purpuricenus*, *fide* Le Conte.]

50. *C. PROTEUS*, *Kirby.* (*Merium*.) N. Z. 172. [*Hylotrupes*, *fide* Le Conte.]

51. *C. SIMILIS*, *Kirby.* (*Merium*.) N. Z. 173.

52. *C. VARIUM*, *Fabr.* Syst. El., ii. 345. Oliv., Ent. IV., pl. 70, fig. 55. *Versicolor*, Turton, L. ii. 329.

This species has the short antennæ of *Callidium*, and approaches the next genus by the three smooth tubercles above.

53. *C. PALLIPES*.

Uniform yellowish-brown, pilose; feet and beneath much paler; femora clavate.

$4\frac{1}{2}$ ''' long; $1\frac{1}{2}$ wide. Inhabits Pennsylvania—New York.

Callidium femoratum, Mels. Cat. No. 817.

54. *C.? SEXFASCIATUM*, *Say.* Journ. Acad. N. Sc., iii. 415.

Inhabits Alabama in June—on leaves?—Hentz.

55. *C. DIMIDIATUM*, *Kirby.* (*Merium*.) N. Z. 137.

56. *C. CINNAMOPTERUM*, *Kirby.* (*Tetropium*.) N. Z. 174.

PHYMATODES, *Mulsant*, p. 47. MERIUM, *Kirby.*

57. *P. VARIABILIS*, *Lin.*, *fenicum*, *F.*, ii. 334. M. C., No. 802.

A well known European species. It presents several marked varieties, and is found from Massachusetts to Alabama. *Callidium fuscum*, Mels. Cat., No. 820, is a small variety, of an ochraceous colour.

VAR. *ventralis*. Testaceous; head above, eyes, metathorax, and three basal articulations of the abdomen black.

Allied to the variety *P. testaceus*, *Lin.* Inhabits Alabama.

*TYLONOTUS. (< Malloecera.)

Body minutely scabrous, convex; antennæ slightly hairy, robust, tapering rapidly, at least as long as the body, *compressed*, with a *groove* upon the anterior edge from the third articulation, which is the longest, exceeding the first and second conjointly; pronotum subglobular, with polished *tubercles*; elytra unarmed; femora incrassated.

The facies is that of *Elaphidion*, whilst it differs from *Phymatodes* in the antennæ, and in having a larger head.

58. *T. BIMACULATUS*.

Castaneous, dorsal line and a tubercle on each side of it polished, a corneous macula at the tip of the elytra. 7''' long; $1\frac{3}{4}$ wide. Inhabits Pennsylvania.

Head finely scabrous, frontal line impressed: prothorax subglobular, minutely scabrous: scutellum semicircular: elytra with numerous impressed punctures, a large corneous macula at the tip of each, and a small, obsolete one before the middle: femora incrassated, with a broad band of pale corneous yellow: tarsi pale ferruginous, hairy: metasternum and abdomen dull testaceous.

All the parts have a thin clothing of hair. Described from a single individual which was cut from a decayed *Fraxinus*, in July.

*SMODICUM, *Dej. Cat.*

Body slender, much depressed, polished, and minutely punctured; head and mandibles prominent, eyes projecting; antennæ subfiliform, shorter than the body; prothorax flat, longer than wide, sides convex; *prosternum* with a large, reniform excavation upon each side anteriorly: elytra parallel: femora incrassated.

59. *S. CUCUIFORME*, *Say.* (*Callidium*.) *Journ. Acad.*, v. 277. *Mels. Cat.*, No. 800. *S. melanophthalmum*, *Dej.*

Inhabits Massachusetts, Pennsylvania, (July,) and Carolina, (June, July,) under oak bark, and flies at night. The shallow excavations in the *prosternum* are scabrous, and without the gloss reflected from every other part.

*PHYSOCNEMUM.

Prothorax subglobose, narrowed posteriorly, tomentose, except the dorsal line, and two slight tubercles behind the middle above: palpi slightly securiform; antennæ eleven jointed, longer than the body, and setaceous in the male, as long as the body and almost filiform in the female: elytra flat above, scabrous punctate, with smooth, raised costæ, of a pale colour; base nearly square, with the angles projecting, sides compressed towards the middle; tips gaping and separately *obtusely rounded*: femora *clavate*.

Apparently closely allied to the genus *Anaglyptus*, *Mulsant*, p. 91, but differs in having all the thighs *clavate*.

60. *P. BREVILINEUM*, *Say.* (*Callidium*.) *Journ. Acad.*, iii. 413. *C. antiquum*, *Dej.*

Pennsylvania and Arkansas. Of the two individuals in Dr. Melsheimer's cabinet, one has setaceous antennæ, and the elytra tapering, as in *Agrilus*; in the other, they are shorter, and nearly filiform, and the elytra do not taper towards the extremity. Notwithstanding these differences, the facies is so similar that I think the two may be regarded as opposite sexes of the same species. The length of what I suppose to be the male and female, is about five and four lines respectively.

*STENOSPHEMUS, *Dej. Cat.*

Head small, antennæ setaceous, shorter than the body in the females, and longer in the males, most of the articulations *spinose* at tip; prothorax smooth, subglobular, and *mutic*: scutellum semicircular: elytra tapering, *bi-spinose* at tip: femora slightly incrassated. Facies of *Callidium*, with the spinose antennæ and elytra of *Elaphidion*.

61. *S. NOTATUS*, *Oliv.*, iv., tab. 7, fig. 89, *discicollis*, *Dej. Cat.*, 355.

The black spot upon the pronotum varies from a large to a small size, and is frequently absent. Inhabits Pennsylvania. Washington, Carolina, April.

ERIPHUS, *Serv. Ann. Ent.*, iii. 88.

Allied to *Stenosphenus*; body punctured and hairy; palpi truncate, antennæ filiform, shorter than the body, very slightly armed; feet slender, femora not thickened; elytra rounded at tip, and unarmed.

62. *E. IGNICOLLIS*, *Say*. (*Callidium*.) *Journ. Acad.*, iii. 412, anno 1823,—*sanguinicolle*, *Germar*. *Sp. nov.*, p. 515, anno 1824.

63. *E. COLLARIS*, *Kirby*. (*Callidium*.) *N. Z.* 171.

64. *E. SUTURALIS*, *Say*. *Journ. Acad.*, iii. 411,—*miniaturum*, *Germar*. *Sp. nov.*, 515. *Eriphus rubens*, *Dej.*

Occurs with the antennæ and feet rufous; and without the sutural band. In the latter case, it is *E. rubens*, *Dej. Cat.*

65. *E. DISCOIDEA*, *Say*. *Journ. Acad.*, iii. 411.

A specimen in Dr. Melsheimer's cabinet has the head rufous, and the anterior and intermediate femora pale-rufous.

66. *E. COCCINEICOLLIS*. (*Eriphus*.) *Dej. Cat.*

Sanguineous, antennæ black, elytra deep, shining blue, punctured, *femora clavate*. 3''' long; $\frac{3}{4}$ wide.

At first view appears to be a small individual of *E. ignicollis*, *Say*, but the general colour is uniform, and it has the femora clavate.

CLYTUS, *Fabr. Serv. Ann. Ent.*, iii. 83.

67. *C. SPECIOSUS*, *Say*. *Am. Entomology*, pl. 53. *C. hayii*, *Gray*. *Griff. Cuv.*

68. *C. CHARUS*, *Say*. *Boston Journ. Nat. Hist.*, i. 193. Inhabits Indiana.

69. *C. DECORUS*, *Oliv.*, pl. 70, fig. 92. Inhabits Georgia.

70. *C. ROBINIÆ*, *Forster*, 1771, *flexuosus*, *F.*, 1775. *Harris*, 85. *Mich. Am. Sylva.*, i. pl. 35, f. 3.

71. *C. NOBILIS*, *Harris*, *Hartford Trans.*, i. 84, pl. 1, fig. 7.

72. *C. ERYTHROCEPHALUS*, *F.* *Syst. El.*, ii. 350. *Oliv.*, pl. 70, fig. 60, 60, *b*.

Inhabits Carolina, Virginia, Pennsylvania, Massachusetts, April—September. $3\frac{1}{2}$ —7''' long.

M. Serville makes this species the type of the genus.

73. *C. LUSCUS*, *Fabr.* *Syst. El.*, ii., 347. *C. aculeatus*, *Dej.* Carolina, June—August.

74. *C. SCUTELLARIS*, *Oliv.*, iv. pl. v. fig. 52. *Encyc.*, v. 267.

Black, pronotum obtusely carinate, with a narrow, transverse medial, and an anterior and posterior narrow, yellow band; elytra with the base rufous, and having two obliquely curved, and one transverse yellow band. $5\frac{1}{2}$ " long; $1\frac{1}{2}$ wide. Hab. Pennsylvania, Virginia, July—Carolina, June.

C. elegans, *Mels. Cat.*, 812. Boston Collection, 573. Head surrounded posteriorly with a narrow, yellow band; front with two vertical yellow bands; antennæ rufous: elytra tapering rapidly; tip obliquely truncate, with a spine exteriorly; first elytral band curving obliquely outwards from the scutel to the margin, when it extends forward along the side, the second curves in an inverse direction from the margin to the suture about the middle, and the third is midway between this and the tip: feet slender, rufous, femora clavate, extremity black, the posterior ones extending beyond the elytra: venter with four broad, yellow bands.

The curved lines on the elytra present the appearance of four separate quadrants placed together, with the convexity inwards.

75. *C. PUBESCENS*, *Dej. Cat.*

Uniform dull reddish-brown, sparsely covered throughout with yellowish hairs; elytra conjointly emarginate, with a spine at tip, externally. 6—8" long. Hab. Pennsylvania. ♂ Cab. Melsheimer. ♀ Cab. Le Conte.

Head with a wide frontal groove: prothorax large, tapering very gradually forwards, scabrous and transversely rugous above, without dorsal line: elytra tapering rapidly, minutely rugose, with confluent punctures, and ending in a spine near the outer margin; sutural hairs sufficiently dense to form a light-coloured line which is crossed by two others, at a third of the distance from the base and apex, and there is another line of hair in a short, humeral impression: feet and beneath hairy, femora extending a little beyond the elytra.

76. *C. GRAMINEUS*, *Klug.*

Dull brown, cinereous hairy beneath; elytra with several indistinct yellowish irregular transverse lines, apex truncate-emarginate, with a small spine towards the external side. 6" long; 2 wide. Inhabits Oregon.

Body short and robust, pronotum transversely rugulose, widest behind the middle, whence it narrows suddenly and obliquely to the base of the elytra. Cab. Le Conte.

77. *C. VESPOIDES*, *Dej. Cat.*

Reddish-brown, base of the antennæ, feet, and base of the elytra rufous; prothorax subglobose, anterior and posterior margins, with the scutel, yellow; four transverse yellow bands. 5" long; $1\frac{3}{4}$ wide. Georgia.

Robust, metathorax with a yellow spot laterally: segments of the venter margined with yellow: elytra with the basal band interrupted, the second directed obliquely outwards and backwards, and placed before the middle, the third one-fourth the distance from the apex, the fourth apical. Cab. Le Conte.

This species, as well as others noticed in this paper, may be figured in the monograph of Castlenau and Gory on this genus, a work which I have not seen.

78. *C. CAMPESTRIS*, *Oliv.*, iv. pl. 70, fig. 95. *Id.*, villicus? fig. 94—colonus? *Fabr. Syst. El.*, ii. 345. *Encyc.*, v. 259.

The larva does considerable damage to fallen chestnut timber, which is extensively used in the construction of fences. The younger individuals burrow between the bark and the wood, where the larger ones are also found, but in general they penetrate beneath the surface. The perfect insect appears in May and June, and has been found from Massachusetts to Carolina and Mississippi.—Bost. Coll., 579.

79. *C. RHOMBIFER*, *Oliv.*, pl. 70, (4) fig. 51. *a. b.* Georgia.80. *C. CAPREA*, *Say.* *Ann. Ent.*, pl. 53. Mass., Penna., Virginia, Missouri, New Orleans.

81. *C. GAZELLA*, *Fabr.*, ii. 348. *C. hamatus*, *Say*. *Am. Ent.*, pl. 53.

A European species, taken near the Illinois river, by Say. Another specimen was taken by Mr. Hentz, in Alabama? and Say's name is quoted in Harris' Catalogue.

82. *C. UNDULATUS*, *Say*. *Am. Ent.*, pl. 53. *Kirby*, *N. Z.*, 175, pl. 7, fig. 5.

North-west Territory.

VAR. integer. Undulated line upon the elytra obsolete.

An individual in Dr. Melsheimer's cabinet, taken in Pennsylvania.

83. *C. LUNULATUS*, *Kirby*, *N. Z.*, 175.

Black, pronotum with an anterior and posterior whitish band; elytra with a basal spot and three bands whitish. 5''' long; 1½ wide.

VAR. capreolus, *Dej. Cat.*

The markings of Say's figure of *undulatus* represent those of this variety very accurately.

84. *C. 4-MACULATUS*.

Black, elytra pale yellowish-brown, pronotum with a yellow macula in each angle. 5''' long. Inhabits Pennsylvania.

C. 4-maculatum, *Mels. Cat.*, No. 813. Head black, with raised frontal and short orbital lines: antennæ, feet, and abdomen piceous: prothorax minutely scabrous, equally narrowed towards both extremities, a conspicuous tomentose, pale-yellow spot in each of the four angles above, another upon the margin of meso-sternum, and similar ones upon the lateral posterior margin of the first and second segments of the abdomen.

85. *C. FUSCUS*, *Kirby*. *N. Z.*, 176.

86. *C. LONGIPES*, *Kirby*. *N. Z.*, 176.

87. *C. MURICATUS*, *Kirby*. *N. Z.*, 177.

88. *C.? DENTIPES*, *Oliv.*, iv. pl. 70, fig. 40. *Encyc.*, v. 268.

89. *C.? CONFUSUS*, *Say*. *Journ. Acad. Nat. Sc.*, v. 276. *Lamia*, id. *Harris Cat.*, p. 51.

90. *C. ANNOSUS*, *Say*. *Journ. Acad. Nat. Sc.*, v. 277.

91. *C. PALLIATUS*, *Harris Cat.*

Rufous, head and pronotum black, posterior half of the elytra blackish-brown. 3''' long; 1 wide. Inhabits Massachusetts.

Frontal line impressed, palpi and antennæ rufous: pronotum minutely scabrous, with numerous punctures, except at the posterior extremity of the dorsal line: scutel covered with cinereous hairs: elytra parallel, densely punctured, obtusely rounded at tip: femora clavate.

92. *C. VERRUCOSUS*, *Oliv.*, pl. 8, fig. 98, *gibbosus? F., obliquum, Knoch.* *Mels. Cat.*, No. 814.

The mesosternum and basal half of the elytra vary from black to rufous. Inhabits Massachusetts, Pennsylvania, Carolina.

93. *C. PINIADEUS*, *Fabr.*, ii. 353, *pini, Oliv.*, pl. 8, fig. 105. (*C. picipes? Var.?*)

VAR. testaceipes. Head, antennæ, prothorax, and feet testaceous; elytra with an additional light, oblique line upon the pale-brown of the extremity. Carolina, March—June.—*Bost. Coll.*, 585.

94. *C. PICIPES*, *Fabr.* *Syst. El.*, ii. 353. *Oliv.*, pl. 70, fig. 43. *Encyc.*, v. 269.

Black, pronotum longitudinally rugose; elytra with an oblique white line: third and fourth joints of the antennæ tipped with a spine. Three lines long.

95. *C. GEMINATUS*.

Dark-brown, head and prothorax black, minutely scabrous; elytra with an oblique whitish line near the apex, and a geminate one, forming a flattened oval near the base; femora clavate. $2\frac{1}{2}$ " long. Inhabits Penna.

Allied to *picipes* and *pincadeus*. The anterior side of the oblique oval on the elytra is formed by an elevated line; antennæ and feet varying from yellowish-brown to piceous.

96. *C. GAZELLUTA*.

Minutely scabrous, pale-brown, pronotum darker, lengthened, narrowed behind; antennæ filiform, and with the under parts dull testaceous; elytra with the apex, two spots near the base, and a medial transverse band, white tomentose. Three lines long. Inhabits Pennsylvania.

97. *C. SUPERNOTATUS*, Say. Journ. Acad., iii. 425. *C. minutissimus*, Dej.

Scutel whitish, and with two light spots on the elytra, finely tomentose. 5—7 mm. long. Inhabits Massachusetts, Harris: Missouri, Say: Pennsylvania, June: Carolina, March—June.—Hentz.

Presents much the appearance of a minute Saperda.

98. *C. PYGMÆUS*.

Dark-brownish testaceous; front convex; antennæ annulate, with one or two spines or hairs at the apex of the articulations: head continuous with the prothorax, which is wedge-shaped, widest before, with the sides rectilinear: feet strongly clavate. 1" long. Inhabits Pennsylvania.

Callidium pygmæum. Mels. Cat., No. 821.

Remarkable for its minute size, and the great latitude of the head and adjoining portion of the thorax. Characterized from an imperfect individual in Dr. Melsheimer's cabinet.

*DIOZODES.

Body oblong, depressed, shining: head porrect, terminal articulation of the maxillary palpi cylindrical, and truncate at tip; eyes prominent; antennæ eleven-jointed, almost filiform, very slender, base rather long and enlarging outwards, second articulation short, narrowed at base, third *shorter* than the first, fourth slightly *longer* than the third, fifth longest, the remaining ones gradually shorter to the extremity, prothorax with a transverse groove at each extremity, depressed, longer than the head, much contracted posteriorly, the sides *projecting into a large tubercle* before the middle: elytra with piliferous punctures, widening posteriorly, and conjointly rounded at tip: femora clavate: first and second segments of the abdomen entirely confluent.

99. *D. PALLIDA*, Say. (Callidium.) Journ. Acad. Nat. Sc., iii. 412. Rhagium nitidum. Mels. Cat., No. 790. Boston Soc. Collection, No. 845. Obrium lepidum, Dej.

Inhabits Arkansas, Pennsylvania; and Carolina, (June,) on Castanea pumila.

OBRIUM, Serv. Ann. Ent., iii. 93.

100. *O. RUFULUM*, Dej. $2\frac{2}{3}$ " long.101. *O.? DEJEANII*, Le Conte.

3" long. Olivaceous, elytra abbreviated.

*NOTHRUS. (*Plectrocerum?* Dej.)

Body slender; *antennæ* setaceous, longer than the body, fringed beneath with a row of fine hairs, scapus enlarging rapidly to the apex, pedicellus one-fourth the length of the third articulation, which is equal to the fourth, fifth longest, eleventh shorter than the penultimate: prothorax elongate, sides continuous with the head, slightly convex, suddenly diminished posteriorly; a wide depression along the dorsal line: scutel rounded at tip: elytra parallel, flattened above, apex conjointly rounded: feet slender, femora clavate. Facies of *Ancylocera*.

102. *N. FUSCUS*.

Pale-brown, slightly reddish beneath, eyes black. $2\frac{1}{2}$ ''' long; (elytra $1\frac{1}{2}$,) $\frac{1}{2}$ wide. Cab. Le Conte.

Antennæ slightly hairy: pronotum with a broad depression along the dorsal line, which widens and turns outwards posteriorly; and with the elytra clothed with short prostrate hair: femora strongly clavate.

PLECTROMERUS, *Dejean*.

103. *P. DENTATUS*, *Le C.* Ann. Lyc. N. York, i. 172, pl. 11, fig. 11.

104. *P. CONCINNATUS*, *Dej.*

$2\frac{1}{2}$ ''' long. Pale-brown, elytra with three longitudinal darker spots; femora mutic.

HETERACHTHES, *Newman*. (*IBIDION*, *Dej. Cat.*)

Body slender, prothorax cylindrical, twice as long as the head, narrowed posteriorly: *antennæ* eleven-jointed, setaceous, and as long as the body in the female, first joint double the thickness of the remainder, second minute, subglobular, third considerably the longest; and most of them slightly thickened at the end; in the *male*, first and second as in the female, third thicker than the first, and with the fourth, fifth and sixth cylindrical, rounded at both ends, seventh and succeeding ones suddenly reduced in thickness, and resembling those of the female; slightly fringed beneath in both sexes: scutel rounded: elytra slender, mutic: extremity of the femora incrassated.

105. *H. 4-MACULATUM*.

Testaceous, two yellow circular spots near the middle of the elytra. 4—5 lines long. Hab. Pennsylvania: Carolina in July.

Rhagium 4-maculatum. Mels. Cat., 789. Boston Coll., No. 741.

A slender insect, with prominent eyes projecting beyond the prothorax, the latter with a wide, shallow transverse groove before the middle, and another at the posterior extremity; elytra with piliferous punctures.

VAR. *pallidum*. Pale, posterior spots wanting. Three lines long.

106. *H. EBENUS*, *Newman*, *dimidiaticorne*, *Dej.*

Very slender, uniform atropurpureous; head and prothorax minutely granulate; dorsal line smooth; elytra with a slight humeral depression. $4\frac{1}{2}$ ''' long; $\frac{3}{4}$ wide.

STIZOCERA, *Serv.* Ann. Ent., iii. 107.

Body slender, subcylindric, with numerous impressed punctures: head large, eyes deeply emarginate and prominent, *antennæ* as long as the body, setaceous, articulations cylin-

drical, slightly thickened at tip, third longest, subsequent ones subequal, tip of the third and several of the succeeding ones *with a spine*; palpi with the terminal articulation obconic, truncate: prothorax cylindrical, narrower than the head and elytra, and double the length of the head: elytra subparallel, punctate scabrous, tipped each with two spines: feet long and slender.

In the armature of the antennæ and elytra this genus approaches *Elaphidion*; and *Ibidion* in form.

107. *S. UNICOLOR*, *Randall*.

Pale-yellowish testaceous, elytra paler; eyes black, coarsely reticulate. $4\frac{1}{2}$ " long. Hab. sea coast of Virginia. Bost. Coll., No. 564.

Ibidion plochionocerum, *Dej.* Head with numerous impressed punctures, prominent between the antennæ, two little tubercles in front of this, medial line fine, obsolete on the vertex, where the punctures are smaller and less crowded; inner edge of the mandibles black: prothorax with a slight, transverse, impressed line at each extremity; sparsely punctured, and having a few hairs: elytra irregularly and coarsely punctate, having a small, sutural spine, and a larger one at the external angle: feet slender, femora thickened beyond the middle.

IBIDION, *Serv.* Ann. Ent., iii. 103.

108. *I. LINEARIS*, *Dejean Catalogue*.

ANCYLOCERA, *Serv.* Ann. Ent., iii. 107.

109. *A. RUGICOLLIS*, *Fabr.* (Gnomo.) Syst. El., ii. 317. *Saperda bicolor*, *Oliv.*, iv. pl. 3, f. 25.

110. *A. LIVIDIPENNIS*, *Le Conte*.

Black, elytra yellow. 6" long.

STENOPTERUS, *Illig.* *Serv.*, Ann. Ent., ii. 545. R. A., (Ed. nov.) pl. 66, b. fig. 2.

111. *S. RUFUS*, *Lin.* Harris, Cat. *Fabr.*, ii. 372. *Oliv.*, iv. pl. 1, fig. 6, a. b.

112. *S. SANGUINICOLLIS*, *Say.* Bost. Journ. Nat. Hist., i. 194.

Olivier has a North American species under the same name, (pl. 74, fig. 7,) which is probably identical with the *collaris* of Forster, Cent. i. 46, Lin. Gmel., p. 1881, No. 24, and with *cruentatus*, *Dej. Cat.*

NECYDALIS, *Lin.* *Serv.*, Ann. Ent., ii. 543. R. A., pl. 66, bis. fig. 3.

113. *N. AMERICANUS*.

Rufo-testaceous; head, antennæ, (base and tip tinged with rufous,) thorax, scutel, and abdomen above, black: elytra punctate, more coarsely towards the margin; reddish-brown, with a pale-yellowish spot at tip.

10 lines long. Inhabits Pennsylvania. *Molorchus americanus*, *Dej. Cat.*

114. *N. MELLITUS*, *Say.* (*Molorchus*.) Boston Journ., i. 194. Harris, Hartf. Tr., p. 89. *Molorchus cylindricus*, *Dej.*

MOLORCHUS, *Fabr.* Mulsant, 107.

115. *M. BIMACULATUS*, *Say.* Journ. Acad., iii. 428. *M. affinis*, *Le C.* Ann. Lyc. N. Y., i. pl. 11, fig. 12.

Varies considerably in size. Inhabits from Massachusetts to Alabama. Found in the blossoms of *Cornus florida*, in April and May, in Pennsylvania.

M. corni. Black; prothorax rufous, punctured, a small polished tubercle each side of the dorsal line before the middle, and a longitudinal one behind, forming an equilateral triangle with them; elytra punctured; antennæ about as long as the body. Three lines long.

Molorchus Corni, *Hentz*, MS. Boston Coll., No. 782. *M. ruficollis*? *Dej.* Cat.—Cuba. Inhabits Carolina in March—May, upon the flowers of cornus.

The insect described under the name of *Molorchus marginalis*, by Say, in Long's Expedition, ii. 292, is a *Malthinus*.

LAMIADÆ.

MONELERMA, *Say*. Journ. Acad., iii. 403.

116. *M. ANNULATA*, *Say*. Journ. Acad., iii. 404. Inhabits Missouri Territory.

ACANTHODERES, *Serv.* Mulsant, 143.

117. *A. QUADRIGIBBUS*, *Say*. Bost. Journ., i. 195.

Inhabits near New Orleans, Say: Carolina in May and June, *Hentz*: Pennsylvania, Dr. Melsheimer. Boston Coll., No. 1039. *A. distinctus*, *Dejean*.

118. *A. TRIANGULIFER*.

Dull reddish-brown, elytra with a large, irregular triangle behind the middle, running from the outer margin to near the suture; and a small one near the apex. 6''' long; 2½ wide. Inhabits Alabama.

Robust, antennæ annulate with cinereous on the basal half of the articulations: sides of the prothorax cinereous, with a black spot in front of the spine; a black spot on each side above: scutellum and adjoining portion of the elytra black: elytra slightly emarginate, covered with small impressed punctures: feet annulate, with cinereous; segments of the venter margined with black.

ÆGOMORPHUS, *Dejean* Cat., p. 363.

Distinguished from *ACANTHODERES* by having the antennæ slightly fringed beneath; and an additional spinose tubercle on each side of the prothorax above.

119. *Æ. DECIPIENS*.

Cinereous brown, punctured; front plane, whitish; elytra with three obscure, oblique, subparallel bands, middle one undulated. 6''' long; 2¼ wide. Cab. Le Conte.

Front and labrum covered with short, whitish hair, sprinkled with a few minute, black dots; frontal line impressed; vertex with a slight, dark elevation between the medial line and eyes; mandibles black; eyes reddish-brown, with a brassy reflexion; antennæ reddish-brown, annulate with gray: prothorax cinereous, with numerous dark, dilated, impressed punctures; a conspicuous black, smooth tubercle each side of the dorsal line; lateral spines direct, punctured posteriorly; dorsal line marked by the lighter colour of the hair, which is continued upon the scutellum, and bounded upon the latter and posterior extremity of the former with a lateral black line: elytra with an indistinct, oblique, black band from near the base of the suture, towards the humeral angle; an undulated, W-shaped, post-medial one; and a small one near the apex, bounded by a black dot exteriorly; suture cinereous, marked posteriorly with a row of about eight black dots; external margin similarly marked; apex truncate, scarcely emarginate separately; external side slightly produced: feet reddish-brown; femora clavate, covered with cinereous hair; tibiæ annulate with the same material: inferior parts testaceous, slightly clothed with cinereous.

The ground colour, where it can be distinguished, seems to be uniformly testaceous.

120. *Æ.* A second species, too imperfect to admit of description.

*ASTYNOMUS.

An uncharacterized genus of Dejean, including *Ædilis*, but which I restrict to the species here cited; assuming the remarkable enlargement at the extremity of the third articulation of the antennæ in the male as the generic characteristic.

121. *A. NODOSUS*, *Fabr.* Syst. El. ii. 289. Oliv., pl. 14, fig. 103. Encyc., v. 291.

This rare species has been found in Pennsylvania and Maryland.

AMNISCUS, *Dejean*.

122. *A. PERPLEXUS*.

Dull, obscure brown; pronotum with two tubercles; elytra with an indistinct, submarginal costa, and rather regular series of impressed punctures. $5\frac{1}{2}$ ''' long; (elytra $4\frac{1}{4}$.) $2\frac{1}{4}$ wide.

A. perplexus, *Dej.* Cab. Le Conte. Front convex, medial line impressed, particularly between the antennæ; labrum fulvous, mandibles shining black; antennæ obscurely annulate: prothorax with small, impressed punctures, largest posteriorly, and wanting upon the obtuse lateral tubercle, pleura margined anteriorly and posteriorly with large ones, of which there is but a single row posteriorly; a small, longitudinal tubercle along the dorsal line posteriorly, and a small, circular, shining one each side of it anteriorly: scutel longitudinally impressed: elytra entire at tip, an indistinct, cinereous spot behind the middle, and at the basal angle, and a row of black points along the suture posteriorly: feet and under parts with numerous small spots: elytra cinereous, hairy, mottled with dark-brown.

123. *A. COLLARIS*.

Dull reddish-brown, with darker spots; five tubercles arranged around the posterior margin of the prothorax. $4\frac{3}{4}$ ''' long; (elytra $3\frac{1}{2}$.) 2 wide.

Front uniformly dull cinereous; medial line strongly impressed, eyes dark-brown, with a golden reflexion; antennæ and feet annulate: prothorax thickly punctured, a large tubercle in the middle posteriorly, and another each side between it and the lateral tubercle; elytra punctate, basal angles glabrous black, whence a dark-brown, irregular band extends backwards to the middle, and then narrows towards the suture; one or two black spots near the suture posteriorly; suture with a row of dark points; apex sub-entire: metasternum with yellowish hair, indistinctly dotted with brown: ground-colour dull testaceous.

124. *A. ALBESCENS*.

Grayish-white, antennæ spotted and annulate with brown; elytra scabrous, with numerous elevations, posterior third and epipleura brown. $10\frac{1}{2}$ mm. long; (elytra 8) 4 wide. Boston Collection, No. 545?

Ground-colour blackish-brown, covered with close, short hair: head concave between the antennæ, medial line wanting; eyes and mandibles black; mouth yellowish-brown; antennæ with a dark-brown annulation at the apex of every articulation, confluent with a paler and more indistinct one at the base of each succeeding one; third and fourth articulation thickly maculate with brown, five or six terminal articulations without spots: pronotum with five tubercles around the posterior margin, central one in the dorsal line, conspicuous and polished, lateral ones clothed like the general surface; an obtuse elevation each side anteriorly, medial line but slightly marked: elytra with a sutural and three lateral costæ, marked with elevated points; a small brown macula near the suture behind the middle; suture with a row of black points; epipleura with a dark-brown spot extending to the middle of the elytra, where it rises in a point, forming a triangle; apex dark-brown, slightly marked with cinereous, somewhat truncate within; tarsi blackish-brown, extremity of the tibiæ and an annulation near the base of the same colour: under parts with a tinge of reddish, slightly clothed with hair; sternum more thickly clothed, and irrorate with brown.

VAR. *A. asperatus*, *Dej.* Elytra, with the posterior black spot wanting, and having a short, curved ridge at the base, extending from the scutel to the suture; scutel brown. $3\frac{1}{4}$ lines long.

125. *A. MARGINELLUS*.

Robust, cinereous brown, elytra with a whitish band posteriorly, bounded with a black line anteriorly and posteriorly; apical third brown. 9 mm. long; (elytra 7,) 4 wide.

A. marginellus, *Dej. Cat.*—*Cab. Le Conte*. Front mottled with cinereous and brown, impressed between the antennæ; a narrow frontal line continued over the vertex, where it has a short, black band on each side; eyes, mandibles, and maxillary palpi black, apex of the latter yellowish; labium and palpi yellowish; a glabrous, black spot behind the eye; antennæ maculate and annulate, as in the preceding species, the scapus being maculate in addition: pronotum unequal, medial line elevated, glabrous, widest posteriorly, where it forms a tubercle; lateral tubercle posterior, obtuse, projecting; another intermediate between it and that of the dorsal line, an indistinct, cordate elevation anteriorly, and converging to the posterior dorsal tubercle: scutel and adjoining portion of the elytra blackish: elytra slightly truncate at tip, rough, with numerous elevations, cinereous brown, with a greenish tinge, interspersed with black tufts, which form a sub-basal and post-medial macula, the latter diverging obliquely backwards from the suture, which is dotted with black, epipleura greenish, irrorate with black, margin with a row of black dots, a black, submarginal band from the shoulder to the middle, indistinctly continued across the prothorax: feet and beneath with short, prostrate hair, spotted with brown; tibiæ bi-annulate with blackish, tarsi blackish.

126. *A. ACULIFERA*, *Say*. (*Lamia*.) *Journ. Acad. Nat. Sci.*, iii. 329.

Thorax unequal; elytra unequal, with numerous elevated points, aculeate, with a white band behind; *tip entire*. Four lines long.

I have not met with a specimen which could be determinately referred to this species.

127. *A.? CRYPTUS*, *Say*. (*Lamia*.) New species of insects, found by Joseph Barabno, in Louisiana.

Clothed with dark, ferruginous, prostrate hair. $6\frac{3}{4}$ lines long.

128. *A. VARIEGATUS*.

Brown, spotted with black, elytra with two approximate costæ united posteriorly, with an intermediate black spot behind the middle, bounded posteriorly by an elongate, cinereous spot. $4\frac{1}{2}$ ''' long; (elytra $3\frac{1}{2}$.) $1\frac{3}{4}$ wide.

Ground-colour, reddish-brown; mouth pale, glossy, yellowish-brown; front slightly convex, covered with yellowish, prostrate hair, sprinkled with black; medial line a dark streak, indented between the antennæ, and crossed by a transverse, indented line at the posterior base of the antennæ, a glabrous point at the junction; antennæ brown, scapus annulate in the middle, with cinereous, remaining articulations, with the basal third, of the same colour: pronotum with minute, black punctures, a small, central black spot, and another on each side anteriorly, forming a triangle; scutel black: elytra truncate at tip, surface with numerous, impressed punctures, each with two longitudinal costæ, which unite near the apex, a cinereous spot lying in the commissure; costæ, suture, and external margin marked with a row of black dots; beneath reddish-brown, scarcely hairy; feet annulate.

VAR. A. trifasciatus. Mouth not yellowish; elytra with three, irregular, transverse, dark-brown bands, the first sub-basal, extending outwards and forwards from the suture towards the shoulder, the second medial, and the third in the line of the posterior black spot. Inhabits Alabama.

VAR. A. obscurus. Very dark-brown, with three indistinct, black bands; beneath blackish-brown.

129. *A. COMMIXTUS*.

Brown, with a few yellowish spots and numerous black tufts; pronotum finely and irregularly punctured; elytra bi-costate, and thickly covered with large dilated, impressed punctures. $9\frac{1}{2}$ mm. long; (elytra 7,) 4 wide. Inhabits Washington City.

Front covered with olivaceous hair, spotted with brown; labrum and clypeus yellowish-brown over the vertex; a large brown spot at the inner base of the antennæ, and another on the vertex; antennæ cinereous, spotted and annulated with brown; pronotum with an obsolete, black tubercle on each side anteriorly; scutel black, with a few yellowish hairs; elytra with two costæ united towards the apex, inner one with a conspicuous, lengthened,

black tuft at the base, a smaller one behind the middle, followed by another posterior one, these, with two corresponding ones, forming a common quadrangle; a yellowish spot near the base and exterior margin; suture with a row of small tufts; exterior margin spotted with yellowish; apex truncate: femora and under parts spotted with brown, tibiae annulate. Colour and general appearance of the preceding *variety*.

I have a small, imperfect specimen from Massachusetts, (Boston Collection, No. 537,) and another from Carolina, (ib. No. 1040,) which appear to be the same species, although not more than $3\frac{1}{2}$ lines long. Another individual, 3 lines long, belongs to the collection of Dr. Le Conte.

130. *A. INTERRUPTUS*.

Brown, punctured, prothorax surrounded posteriorly with five tubercles, elytra truncate, with two costae, numerous glabrous, and four indistinct, cinereous spots. $3\frac{3}{4}$ " long; (elytra $2\frac{3}{4}$,") $1\frac{1}{2}$ wide. Inhabits Pennsylvania.

Cerambyx interruptus, Mels. Cat., No. 742. Front and antennae spotted, the latter annulated with brown; frontal line impressed throughout, a transverse line between the eyes and antennae; margin of the labrum yellow, palpi rufous: elytra reddish-brown, slightly hairy, with glabrous portions; an obsolete, cinereous spot at the base, another at the outer margin behind the middle, a third posterior to this at the suture, and a fourth at the junction of the costae; outer margin with a brown macula near the shoulder; epipleura cinereous, margined above and below with a row of brown spots: feet and beneath cinereous hairy, spotted with brown; tibiae annulate.

131. *A. FASCICULARIS*, *Harris*. (Mesosa.) Tr. Nat. Hist. Soc., Hartford, i. 88.

4 lines long.

132. *A. STICTICUS*, *Dejean*. 8 mm. long; (elytra 6,) 3 wide.

This is probably a large variety (or perhaps the female,) of *A. MACULA*, *Say*, in which the cinereous spot on the elytra extends to the suture. It appears to be noticed by *Say*, when he describes the gray spot of the elytra as "rarely reaching the suture."

133. *A. MACULA*, *Say*. (Lamia.) Journ. Acad. Nat. Sci., v. 268. Mels. Cat., No. 735.

A. hebes, *Dej.* Inhabits Pennsylvania, in June—August.

134. *A. ALPHA*, *Say*. (Lamia.) Journ. Acad. N. Sc., v. 270. Mels. Cat., No. 738. *Graphisurus pusillus*, *Kirby*, N. Z., 169. Pennsylvania. *A. cinereus*, *Dej.*, appears to be a small variety, with rather rougher elytra.

VAR. *A. divergens*. Dull-brown, elytra with blackish velvety points, and a band behind the middle, running backwards and outwards from the suture. 2 lines long. Inhabits Pennsylvania.

Head convex, with a deep impression between the antennae; fifth, sixth, and seventh articulations of the antennae pale-yellowish, and with the third and fourth tipped with black: pronotum with two diverging, velvety lines: elytra minutely punctured, having blackish, velvety points, and an oblique band behind the middle, in front of which the surface is slightly cinereous, with short hairs; inner extremity truncate; sternum and feet dull-brown, obscurely cinereous; abdomen darker, polished.

135. *A. LATERALIS*.

Uniform reddish-brown, subglabrous; epipleura with a black band. 6 mm. long; (elytra $4\frac{1}{2}$,") 2 wide. Inhabits Pennsylvania.

Front convex, covered with dull-grayish hair, deeply sulcate between the antennae; eyes black, prominent; antennae with the articulations tipped with blackish: prothorax finely punctured, and having a prominent lateral tubercle, behind which it is suddenly reduced; an obsolete tubercle each side of the middle, anteriorly: elytra with impressed punctures, sparsely hairy, with a black band along the epipleura from the base to beyond the middle; apex truncate within: sternum slightly hairy.

136. *A. PUNCTATUS*.

Robust, brown, densely clothed with short hair, elytra with four rows of black points. 5 mm. long; (elytra 4,) 2 wide.

Frontal line impressed, entire; antennæ with the apex of the articulations blackish: prothorax finely punctured, a prominent lateral tubercle, behind which the diameter is suddenly reduced: elytra truncate, with two or three indistinct costæ, bearing rows of black points; an obsolete cinereous spot behind the middle: femora spotted; tarsi and adjoining portion of the tibiæ blackish: sternum yellowish hairy, with brown spots: venter blackish, with very little hair.

137. *A. VICINUS*.

Brown, densely clothed; pronotum with three tubercles arranged in a triangle; elytra truncate, with three costæ bearing black points, a black macula upon the inner one behind the middle, epipleura with a black band.

4½ mm. long; (elytra 3½,) 1½ wide. *A. vicinus*, *Dej.* Cab. Le Conte.

Head sulcate between the antennæ; antennæ dull yellowish, feebly spotted with brown, and annulate with blackish at the apex of the articulations: prothorax armed laterally, a tubercle in the dorsal line posteriorly, and another each side anteriorly: elytra minutely punctate, a few black points along the costæ, and a black macula near the suture behind the middle, bounded exteriorly by an obsolete, cinereous spot.

This and the two preceding species are nearly allied.

138. *A. FACETUS*, *Say.* (*Lamia.*) *Journ. Acad. Nat. Sc.*, v. 271. *Mels. Cat.*, No. 739, 741, 743. *A. pumilus*, *Dej.* Inhabits Pennsylvania, appearing in June.

139. *A. PAGANUS*, *Dej. Cat.*

140. *A. CONFINIS*, *Dej. Cat.*

141. *A. GLAUCINUS*, *Dej. Cat.*

*HYPERPLATYS (< *Leiopus*.)

General characters of *Leiopus*, *elytra* plane above, apex separately emarginate; scutell triangular, apex rounded.

Agrees with *Leiopus* in the re-curved spine upon the prothorax, in having incrassated femora, and in several minor characters, but the entire form is depressed.

142. *H. MACULATA*.

Pale reddish-brown, irregularly spotted with dark-brown, two large spots upon the pronotum, and two upon the elytra behind the middle.

2½" long. Inhabits Pennsylvania. *Cerambyx punctatus* and *maculatus*, *Mels. Cat.*, No. 734. *Leiopus tigrinus*? *Dej. Catalogue*.

VAR. *H. Nigrellus*. Black; cinereous above, spots black.

143. *H. ASPERSA*, *Say.* (*Lamia.*) *Journ. Acad. N. Sc.*, iii. 330. *Leiopus puellus*? *Dej.* Boston Collection, No. 543? Inhabits Missouri, Mississippi, and Alabama?

Closely allied to the preceding, but the femora are "reddish-brown" or orange, and the spots are more regular in disposition and size.

144. *H. FEMORALIS*.

Dull black, minutely scabrous; apex of the elytra produced in a spine exteriorly; basal half of the femora orange yellow. 5½ mm. long; 2 wide. *Alcidion femorale*, *Dej. Catalogue*.

Characterized from an imperfect individual in Dr. Le Conte's cabinet.

LEIOPUS, *Serv.* Ann. Ent. Fr., iv. 86. Muls., 149.

145. *L. SYMMETRICUS.*

Cinereous hairy above, with oblong, brown maculæ; beneath testaceous. $3\frac{1}{2}'''$ long; (elytra $2\frac{1}{2}$.) 1 wide. *Cerambyx symetrus*, *Knoch.* Mels. Cat., No. 736. *Leiopus gilvicornis*, *Dej.* Catalogue.

Front slightly hairy, medial line impressed, mouth testaceous: pronotum cinereous, a brown band each side of the middle; elytra separately rounded at tip; pale cinereous; outer margin brown; a small, oval, brown spot at the base; a lengthened one in the middle, very near the suture, and a minute one at the apex: feet dull reddish-brown, extremity of the tibiæ blackish.

VAR. *L. confluens.* Every portion paler, allowing less contrast in the colours of the elytra, which have but little cinereous, the spots being confluent with the brown of the margin, leaving a large, common, cinereous spot about the middle, and a smaller one near the apex.

146. *L.? SPINOSUS*, *Say.* (Lamia.) Journ. Acad. N. Sc., v. 271. Mels. Cat., No. 770.

EXOCENTRUS, *Muls.*, 152, pl. 3, fig. 3.

147. *E. DASYCERUS*, *Say.* (Lamia.) Journ. Acad. N. Sc., v. 270. *E. humilis*, *Dej.*

Inhabits Massachusetts, Pennsylvania, and Carolina, appearing in June. Boston Collection, No. 552.

148. *E. EXIGUUS*, *Dej.* Cat. $1\frac{1}{2}'''$ long.

149. *E. OBSCURUS.*

Dark-brown, elytra with dilated, impressed punctures, and two costæ, exclusive of a sutural one.

$3\frac{3}{4}'''$ long; (elytra $2\frac{1}{2}$.) $1\frac{1}{3}$ wide. Pennsylvania. Cabinet of the Reverend D. Ziegler.

Frontal line impressed throughout; a tubercle each side of it on the vertex; antennæ dark testaceous, indistinctly annulate; trophi rufous: elytra scarcely truncate, two small black spots side by side, near the posterior extremity: metasternum cinereous hairy, spotted with blackish: feet dark-brownish rufous.

This species is at first view distinguished from *dasycerus*, by the superior size and darker colour.

POGONOCHERUS, *Latr.* *Serv.* Muls., 155, pl. iii. fig. 4.

150. *P. MIXTUS.*

Head and thorax blackish-brown, sparsely covered with erect hairs; elytra brown, varied with yellowish cinereous. $2\frac{1}{2}'''$ long. Inhabits Pennsylvania. Cab. Melsheimer.

Head sparsely hairy, black, with an indistinct, yellowish spot before the eyes; frontal line impressed; antennæ testaceous, with the tip of the articulations blackish; scutell black: elytra hispid; base, middle, and apex brown; extreme tip and an oblique band before the middle running forwards and outwards, yellowish, with a few brown dots; extreme base testaceous: feet brown, varied with testaceous.

The thoracic tubercles are rather prominent.

151. *P. VESTITUS*, *Say.* (Saperda.) Journ. Acad. N. Sc., v. 273. Inhabits Alabama.

This is a very different insect from the *Saperda vestita*, *Say.* Long's Expedition, ii. 290.

DESMIPHORA, *Serv.*

152. *D. TOMENTOSA.*

Rufo-testaceous, head and prothorax reddish-brown; every part covered with erect hairs.

$3'''$ long; (elytra $2\frac{1}{4}$.) 1 wide. *D. tomentosa*, *Dej.* Cat. Cab. Le Conte.

Prothorax with confluent, impressed punctures, and a prominent lateral spine behind the middle: elytra with piliferous punctures, and a few indistinct tufts of yellowish hair; apex entire.

MONOHAMMUS, *Zatr.* Serv., Ann. Ent., iv. 91.

153. *M. TITILLATOR*, *Fabr.*, ii. 295. *Oliv.*, Ins., pl. 15, fig. 109. Drury, —. Harris, 88.

154. *M. DENTATOR*, *Fabr.*, ii. 294, *carolinensis*, *Oliv.*, pl. 12, fig. 88.

155. *M. BIFIDATOR*, *Fabr.*, ii. 286.

156. *M. SCUTELLATUS*, *Say.* (Cerambyx.) Long's Expedition, ii. 289. *M. Faber*, *Dej.* *M. resutor*, *Kirby*, N. Z., 167.

157. *M. SUTOR*, *Lin.* Harris's Catalogue.

Perhaps Dr. Harris's insect is the preceding species, which is the analogue of *M. scutellatus*.

158. *M. MACULOSUS*.

Blackish-brown, thoracic spines and scutel white; elytra cinereous and brown intermixed, the latter in raised, tufted patches, apex armed at the suture; sternum and tip of the venter reddish.

9" long; (elytra 7,) 3 wide. *M. maculosus*, *Dej.* Cab. Le Conte.

Closely allied to *M. scutellatus*, but is less shining, and scarcely brassy, and the white of the scutel is less pure. The essential character is the white upon and around the lateral armature.

159. *M. PULVERULENTUS*.

Ground colour brown, entirely covered with short, prostrate, whitish hair, indistinctly clouded with pale-brown upon the elytra. $8\frac{1}{2}$ " long; (elytra $6\frac{1}{2}$,) $2\frac{1}{2}$ wide. Cab. Le Conte.

General surface covered with small, impressed, brown punctures: mandibles black; labrum dotted with brown, and fringed with fulvous hair; front minutely spotted with brown between the eyes and antennæ; frontal line entire; eyes black; scapus brown, dotted; prothorax equal, lateral spines slender; scutel whitish: base of the elytra brownish, an indistinct, irregular band of the same colour behind the middle, tip unarmed; medial femora and tibiæ with a small, glabrous, brown spot about the middle of the posterior side.

160. *M. TOMENTOSUS*, *Ziegler*. Proceed. Acad. N. Sc., ii. 47. *M. confusor?* *Kirby*, N. Z., 168.

Dull cinereous with a tinge of reddish; elytra with an irregular, transverse, dark-brown band near the base, and another behind the middle; base shagrinèd. 12" long; (elytra $8\frac{1}{2}$,) 4 wide. Pennsylvania.

Head dark-brown, with a reddish tinge, sparsely covered with prostrate, cinereous hair; an impressed line above; labrum blackish, hairy, margin piceous; clypeus, testaceous with reddish hair; eyes dark reddish-brown; antennæ concolorous with the head, outer articulations paler, except at the tips; pronotum transverse, cinereous, with a medial, glabrous, brown space, and two indistinct ones each side; lateral spine large, direct; scutel cinereous, impressed glabrous along the middle: elytra separately slightly rounded at tip, basal angles prominent, base square, finely shagrinèd; surface densely covered with short, prostrate, cinereous hair, with a confluent series of blotches, forming an irregular, transverse band near the base, and another behind the middle: under parts reddish, sparsely covered with cinereous hair; feet dull brown cinereous.

161. *M. TESSELATUS*.

Ground colour brown; above, sparsely covered with yellowish-brown hair, and several irregular spots of the same material; beneath, densely clothed with short, prostrate, fulvous hair. 12" long; (elytra 9,) 4 wide.

M. tessellatus, *Dej. Cat.* Cab. Le Conte. *M. Marmorator?* *Kirby*, Northern Zoology, 169.

Trophi dark reddish-brown, mandibles black, frontal line entire; eyes black; head above, and pronotum, scabrous; scutel covered with fulvous hair: elytra mutic, minutely shagrinèd at base, covered with small, impressed, punctures, and scattered dots of yellowish hair, of which there is an irregular row near the suture, a more regular one between two indistinct costæ, and a few exterior to these, the remainder lying along the external margin and at the apex.

162. *M. PULCHER.*

Ochraceous with a dense covering of short hair; basal articulations of the antennæ, base of the elytra, and a wide, transverse band behind the middle, brown. 10''' long; 3 wide. Inhabits Pennsylvania.

Lamia pulchra, *Mels. Catalogue*, No. 753. *Monohammus carpentarius*, *Dej. Cat.*, p. 367.

Frontal line impressed, entire; region of the mouth testaceous; mandibles and eyes black; disk of the labrum blackish; antennæ ochraceous, invested with fine hair, and having a row of scattered hairs beneath; scapus brown, with scattered hairs, remaining articulations with the tips, slightly brown; prothorax sub-equal: scutel conspicuous, its colour being paler than that of the elytra: elytra truncate at tip, shagrinèd at base, which is brown, gradually passing into ochraceous at the posterior margin; another band commences behind the middle in an irregular but definite line, and passes into the ochraceous of the apex: inferior parts concolorous: ground testaceous.

This handsome insect is rare in collections. I have seen it only in Dr. Melsheimer's, and in that of the Academy of Natural Sciences.

"LAMIA, *Fabr.*"

The Reverend F. W. Hope (*Charlesworth's Mag.*, N. H., iii. 251,) has restricted this generic name to a group named BATOCERA, by Count Dejean, none of the members of which have been found here. It is quoted in this place merely as a depository for such species as cannot be referred to their proper station without an examination of the individuals themselves.

L. BIFIDATOR, *Fabr.*, ii. 286. "Thorace spinoso tuberculatoque cinereo, margine lineolisque atris, elytris cinereis, maculis oblongis atris." *Astynomus nodosus*, *F.* ♀

L. MIXTA, *Fabr.*, ii. 290. "Thorace spinoso, cinereo fuscoque variegata, antennis longis." *Ent. Syst. Supp.*, 144, 46.

L. OBSCURA, *Fabr.*, ii. 294. "Thorace spinoso, fusca, elytris striatis, apice pallidis, antennis longis."

PLECTRODERA, *Dejean.*

164. *P. SCALATOR*, *Fabr.*, ii. 295. *Oliv.*, pl. 67, fig. 172.

"Thorace acute spinoso, atra, elytris strigis numerosis interruptis albis, antennis mediocribus,"—belli, Le Conte. (*Lamia.*)

Mr. Le Conte's specimen was taken near the Rocky mountains.

ONCIDERES, *Serv.*

165. *O. CINGULATUS*, *Say.* *Journ. Acad. Nat. Sci.*, v. 272. Knoch, in *Mels. Cat.*, 775. *O. rubiginosus?* *Dej.*

The sexes differ only in the greater length of the antennæ in the male. The scutel is sometimes fulvous. A specimen in Mr. Le Conte's collection, named *O. rubiginosus*, *Dej.*, has the fulvous spots a little larger than they usually are, and the pronotum is whitish.

Appears in Pennsylvania during the last two weeks in August, and first week in September, upon *Carya alba*, feeding upon the bark of the small branches. The ova are a line long and half a line in diameter, and are deposited in excavations made for the purpose in the small branches of the tree just mentioned. The female then proceeds to gnaw a groove of a line in width, and nearly as much in depth, around the limb, which, in a short time, dies, and the larva feeds upon the dead wood. The diameter of the branches thus cut is from three to five lines, and it sometimes happens that the upright

stems of small trees are cut in a similar manner, and were the insect abundant, much damage would be done to valuable young forests of a material extensively used for hoop-ing casks. Guilding (Lin. Tr., vol. xiii. pl. 30,) gives a figure of "*Lamia amputator*" in the act of cutting off a branch.

PTYCHODES, *Chevr.*

Body oblong fusiform, tapering forwards and backwards from the base of the elytra: head long and narrow, contracted forwards; antennæ approximate, filiform, two and a half times the entire length, fifth articulation reaching to the end of the elytra in the male; eleventh longest, ($5\frac{1}{2}'''$), the third being next in length, ($4\frac{1}{2}'''$), the fourth to the tenth being about half the length of these: *eyes* divided into two upon each side, the inferior pair large and nearly circular, and the upper ones contracted to a narrow line; palpi slender, ultimate articulation fusiform: prothorax narrowed forwards: elytra tapering rapidly, and ending in a sutural *spine*: *feet* long and slender, posterior pair shortest, femora simple, anterior tibiæ curved, *medial* pair with a notch near the extremity upon the outside.

166. *P. VITTATUS*, *Fabr.*, (Saperda) ii. 322.

Pale-brown, with fulvous dots, a broad, lateral, and common, sutural white vitta. 10''' long; $2\frac{3}{4}$ wide. Drury's Illustrations, i. pl. 41, fig. 1. Inhabits Louisiana.

Head deeply impressed between the antennæ, eyes dark reddish-brown, antennæ scabrous at base, a white lateral vitta extending from the base of the antennæ backwards along the head, propleura, and epipleura: pronotum transversely rugulose, with a white, dorsal vitta, abbreviated before: elytra with a sutural spine at tip; slightly shagrinéd and punctured at base, with about two longitudinal rows of fulvous spots, and having a broad marginal vitta with its inner edge, and a common, sutural one with its outer margins scalloped: feet and under parts cinereous, except a white spot upon the lateral margin, above the medial—and another above the posterior feet.

TETRAOPES, *Dalman.*

167. *T. TETROPTHALMA*, *Forster*, tornator, *Fabr.*, ii. 301. Am. Orn., ii. pl. 11.

Occurs from Massachusetts to Carolina, on *Asclepias syriaca*. Appears in Pennsylvania in June and July. Common.

168. *T. CANTERIATOR*, *Drapiez*. Ann. Gen. des Sc., phys. ii. 47, pl. 16, fig. 6,—arator, *Germer*, Sp. nov., 486,—cordifer, *Dej.*

Massachusetts to Alabama, on *Asclepias*. Rare in Pennsylvania. M. Drapiez' figure does not represent the usual characters of the species. All the specimens I have seen have the medial elytral spots confluent, forming a cordate spot, of which the apex extends backwards and unites with the apical spot, which is also common.

169. *T. 5-MACULATA*, *Le Conte*.

Rufous; antennæ, scutel, feet, and inferior parts black; four black spots arranged in a quadrangle upon the pronotum, one upon the basal, external angle of the elytra, and another towards the outer margin behind the middle; apex blackish. $4\frac{1}{2}'''$ long. Inhabits Sault Ste. Marie. Cab. Le Conte.

HEBESTOLA, *Dejean*.170. *H. NEBULOSA*.

Uniform reddish-brown, with a thin clothing of short, prostrate hair; frontal line slightly marked; pronotum with confluent, impressed punctures, a dilated, abbreviated, glabrous sulcus in the dorsal line; elytra with small, dilated punctures, basal angles glabrous.

$5\frac{1}{2}$ ''' long; (elytra 4,) $1\frac{1}{2}$ wide. *H. nebulosa*, *Dej.* Cab. Le Conte.

*HETÆMIS.

Body slender, head produced, slightly wider than the prothorax; eyes prominent; antennæ slender setaceous, double the length of the body, third articulation longest, and double the length of the fourth, fifth slightly longer than the fourth, subsequent ones gradually longer; palpi slender, pointed: prothorax narrower than the head and elytra, cylindrical, longer than wide, a transverse groove anteriorly and posteriorly: elytra square at base, convex above, deflexed upon the sides, subparallel, narrowed and produced posteriorly in a spinose apex: feet moderate, anterior pair longest, femora robust.

171. *H. IUGLANDIS*.

Body entirely invested with short, prostrate, olivaceous hair; antennæ smooth, rufous; pronotum with a black, bi-abbreviated dorsal line. $5\frac{1}{2}$ ''' long; $1\frac{1}{4}$ wide. Inhabits Pennsylvania and Alabama.

Saperda juglandis, *Knoch*. *Mels. Cat.*, 769. *Hetæmis cinerascens*, *Dej. Cat.*, p. 374.

Head with the frontal line impressed, a black, longitudinal, triangular line above, and another behind the eyes; trophi and antennæ dark rufous; eyes dark-brown, iridescent in a particular light: elytra thickly and finely punctured: feet black.

This species has been found, by Mr. Hentz, on the leaves of *Morus rubra*. Say's description of *Saperda trilineata* agrees very nearly with this insect; but the two are quite distinct.

LYPSIMENA, *Dejean Cat.*, 374.172. *L. FUSCATA*, *Dej.*

A drawing in Captain Le Conte's collection represents this insect as three lines long, with a whitish line along the middle of each elytron, from the centre to the apex.

DORCASCHEMA, *Dej. Cat.*, p. 375.

Distinguished from *Hetæmis* by having the apex of the elytra conjointly rounded.

173. *D. ALTERNATA*, *Say*. (*Saperda*.) *Journ. Acad. N. Sc.*, iii. 405. *S. maculata*, *Mels. Cat.*, No. 778. *D. leptocera*, *Dej.* A specimen found in Pennsylvania.

174. *D. NIGRA*, *Say*. (*Saperda*.) *Journ. Acad. Nat. Sc.*, v. 272. *Mels. Catalogue*, 777. *D. nigricans*, *Dej.* Inhabits Pennsylvania.

HIPPOPSIS, *Serville*.

175. *H. LEMNISCATA*, *Fabr.*, ii. 330—*lineolata*, *Dej.* Inhabits Pennsylvania, appearing in July, and found upon grass, overhanging water courses. Rare.

ANÆREA, *Mulsant*, 184.

176. *A. CALCARATA*, *Say*. (Saperda.) *Journ. Acad.*, iii. 408. Harris, 88.

177. *A. MUTICA*, *Say*. *Ib.*, 409. Western States. *Cab. Le Conte*.

178. *A. OBLIQUA*, *Say*. *Ib.*, v. 274. Found in Pennsylvania.

COMPSIDEA, *Mulsant*, 183.

179. *C. TRIDENTATA*, *Oliv.*, iv., pl. 68, fig. 48. Inhabits Pennsylvania.

VAR. *C. dubiosa*. Dark testaceous, spot on the pronotum and four common, sutural cordate spots replaced by shining facets; antennæ, tibiæ and tarsi black. 5''' long.

180. *C. LATERALIS*, *Fabr.*, ii. 323. *Oliv.*, iv., pl. 68, fig. 41. Pennsylvania.

181. *C.? PUNCTICOLLIS*, *Say*. *Journ. Acad. N. Sc.*, iii. 406.

182. *C.? TRILINEATA*, *Say*. *Ib.*, v. 273. *Mels. Cat.*, 771—cinerea, *Kn*.

SAPERDA, *Fabr.* *Mulsant*, 185.

183. *S. VESTITA*, *Say*. Long's Second Exp., ii. 290. *S. cervina*, *Dej.* Mass., Pa., Mich.

184. *S. PULLATA*.

Ground colour dull rufous, clothed with short, prostrate, cinereous hair; pronotum with a longitudinal, black spot, elytra truncate. 7''' long; 2 wide. Inhabits Alabama?

Frontal line impressed, destitute of hair, and continued over the apex; antennæ dark rufous; labrum and clypeus covered with fulvous hair; mandibles black: prothorax narrowest behind; dorsal line impressed, and having a longitudinal, bi-abbreviated black spot, which is widest posteriorly: elytra truncate at the inner tip, and having a slight sutural stria posteriorly.

185. *S. CANDIDA*, *Fabr.*, ii. 319—bivittata, *Say*. *Journ. Acad. N. Sci.*, iii. 409. Harris's Injurious Insects, p. 89.

Fabricius did not know the native country of the specimen he described, but as he refers to a collection which was rich in North American species, I have no doubt of the correctness of this determination. It appears, from Dr. Harris's account, to be common in New England, where it is destructive to apple orchards. Dr. Melsheimer has a specimen, taken in Pennsylvania, which is the *bifasciata* of his father's catalogue, No. 783.

186. *S. OCULATICOLLIS*, *Say*. *Journ. Acad. N. Sc.*, iii. 406.

187. *S. INORNATA*, *Say*. *Ib.*, 407.

188. *S. PERGRATA*, *Say*. *Ib.*

POLYOPSIA, *Muls.*, 190.

189. *S. ANALIS*.

Nigropiceous, shining, sparsely covered with pale, fulvous hair; apex of the elytra with a large, circular, common, holosericeous macula. 5¼''' long; 1¼ wide. Inhabits Pennsylvania.

Head, prothorax, pleura, and elytra with impressed, dilated punctures: front convex, eyes black: prothorax widest behind, punctures confluent upon the sides; scutellum wide and short: elytra square at base, where the punctures are largest, a little wider than the prothorax, tipped with a large, black, circular spot, which is bounded posteriorly by thickly-set, pale-yellowish hairs: venter shining black, particularly three spots upon each side, which are divested of hair.

The terminal black spot gives the elytra the appearance, on a casual view, of a deep emargination, as in *TOMICUS*.

*ATIMIA.

Body robust, partially clothed with short, prostrate hair; *head small*, nutant, eyes prominent, deeply emarginate, projecting beyond the thorax; antennæ subfiliform, two-thirds the entire length, (♀ ?) first articulation robust, second nearly half the length of the third, *fifth* longest, subsequent ones subdentate, gradually shorter, eleventh fusiform, pointed: prothorax wider than long, sides convex, rapidly narrowed anteriorly: scutel rounded at tip: elytra curved above, narrowing posteriorly, truncate at tip: feet short, weak; femora slightly clavate.

190. A. TRISTIS.

Shining black, maculate with short, prostrate, fulvous hair; feet dull testaceous. 4''' long; $1\frac{1}{2}$ lat.

Inhabits Pennsylvania. Cab. Melsheimer and Le Conte.

Head, except a bare line on the vertex, covered with hair: pronotum with fine impressed punctures, lateral margins densely clothed, middle with a few hairs; scutel clothed; elytra slightly punctured, considerably wider than the prothorax, with the external angles rounded, and extremely narrowed; a sutural row of yellowish dots, the external portions irregularly maculated with the same colour: under parts slightly hairy.

*ATAXIA.

Body somewhat slender; antennæ setaceous, as long as the body, or somewhat shorter, fourth articulation longest: prothorax subcylindrical, length and width equal, sides with a short *spine*; scutel triangular: elytra rounded above, tapering gradually towards the tip, which is truncate: feet slender, thighs slightly clavate.

Resembles the genus *UROCALYMMA*, *Westw.*, (*Arcana Ent.*, p. 58,) in the armature of the prothorax and the form of the body, but the elytra are not produced. I place it here on account of its great general similarity to *SAPERDA*.

191. A. SORDIDA.

Pale dull-brown sericeous, upon a black ground. 6''' long; $1\frac{1}{2}$ wide. Inhabits Alabama,

Head hairy, frontal line inconspicuous; eyes black; antennæ slender, dull brown, hairy beneath, a narrow, white annulation at the base of the articulations: pronotum and elytra with deep, dilated punctures, arranged in striæ from about the middle to near the extremity of the latter, which is truncate: feet with numerous detached, erect hairs.

STENOSTOLA, *Muls.*, 192.192. S. FUSCIPES, *Say.* Journ. Acad. N. Sc., v. 273.

Black, above, front and beneath cinereous white; femora livid, tibiæ and tarsi black.

$4\frac{1}{2}$ ''' long; (elytra $3\frac{1}{3}$,) one and one fifth wide. *Stenostola sulphuripes*, *Dej.* Mels. Cat., No. 780.

VAR. *dorsalis*. Dorsal line cinereous.

OBEREA, *Mulsant*, 194.193. O. RUFICOLLIS, *Turton.* Lin. ii. 316.

Rufous; eyes, antennæ, palpi, tibiæ, tarsi, and wings black; elytra gray, on a black ground. 6—7''' long. Inhabits Pennsylvania and Alabama.

This is our largest species, and may be distinct from the true *ruficollis*.

194. O. OCELLATA.

Rufous, a black puncture on each side of the pronotum; elytra and eyes black. $6\frac{1}{2}$ ''' long; $1\frac{1}{2}$ wide. Inhabits Pennsylvania. *Saperda ocellata*, *Knoch.* Mels. Cat., No. 772. *Oberea bicolor*, *Dej.* Catalogue.

Antennæ dull black, or blackish-brown; tibiæ and tarsi discoloured. Closely allied to the preceding.

195. *O. MYOPS.*

Yellow; antennæ, eyes, a spot upon each side of the pronotum, lateral elytral vittæ, and tarsi, black. 7''' long.

A drawing in the cabinet of Major Le Conte.

196. *O. GRACILIS*, *Fabr.*, ii. 354.

Yellow; antennæ, eyes, wings, tarsi, and lateral elytral vittæ, black. 5''' long.

197. *O. AMABILIS.*

Yellow; mouth, eyes, a spot upon each side of the pronotum, scutellum, suture, and lateral elytral band, black; antennæ annulate; middle and tip of the venter black.

4''' long. Cab. Le Conte. *O. amabilis*, *Dejean Cat.*

198. *O. TRIPUNCTATA*, *Fabr.*, ii. 331—*plumbea*, *Oliv.* Harris's Injurious Insects, p. 91.

Inhabits Massachusetts, Pennsylvania, and Carolina, appearing in June.

199. *O. FLAVIPES.*

Black, elytra dull brown, with the region of the scutellum and basal margin of the epipleura yellow.

4 $\frac{3}{4}$ ''' long; $\frac{3}{4}$ wide. Pennsylvania. Cab. Melsheimer.

Head and eyes black, antennæ dark-brown, palpi pale-yellow: prothorax black, with two black, tubercular spots above: feet pale-yellow.

200. *O. PERSPICILLATA.*

Grayish-black, prothorax yellow, with two black spots. 3 $\frac{1}{2}$ ''' long. Cab. Le Conte. *O. perspicillata*, *Dej. Cat.*

Closely allied to *tripunctata*, but the punctures are smaller, and more scattered upon the vertex; and the palpi are black, whilst in *tripunctata* they are dark-brown, with the articulations tipped with yellowish.

201. *O. MONOSTIGMA.*

Black; head, prothorax, and feet, rufous; a black spot on the middle of the pronotum. 3''' long; $\frac{3}{4}$ wide. Pennsylvania. Cab. Melsheimer.

Eyes black, antennæ dark-brown, annulate with yellowish: elytra black, with rather long hairs directed backwards.

PHYTÆCIA, *Mulsant*, p. 199.202. *P. TIBIALIS.*

Black; anterior tibiae and half the femora rufous. 4 $\frac{1}{4}$ ''' long; (elytra 3,) 1 wide. Pennsylvania. Cab. Melsheimer.

Slender, eyes black, orbits with cinereous hairs: thorax somewhat hairy: elytra gradually tapering, flattened above, obliquely truncate at tip on the inside: medial femora slightly rufous at tip, on the posterior side: beneath slightly cinereous.

203. *P. FEMORALIS.*

Robust, black, cinereous hairy; femora rufous; elytra convex, separately rounded at tip.

3''' long; (elytra 2 $\frac{1}{4}$,) 1 wide. Cab. Le Conte. *P. femoralis*, *Dej. Catalogue.*

AMPHIONYCHA, *Dejean.*204. *A. MARGINATA*, *Fabr.*, ii. 331.

Robust, black, hirsute, antennæ suddenly reduced in thickness, and the articulations much shortened, from the fifth outwards; mouth rufous, front fulvous; a fulvous band extending from above the eye across the propleura, and along the margin of the elytra to the middle. 4''' long.

DISTENIA, *Encyc.*205. *D. UNDATA*, *Fabr.*, ii. 311. *Oliv.*, pl. 69, fig. 15. Pennsylvania—July.

LEPTURINÆ.

DESMOCERUS, *Dej.* R. an., pl. 69, fig. 1.

206. *D. PALLIATUS*, *Forster.* Harris, 92—cyaneus, *Fabr.* Mass., Penna., June, July.

The figure in the atlas to the new edition of the *Règne Animal* which is given for the antennæ of this species, was probably figured in error, as it is incorrect.

RHAGIUM, *Fabr.* Muls., 222.

207. *R. LINEATUM*, *Oliv.*, (*Stenocorus*) pl. 69, fig. 22. Harris, 93—stripe-necked hargium! *Kirby*, 178.

RHAMNUSIUM, *Latr.* Muls., 220.

208. *R.?* *DECOLORATUM*, *Harris*, *Injurious Insects*, p. 93. Perhaps the next species.

TOXOTUS, *Serv.* Muls., 231.

209. *T. RUDIBUS*.

Uniform dark-brownish-red, elytra yellowish-brown. 9''' long; 2 wide. *T. rubidus*, *Dej.* Cat.

Head large, a prominent tubercle at the inner side of the torulus; antennæ robust; eyes large and prominent: impressions of the pronotum profound: elytra with numerous, dilated, impressed punctures, largest at the base, tip separately rounded.

210. *T. PICTUS*.

Reddish-brown, dull olivaceo-sericeous; elytra ochraceous, with irregular, longitudinal, brown lines.

7''' long; 1½ wide. Inhabits Pennsylvania. *Rhagium pictum*, *Knoch.* Mels. Cat., No. 785.

Head small, eyes not prominent; antennæ slender setaceous: thoracic impressions moderate: elytra with a brown line arising near the base, and extending beyond the middle, slightly approaching the suture; another, interrupted with yellow at two points, extends from the epipleura backwards and inwards to near the extremity, and a third short one lies at the outside extremity of the latter; surface thickly covered with impressed punctures, and invested with fine, sparse, prostrate hairs, tip conjointly rounded.

211. *T. TRIVITTATUS*, *Say.* Journ. Acad. N. Sc., iii. 422. Inhabits Mississippi. *T. vittigera*, *Randall.*

VAR. *nigripes*. Outer margin of the elytra yellow, feet black. Inhabits Pennsylvania.—*Le Conte*.

212. *T. ATRATUS*.

Dull brownish-black; pectus, posterior femora, fifth and succeeding articulations, margin of the ventral segments, and of the epipleura, rufous.

10''' long; 2¾ wide. Inhabits Georgia. *T. atratus*, *Le Conte*, MS.

Allied to the next species. There is a rufous spot beneath the eyes, and the clypeus is of the same colour; frontal line and thoracic impressions profound; elytra obliquely truncate and very slightly emarginate; anterior and medial femora slightly tinged with rufous.

213. *T. CYLINDRICOLLIS*, *Say.* Journ. Acad. Nat. Sc., iii. 417. *Rhagium sericeum*, *Knoch.* Mels. Cat., No. 787. Inhabits Pennsylvania.

214. *T. DENTIPENNIS*.

Rufous; tibiæ, tarsi, and apex of the femora dark-brown or blackish; elytra separately, obliquely emarginate. 6''' long; 2¼ wide. Inhabits Alabama? *T. dentipennis?* *Dej.* Catalogue.

Allied to the two preceding in form, and in the deep impressions of the head and pronotum. The elytra are sericeous, and the colour varies from yellowish rufous with a brown base, to brown. Antennæ yellowish rufous, and very robust; as long as the body in the male, and slender and short in the female.

215. *T. ÆSCULI*.

Uniform pale fulvous, eyes blackish, elytra sericeous, separated at tip, and minutely truncate.

5" long; 1½ wide. Carolina, April. Boston Collection, No. 1369.

Distinguished from *dentipennis* by its smaller size, more slender feet and antennæ, uniform colour, simple elytra, and fainter frontal and thoracic impressions.

216. *T. VESTITUS*, *Klug.*

Black, head and thorax lanate, venter and elytra testaceous, the latter entire. 6" long; 1½ wide. Oregon. Cab. Le Conte.

217. *T. COARCTATUS*.

Black, mixed with rufous; elytra very much contracted behind the middle, and divaricate at tip.

8" long; 2 wide. Inhabits Pennsylvania. Rare. *T. coarctatus*, *Dejean*. Cab. Melsheimer.

Head rufous, scapus and vertex black; frontal line slightly impressed: prothorax subequal, blackish, slightly marked with rufous anteriorly; anterior feet rufous: elytra blackish, basal third brownish rufous: pectus and medial feet with a few rufous spots; posterior feet black, venter rufous.

Bears considerable resemblance to "*Saperda cinerea*," *Oliv.*, iv. pl. 68, fig. 34.

PACHYTA, *Serv.* Muls., 237.

218. *P. CORDIFERA*, *Oliv.*, iv. pl. 73, fig. 41.

VAR. lunaris. Black, yellow tomentose; venter dull rufous; elytra yellow, apex, and a semi-circular macula behind the middle on the anterior margin, black. 6" long; 2 wide. Inhabits Pennsylvania. July.

Front clothed with yellow hair, frontal line impressed: prothorax much widened and bi-arcuate posteriorly, covered with yellow hair, and having the medial line obsolete: elytra divaricate and separately pointed at tip; a minute, black spot at the basal angle, and another (sometimes double) between it and the large medial macula.

The yellow covering is sometimes wanting, when the denuded parts appear black.

219. *P. INSTABILIS*, *Klug.*

Robust, black; elytra yellow, trimaculate with black, and having a common, cordate spot between the basal spots, which are united to the medial ones by a black line. 5" long; 2½ wide. Inhabits Oregon. Cab. Le Conte.

220. *P. ATTENUATA*.

Black, thinly covered with olivaceous, prostrate hair: prothorax armed, elytra clouded with reddish-brown. 7" long; 2½ wide.

Front transversely concave before the antennæ, median line glabrous, eyes black; antennæ dull rufous; scapus and apex of the third, fourth, and fifth articulations black: prothorax minutely punctured, a slight, transverse groove anteriorly and posteriorly; dorsal line obsolete; an obsolete, glabrous tubercle upon each side of it; sides armed with a conspicuous, acute, tubercle: elytra narrowing rapidly to the apex, which is entire; sides rectilinear, surface shining, uneven, having distant, impressed punctures; colour reddish-brown, clouded with tomentose spots of a paler tint; feet with a tinge of rufous.

Found floating in Eagle Harbour, Kiwenaw Point, Lake Superior, by Dr. Le Conte, to whom I am indebted for the specimen described.

221. *P. LITURATA*, Kirby. Northern Zoology, p. 178.

222. *P. THORACICA*.

Brownish-black, front and pronotum ochraceous, elytra subquadrate. 5''' long; 2 wide. Inhabits Penna. *Rhagium thoracicum*, Mels. Cat., No. 778. *Pachyta sulcicollis*? Dej. Cat., p. 381.

Head brownish-black, impressed between the antennæ; front, orbits, and labium ochraceous: prothorax yellow, tomentose above, transverse, pleura black; a wide, impressed, mesial line, with a tubercle each side of it, and another at the anterior angles; anterior margin and posterior one, near the scutel, black; scutel triangular, smooth: elytra parallel, obtusely conjointly rounded at tip, finely hirsute, and scabrous with numerous impressed, dilated punctures: beneath piceous, a pale-yellow, evanescent spot on the outer margin of the penultimate segment of the venter; epimera and episterna rufous; basal half of the tibiæ flavous.

223. *P. SUBLINEATA*.

Black, elytra and feet fulvous, extremity of the femora black. 4—4½''' long; 1½ wide. Pennsylvania. Lake Superior.

Head minutely punctured, a fine, impressed line on the vertex, and between the antennæ; antennæ dark-reddish-brown: pronotum minutely punctured except along the medial line; a prominent tubercle in the posterior angles; scutel black, regularly triangular: elytra subparallel, minutely punctate, brownish fulvous, clothed with prostrate, fulvous hair; a rather prominent tubercle at the basal angles; apex truncate; an obscure, common, sutural band, and a second submarginal one.

224. *P. RUFULA*.

Black; antennæ, prosternum, feet, and elytra dull rufous. 4½''' long; 1½ wide. Eagle Harbour. Dr. Le Conte.

Head and pronotum scabrous with confluent, impressed, punctures: prothorax armed with a slightly elevated tubercle; dorsal line obsolete; surface elevated each side posteriorly: elytra parallel, conjointly rounded at the apex, thickly covered with impressed, dilated, piliferous punctures: feet with piliferous punctures; dull rufous, tarsi and apex of the femora blackish.

225. *P. CYANIPENNIS*, Say. Journ. Acad. Nat. Sc., iii. 423. *P. ione*, Newman.

Inhabits Arkansas, Say; Massachusetts, Harris's Catalogue; and I have an individual from Kentucky.

226. *P. LEONARDII*, Harris.

Closely allied to the preceding, if not the male of that species. The antennæ are paler, the labrum and clypeus yellow, the elytra much narrower, and transversely and not obliquely truncate, as in *cyanipennis*. Inhabits Massachusetts and Pennsylvania. Very active; found upon Sambucus, in June.

227. *P. DISCOIDEA*.

Slender, black; elytra with the base, suture, and margins, dull rufous. 4''' long; 1½ wide.

P. discoidea, Dej. Cat. Cab. Le Conte.

Head and pronotum with numerous, impressed punctures; posterior angles of the latter rising in a prominent tubercle: elytra margined with rufous, which is widest at base and narrowest along the suture; apex minutely and separately emarginate.

228. *P. CHALYBÆA*.

Black, elytra deep steel blue, antennæ and feet rufous. 2½—3''' long; ¾—1 wide. Pennsylvania.

Leptura chalybæa, Knoch. Mels. Cat., No. 840.

Head minutely punctured, frontal line impressed: pronotum minutely punctured, medial line smooth, with a wide, shallow impression behind the middle; scutel black: elytra finely punctured, very slightly contracted in the middle; of a deep, shining, steel blue colour, tip separately rounded, leaving a sutural emargination.

STRANGALIA, *Serv.* Muls. 250.229. *S. LUTEICORNIS*, *F.*, ii. 361. *Oliv.*, iv. pl. 3, fig. 4. *Mels. Cat.*, No. 822.

Yellow, pronotum with two and elytra with three black bands; tip of the posterior femora black; venter rufous. 5—6". Inhabits Massachusetts and Pennsylvania.

230. *S. SEXNOTATA*.

Dull rufous; palpi, antennæ, feet, pectus, and three elytral spots, black; elytra and femora yellow. $4\frac{1}{2}$ " long; $1\frac{1}{3}$ " wide. *S. 6-notata*, *Dejean*.

231. *S. OBSOLETA*.

Like *luteicornis*, but having the basal elytral macula replaced by about three minute black spots; antennæ black; beneath black, yellow sericeous, abdomen rufous. 7" long; $1\frac{1}{2}$ " wide. Pennsylvania.

Head black; trophi, (except the maxillæ and labial palpi,) anterior margin of the labrum and clypeus, and a narrow, post-orbital band, yellow; labrum and clypeus punctured; an impressed frontal line, with an obsolete, yellow spot anteriorly; front with yellow hairs; occiput with a yellow spot: prothorax yellow above, with a black lateral band, abbreviated posteriorly; scutel black, with yellow hair: elytra minutely punctured, yellow, extreme sutural margin black, and two marginal maculæ, one in the middle, and the other between it and the tip, black: feet yellow, tarsi, tip of the tibiæ, and of the posterior femora, black.

VAR. S. flaviceps. Head above, and upon the sides, yellow. 5".

232. *S. FAMILICA*, *Newm.*

Like *obsoleta*; abdomen black, minute, elytral spots obsolete or wanting; posterior tibiæ piceous. 7" long. Inhabits Pennsylvania—Virginia. *S. angustata*, *Dej.*—*nigricornis*, *Mels. MS.*

Distinguished from *obsoleta*, in addition to the characters given above, by narrower elytra, a smaller medial, elytral spot, and the elongate, narrow form of the posterior one.

VAR. confluenta. Pronotum almost entirely black, from the confluence of the bands.

VAR. solitaria. Posterior elytral spot alone present. Alabama.

233. *S. SUBHAMATA*, *Randall*.

Black; femora, prosternum, and elytra yellow, these separately encircled with black, and having a transverse black band; ventral segments margined with obscure rufous.

6" long; $1\frac{1}{3}$ " wide. *S. lecontei*, *Dejean*. *L. interrupta*, *Newman*.

Elytra with the black of the margin interrupted at the shoulder; apex deeply, conjointly emarginate; apical fourth black; antennæ, with the base of the six terminal articulations, yellow.

233 $\frac{1}{2}$. *S. BICOLOR*, *Swederus*. *Act. Holm.* iii. 197, anno 1787. *Say, Jour. Ac. N. Sc.*, iii. 418.

Say thought his species distinct from that of Swederus, because this "is said to be black on the upper part of the tail;" but it is possible that the black wings, appearing beneath the divarication of the elytra, were taken for the abdomen.

234. *S. EMACIATA*, *Newman*.

Slender, black, olivaceo-sericeous beneath, elytra pale-yellowish-brown. 5—6" long. Pennsylvania.

Leptura necydaloides, *Knoch*. *Mels. Cat.*, No. 838.

Head shining black, minutely punctured, an indistinct, impressed line upon the front and vertex; labrum with a few yellow hairs: prothorax minutely punctured, sparsely clothed with shining, yellow hair, dorsal line indistinct; scutel black, with shining, yellow hair: elytra punctured throughout, and covered with short, sparse, prostrate hair: yellowish-brown, with a very narrow sutural and external margin of black; divaricate, obliquely emarginate on the inner side at tip, ending in a spine externally: wings translucent, gray: feet and abdomen black.

235. *S. UNICOLOR*.

Slender, black, punctured; a fovea near the posterior extremity of the dorsal line; beneath, olivaceo-sericeous. 5''' long; 1 wide. Pennsylvania.

*STENURA, Dejean.*236. *S. EMARGINATA, F.*, ii. 356. *Oliv.*, pl. 3, fig. 6.

Black; elytra rufous, golden sericeous, apex black, separately emarginate. 14''' long; 4 wide. Bost. Coll., No. 723.

Inhabits Carolina, appearing in July—August. The Reverend D. Ziegler has a specimen taken in Pennsylvania. According to Fabricius, it is a native of Cayenne.

237. *S. OBLITERATA, Klug.*

Obscure brown; thorax olivaceous hairy; elytra separately emarginate, obscure yellow, with a small, indistinct, black line near the base above, and another on the margin; a wide, transverse band at the middle, interrupted at the suture, and another posterior one uniting with the dull testaceous of the apex; feet yellow, posterior femora and tibiæ tipped with black. 7''' long; 2½ wide. Oregon. Cab. Le Conte.

238. *S. ZEBRATA, Fabr.*, ii. 364—*nitens?* *Forster*, Cent. Ins., 45—*quagga, Germar.*

Black, golden sericeous, with four bright-yellow, elytral fasciæ; feet yellowish, antennæ yellowish-brown; palpi and head, in front of the antennæ, yellow. 6''' long. Inhabits from Massachusetts to Pennsylvania, in May and June. Boston Collection, 597.

239. *S. ZEBRA, Oliv.*, pl. 3, fig. 33.

Closely allied to the preceding, but the region of the mouth and antennæ are black, the latter *dentate*, (as required by Olivier's description;) the pronotum is more roughly punctured, the elytra visibly scabrous, with the basal fascia more acutely curved, and the apex very obliquely reduced from the suture to the external angle.

5''' long. Inhabits Carolina in April—July. Boston Coll., 595.

240. *S. 8-NOTATA.*

Black; elytra yellow, with four black maculæ, the third common; shoulder, feet, and apex of the abdomen brownish-yellow. 5''' long; 1½ wide. Alabama.

Head and pronotum olivaceous hairy; palpi yellowish, terminal articulations of the maxillaries black; (antennæ dentate:) prothorax transverse, suddenly narrowed anteriorly; elytra slightly obliquely truncate, tipped with black; a basal and medial macula exteriorly, and another post-medial one narrowing forwards to the suture, along which it extends in a narrow line to near the base.

241. *S. VELUTINA, Oliv.*, pl. 3, fig. 32. *Mels. Cat.*, 834. *S. aurigera, Newman.*

Black, olivaceo-sericeous; elytra dull rufous, with four yellowish spots or bands, tip separately emarginate; feet yellowish rufous, venter reddish, either entirely or at the tip. 6''' long.

242. *S. FUGAX, Fabr.*, ii. 359.

General characters of the preceding. Elytra with the basal macula reduced in size, the second and third wanting, and the apical one evanescent; apex more obliquely narrowed from the suture; antennæ *dentate*. 4—5''' long. Inhabits Pennsylvania.

This species bears nearly the same relation to *velutina* that *zebra* does to *zebrata*, and it is possible that the denticulation of the antennæ is a sexual distinction.

243. *S. LURIDIPENNIS*.

Rather slender, black; head and prothorax scabrous with confluent punctures, sides of the latter subrectilinear, tapering forwards; elytra with numerous, impressed punctures, dull yellowish-brown, apex blackish, scarcely truncate; beneath cinereo-sericeous.

♂ 4; ♀ 6" long; 1½ wide. Pennsylvania. *S. luridipennis*, *Dej. Catalogue*.

244. *S. NIGRELLA*, *Say*, *Journ. Acad. N. Sc.*, v. 279. *Mels. Cat.*, No. 825.245. *C. ELEGANS*, *Dej. Cat.*

Yellow, antennæ annulate, pronotum with a dark, longitudinal spot anteriorly, elytra with the suture and a medial fascia dark-brown. 7" long.

A drawing in Mr. Le Conte's collection.

246. *S. AMERICANA*.

Black, head and prothorax rufous, with fulvous hair; elytra parallel, slightly obliquely truncate.

4½" long; 1½ wide. Pennsylvania. *Leptura americana*, *Mels. Cat.*, No. 836. *Stenura fulvicollis?* *Dej. Cat.*

Head rufous, eyes, antennæ, and maxillary palpi black, the last with the articulations tipped with yellowish; a transverse, impressed line above the clypeus, and another behind the antennæ, the impressed frontal line uniting them; prothorax swelled above, very wide posteriorly, a large, transverse depression each side of the middle, on the posterior margin: elytra thickly covered with piliferous punctures; venter with a fulvous tinge, and clothed with fulvous hair.

247. *S. ABDOMINALIS*, *Dej. Cat.*

Black, venter fulvous, apex black. 8" long. A drawing in Major Le Conte's collection.

248. *S. LUGUBRIS*, *Say*. *Journ. Acad. N. Sc.*, iii. 419. *M. C.*, 833. Pennsylvania—June.249. *S. LUNATA*, *Fabr.*, ii. 360. *Oliv.*, pl. 4, fig. 47. *Mels. Cat.*, No. 834.250. *S. CINCTA*.

Black; elytra truncate, flavous, apex, margin, suture, and an intermediate line, black; feet brownish or reddish-yellow, tarsi brown; antennæ annulate beyond the middle. 3½" long; 1 wide. Pennsylvania.

Leptura cincta, *Knoch*—*lateralis*, *Mels. Cat.*, No. 823. *Stenura lineolata*, *Dej. Catalogue*.

Head sparsely covered with fine hair, particularly above, and in front of the antennæ; frontal line impressed, entire; palpi and anterior margin of the labrum and clypeus, yellow: prothorax campanuliform, elevated above, covered with small, piliferous punctures: elytra with dilated, impressed, piliferous punctures; sutural striæ, apex, and outer margin black, the last sometimes divided into three maculæ, from the posterior of which a black line runs along the disk to near the base.

VAR. obsoleta. Line of the disk, and black of the apex obsolete.

VAR. lateralis. Slender, (3½" long; ¾ wide,) line of the disk wanting, margin and apex black.

251. *S. LINEOLA*, *Say*. *Journ. Acad. Nat. Sc.*, iii. 421. *Mels. Cat.*, No. 832. *Bost. Coll.*, 603.

Occurs from Massachusetts to Carolina, in May and June. Say found it in Mississippi.

252. *S. ARMATA*.

Black, elytra emarginate, exterior tip armed, a yellow, transverse line at the base, and extending in a vitta from the shoulder along the external margin posterior to the middle, interrupted near its extremity; sixth and following articulations of the antennæ annulate; mouth, base of the femora, and anterior face of the first pair, yellow. 5" long; 1½ wide. Pennsylvania.

At first view this species might be taken for *Leptura vittata*, *Oliv.*

253. *S. CRUENTATA*.

Black, metathorax, venter, base of the posterior femora, and margin of the elytra (except at the base,) sanguineous; elytra black, thickly punctured, suture with a rufous tinge, and curving outwards towards the exterior apex, leaving a deep emargination.

$3\frac{1}{4}$ " long; 1 wide. Pennsylvania. *Leptura cruentata*, *Knoch*. Mels. Cat., 841.

LEPTURA, *Lin.* Muls., 266.

254. *L. CANADENSIS*, *Oliv.*, pl. 23, fig. 27. *Fabr.*, ii. 357. Mass., Penna.—August.

255. *L. CINNAMOPTERA*.

Size and habit of the preceding; elytra rufous, outer angle of the apex black.

L. erythroptera, *Kirby*, Northern Zoology, p. 180.

256. *L. ERYTHROPTERA*, *Zenker*. Germar's species, p. 522. *L. rubrica*, *Say*, Journ. Acad. Nat. Sci., iii. 418. Mels. Cat., No. 826. *L. annulata*, *Dej.*

Smaller than the preceding, less profoundly punctured, elytra entirely rufous. Makes its appearance in Pennsylvania in June.

257. *L. TENUICORNIS*.

Black, scabrous with confluent punctures, basal fourth of the elytra rufous; antennæ dentate, slender and longer than the body. $4\frac{1}{2}$ " long; $1\frac{1}{2}$ wide. Cab. Le Conte.

Distinguished from *canadensis* by the long, slender antennæ, which are not annulate.

258. *L. VAGANS*, *Oliv.*, iv. pl. 73, fig. 46—*axillaris*, *Dej.*

Black, a triangular rufous macula at the external base of the elytra, these conjointly deeply emarginate, scarcely truncate. 3—4" long.

259. *L. MALACHITICUS*.

Splendent green, scabrous with dilated, impressed punctures; antennæ and scutel black, trophi and feet testaceous, tarsi and outer half of the tibiæ brown; prothorax with a lateral tubercle; elytra entire.

$6\frac{1}{2}$ " long; 2 wide. Pennsylvania.

This beautiful insect is in the cabinet of the Rev. Dr. Morris, who received it from Somerset County, Pennsylvania.

260. *L. BIFORIS*, *Newman*.

Yellowish-brown, or dull testaceous, elytra paler, with a black macula about the middle of the outer margin, and a small, obsolete one upon the margin, near the base.

6" long; $1\frac{3}{4}$ wide. Pennsylvania—June. *L. marginenotata*, *Dej.* Catalogue.

Body covered with short, fulvous hair, somewhat sericeous beneath: head dark-brown; frontal line impressed, vertex scabrous; antennæ, feet, and beneath dull testaceous: prothorax subglobular, with fine, piliferous punctures; dorsal groove impressed: elytra taper, not divaricate, apex slightly obliquely truncate.

261. *L. VITTATA*, *Oliv.*, iv. pl. 73, fig. 45. *Encyc.*, vii. 523. Mels. Cat., No. 829.

Occurs from Massachusetts to Alabama.

262. *L. 4-PUNCTATA*.

Black, villose; elytra slightly obliquely truncate, with a flavous, yellow spot behind the middle, near the suture, and another upon the suture near the apex; posterior feet, with the tarsi, and base of the femora, yellow.

6" long; $1\frac{3}{4}$ wide. Pennsylvania. *L. 4-punctata*, *Mels.* Catalogue, No. 830.

263. *L. PUBERA*, Say. Journ. Acad. N. Sc., v. 279. Mels. Cat., No. 824. Pennsylvania.

264. *L. CIRCUMDATA*.

Black; elytra dull ochraceous, with a narrow margin of black. ♂ $3\frac{1}{2}$ " long; $\frac{4}{5}$ wide. ♀ $3\frac{3}{4}$ long; $1\frac{1}{2}$ wide. *L. circumdata*, Dej. Cat. Inhabits Pennsylvania.

Body covered with piliferous punctures, two or three articulations of the antennæ slightly annulate; prothorax convex above, dorsal line wanting: margin of the elytra interrupted at the shoulder.

265. *L. 8-NOTATA*, Say. Journ. Acad. N. Sc., iii. 419.

266. *L. SCALARIS*, Say. Journ. Acad. N. Sc., v. 278.

267. *L. CHRYSOCOMA*, Kirby, N. Z., 179, pl. 5, fig. 2.

268. *L. SUBPUBESCENS*, Kirby, N. Z., 180.

269. *L. TENUIOR*, Kirby, N. Z., 181.

270. *L. BREVIS*, Kirby, N. Z., 182.

271. *L. SEXMACULATA*, Lin. Kirby, N. Z., 182.

272. *L. SEMIVITTATA*, Kirby, N. Z., 183—abbreviata, Germ. Schön.?

273. *L. GULOSA*, Kirby, N. Z., 184.

274. *L. SUBARGENTATA*, Kirby, N. Z., 184.

275. *L. SIMILIS*, Kirby, N. Z., 185.

276. *L. LONGICORNIS*, Kirby, N. Z. 185.

277. *L. PROTEUS*, Kirby, N. Z., 186. *L. biforis?* Newman.

278. *L. LONGICEPS*, Kirby, N. Z., 187.

TRIGONARTHRIS, Dejean.

Distinguished from *LEPTURA* by the short, triangular articulations of the anterior and medial tarsi.

279. *T. PROXIMA*, Say. Journ. Acad. N. Sc., iii. 420—terminata, Dej.

Inhabits Pennsylvania and Missouri. ♂ 6" long; 2 wide. ♀ 8 long; $2\frac{3}{4}$ wide.

The prothorax is covered with impressed punctures, and sparse, upright, fulvous hairs, elytra finely punctured, tip slightly emarginate.

280. *T. ATRATA*, Dejean. Catalogue, p. 83. 8" long.

ANOPLODERA, Mulsant, 285.

281. *A. 4-VITTATA*, Lin.—vittata, Say. Helwig in Mels. Cat., No. 831. Penna.—June.

VAR. *pallida*. Colours paler, sutural vitta wanting.

GRAMMOPTERA, Serv. Muls., 289.

282. *G. CAPITATA*, Newman. (*Leptura*.) *G. sanguinicollis*, Dej.

Black, head and prothorax bright rufous. 3—4" long.

283. *G. SPHERICOLLIS*, *Say*. Journ. Acad. Nat. Sc., v. 280. *G. discicollis*, *Dej.*—paupercula, *Newman*.
284. *G. RUFICOLLIS*, *Say*. Journ. Acad. Nat. Sci., iii. 421—collaris, *Mels. Cat.*, No. 842. Boston Collection, 1247. Extends from Massachusetts to Carolina.—April.

NOTE.—An entomological article in the Boston Journal of Natural History, Vol. II., containing descriptions of ten species of Longicornia, by Mr. Randall, was overlooked until this paper had been presented to the society: and also one by Mr. Newman, in the Entomological Magazine, Vol. II. The latter contains a number of species of Elaphidion, some of which are probably redescribed. Several new species will be found described by me in the Proceedings of the Acad. Nat. Sci., Vol. III.

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