The Coleoptera of Michigan.

By H. G. Hubbard and E. A. Schwarz.

(Read before the American Philosophical Society, April 18th, 1878.)

1. Descriptions of New Species by John L. LeConte, M.D.

I have written these descriptions in order that fewer species without names may be referred to in the two lists which form the bulk of the present memoir.

The lists of the Coleoptera of the Upper and Lower Peninsulas of Michigan respectively, have been prepared by the authors with great care, after extensive explorations and collections in the two regions. The species, as far as described, have been identified with the series contained in my collection, and I cannot sufficiently express my thanks, to both Mr. Hubbard and Mr. Schwarz, for the great liberality with which they have given me even unique specimens, so that all the material necessary for comparison and investigation is placed in one single collection. My series, therefore, both of Florida and Michigan Coleoptera, contain all the species catalogued in their lists, and a basis for future studies in geographical distribution has been thus firmly established.

I have added to the list of the species from Lake Superior all those collected in my own extensive explorations of that basin, which were not contained in the collections of the authors. This list is therefore to be considered as a complete catalogue of the Coleopteronous fauna of that region, so far as at present known, and exhibits some very interesting points in geographical distribution.

Especially worthy of notice is the large proportion of species common to Lake Superior and Alaska, and if types of the other species described by Mannerheim and Mäklin were accessible for comparison, the number of forms in this category could doubtless be still further increased. Space and time alike forbid my making a separate list of such species on the present occasion, but I intend to recur to the subject again, when larger series from the Alpine heights of the Rocky Mountains have been collected. The occurrence at Lake Superior of Euthia scitula and Syntomium confagogosum, previously known only from Alaska, and Goniopsis gibbosa from Colorado, deserves mention; as also the extension northward of Callida emarginata.

1. Dyschirius brevispinus. Shining black, feebly bronzed, rather robust, antennae, palpi, and legs rufous. Epistoma very slightly emarginate, angles not prominent, transverse impression deep, frontal impressions also deep. Prothorax longer than wide, oval, a little wider behind; lateral margin extremely fine, scarcely continued behind the posterior lateral puncture. Elytra oval, as wide as the prothorax, brownish at the tip, base not margined; stria uniformly abbreviated in front, very coarsely punctured, obliterated a little behind the middle, 8th represented at the tip by a short groove; scutellar puncture large; dorsal punctures two, one on the 2d interspace near the base, the 2d near the 2d stria about the middle. From
tibiae not toothed on the outer edge, terminal digitation long, slender, curved; spur not longer than the first joint of the tarsus. Length 3.4 mm.; .135 inch.

Detroit; one specimen. This species is very distinct by the small size of the lower spur of the front tibiae, and may be placed as a separate division in B, A, a, of my table (Proc. Ac. Nat. Soc. Phila. 1857, 76.) before sphaericollis.

2. Badister obtusus. Piceous, shining; prothorax, base of antennae, palpi and legs testaceous; elytra piceo-testaceous, lateral margin and base testaceous. Prothorax wider than long, narrower behind, hind angles rounded, indistinct, side margin not wider towards the base, which is not explanate towards the sides, basal impressions rounded, not extended towards the sides; dorsal line deep, transverse impressions feeble. Elytra with well-marked stria, interspaces nearly flat, 3d with two dorsal punctures contiguous to the 2d stria. Length 5.8 mm.; .23 inch.

Marquette, Lake Superior; one specimen. More allied to the Californian B. ferrugineus than to any other in my collection, but easily known by the more rounded hind angles of the prothorax.

3. Bembidium (Notaphus) arcuatum. Black, with a greenish bronzed lustre. Antennal scape, palpi and legs piceo-testaceous. Elytra piceous, with ill-defined testaceous markings, viz.: a humeral cloud, lateral narrow margin, curved band behind the middle, which is concave backwards, and apex; epipleurse black and testaceous. Prothorax wider than long, rounded on the sides, strongly sinuate behind, base as wide as the apex, hind angles rectangular, carinate; basal impressions deep, dorsal line well-pressed, transverse impressions feeble. Elytra elongate-oval, humeri rounded, stria distinctly punctured to behind the middle, then finer and smoother; 8th stria deep near the tip; dorsal punctures two, on the 3d interspace. Length 5.4 mm.; .31 inch.

Marquette, Lake Superior. This species resembles B. flammeatum of Europe, but is wider and less convex. It also greatly resembles B. ineretum LeC. from Cala., Oregon and Alaska, but the latter has the elytral markings undefined, and the stria finer and less strongly punctured.

4. Bembidium (Notaphus) versatum. Beneath black, shining; above bronzed; head and prothorax not polished; antennae piceous, base, palpi and legs testaceous. Prothorax wider than long, narrowed behind, sides rounded in front, strongly sinuate behind, base not narrower than the apex; basal angles rectangular, carinate, basal impression rugose, deep; dorsal line abbreviated at each end, transverse impressions obsolete. Elytra elongate-oval, wider than the prothorax, humeri rounded, angles slightly marked; stria entire, fine, finely punctulate to behind the middle, inter-
spaces flat, 3d with two dorsal punctures; color brown with metallic lustre, with large ill-defined testaceous markings arranged as in B. indistinctum, epipleurite testaceous edged with black. Length 4.3 mm.; .17 inch.

Marquette, Lake Superior. Smaller and less convex than the preceding, with the prothorax wider and not polished. This species resembles the Californian B. approximatum and indistinctum in form and markings, but differs by the sides of the prothorax more strongly sinuate towards the base, and by the head and prothorax being less shining, and of a brown-bronze, not green-bronze color.

5. Hydroporus fuscat us Crotch. Oblong-oval, elongate, pointed behind, shining brown above, mottled with darker; antennae with the outer joints blackish. Prothorax slightly rounded on the sides finely and distinctly punctured, basal plica extending a short distance upon the elytra, which are more strongly and not densely punctured. Metasternum with a few scattered punctures, and three striae behind. Length 1.7 mm.; .065 inch.

Detroit and Lake Superior. Allied to affinis, but the elytra are more strongly and sparsely punctured; the continuation of the stria upon the elytra is very short, and forms an angle with the thoracic stria. Among 14 specimens examined I find no sexual difference worthy of note, and I have redescribed this species in order to correct an error made by Mr. Crotch, who (Trans. Am. Ent. Soc. 1873, 391,) considered as the ♀ a different species, in which the stria is not continued upon the elytra.

6. Hydroporus laccophilinus. Ovate, depressed, pointed behind, brown, paler in front, darker behind; epistoma not margined, head finely punctulate; prothorax (♂) rugose and finely punctured, narrower in front, sides oblique, finely margined. Elytra (♂) strongly punctured, shining, (♀) opaque, finely sparsely punctulate. Metasternum channeled for the posterior half of its length; sparsely punctured in front; abdomen coarsely punctured in both sexes. Length 2.6 mm.; .10 inch.

Detroit; rare. The form is exactly that of a Laccophilus in miniature. The head and prothorax of the ♀ are opaque and very finely and sparsely punctulate.

7. Suphis semipunctatus. Elongate-oval, not pointed behind, moderately convex, yellow-brown, shining, smooth; elytra darker, covered from the middle to the tip with scattered coarse punctures; of which one series extends to the base half way between the margin and suture. Pros-
ternum not punctured, less dilated behind than in the other species, but with two short posterior striae; metasternum with a deep impressed median line, smooth, with only a few scattered punctures behind. Length 26 mm.; .10 inch.

Monroe, Michigan; one specimen; very different from the other species by the regularly oval form, scarcely narrower behind than before, by the peculiar punctuation of the elytra and by the impunctured sterna. The last joint of the maxillary palpi is nearly acute at tip, and does not appear emarginate from any point of view.

The insect mentioned in the Florida list (ante p. 438) as *Suphis* n. sp., on remounting, proves to be a very small species of *Laccophilus*, having the same form of prosternum as the others. It may be here conveniently described as:

8. *Laccophilus* pumilio. Ovate, pointed behind, not convex, impunctured, rufo-testaceous, meso- and metasternum darker; elytra piceous, slightly iridescent, regularly narrowed behind, and not obliquely truncate at tip; abdomen without the distant fine oblique lines seen in the other species. Length 1.9 mm.; .075 inch.

Enterprise, Florida; one specimen. Very careful examination shows in certain lights traces of two or three lines on the second ventral segment towards the sides, but these are the only evidences of the characteristic ventral sculpture of the other species.

9. *Gastrodytes* leptapsis. ♀ Elongate-oval, less obtuse than usual, black, with a slight bronzed tint, opaque, finely strigose with lines forming very elongate meshes; base of antennae, palpi, front and middle legs tinged with piceous. Head less opaque than the prothorax, the sides of the latter are oblique, finely margined and scarcely rounded. Elytra with the usual rows of punctures indistinct. Beneath shining, finely reticulate, meso- sternum acutely emarginate, hind tibiae sparsely, coarsely punctured, margined on the inner side, but without a very distinct row of punctures. Front and middle thighs distinctly, not densely punctured. Length 9.7 mm.; .38 inch.

Marquette, Lake Superior; one specimen. This species is as elongate as *G. parallelus*, but less obtusely rounded, and is easily recognized by the peculiarly elongated meshes of the reticulation. The prosternum is obtusely carinate.

10. *Gastrodytes* longulus. Elongate-oval, obtuse at each end, not convex, shining, smooth black, with a slight metallic gloss. Antennae, palpi
and feet tinged with piceous. Prothorax with sides oblique, finely margined; apical and basal rows of punctures strongly marked. Elytra with the rows of punctures strongly marked. Prosternum acutely carinate; mesosternum deeply emarginate; front and middle thighs punctured and rugose; hind tibiae smooth, with a few small punctures at the inner margin and some larger ones along the outer margin. Length 9 mm.; 35 inch.

♀ Smooth but not polished; claws of front tarsi long, not toothed, curved only near the tip.

♀ Scarcely perceptibly punctulate; claws of front tarsi not so long, and regularly curved.

Lake Superior; the elytra vary from brown to black, with only the edge brownish. The form is exactly as in *G. parallelus*, from which it differs greatly by the other characters.

11. *Hydrobius feminalis*. Sub-ovate, convex, blackish piceous, sides of prothorax and elytra and beneath paler. Head and prothorax sparsely punctulate, elytra finely not densely punctured, sutural stria deep, extending from the middle to the tip. Length 2.5 mm.; .10 inch.

Detroit. This species is less oval than the others of the same size in our fauna, and is somewhat narrower behind than in front; it is free from metallic lustre. The prosternum and mesosternum are not prominent, and the thighs are punctulate and pubescent from the base nearly to the knees. It therefore belongs to the genuine Hydrobii, and is allied to the two following Californian species.

12. *Hydrobius castaneus*. Oval, convex, shining brown, beneath piceous. Head prothorax and elytra finely, moderately densely punctured, the latter a little more strongly; sutural stria deep, extending from the middle to the tip. Length 2.5 mm.; .10 inch.

Lake Tahoe, Cal.; Mr. Crotch. The pro- and mesosternum are not carinated, and the thighs are punctulate and pubescent except near the knees.

13. *Hydrobius cuspidatus*. Oval, more elongate and somewhat less convex; blackish piceous, paler at the sides of the head and prothorax, also along the basal and apical margins of the latter; finely punctured, rather more strongly upon the elytra, with here and there indistinct traces of rows. Length 3.4 mm.; .14 inch.

Lake Tahoe, Cal.; Mr. Crotch. The prosternum is not carinate; the mesosternum is strongly carinate, with the anterior angle rectangular and slightly cuspitate. The under
surface and thighs are punctulate and pubescent almost to the knees.

14. Habrocerus? magnus. Elongate, depressed, blackish piceous. Head and prothorax shining, polished, the former with one frontal puncture each side. Prothorax twice as wide as long, emarginate at tip, broadly rounded at base, narrowed in front, strongly rounded on the sides, basal angles much rounded; sides finely margined, with two marginal punctures, and one in the base near the angle, base very finely margined; disc with one setigerous dorsal puncture near the base towards the suture. Dorsal segments densely punctulate. Beneath finely punctured and pubescent; tip of abdomen, antennae, palpi and legs piceous. Length 3.8 mm.; .15 inch.

♂ 6th ventral segment acutely emarginate, 7th more deeply emarginate almost to the base, 8th prominent, rounded at tip.

♀ Ventral segments not emarginate.

Isle Royale, Lake Superior. This species differs from H. Schwarzi by the much greater size, more elongate and depressed body, and pubescent elytra; it seems to be a connecting form between this genus and Tachinus.

15. Agathidium globatile. Black, shining, completely contractile into a ball. Head and prothorax smooth. Elytra smooth, without sutural stria, finely margined, margin extending along the base almost to the scutellum, which is large and triangular. Length (when contracted) 2 mm.; .08 inch.

Marquette and Detroit. Much smaller than A. oniscoides, but not otherwise specially different.

16. Agathidium parvulum. Hemispherical, not contractile, rufo-piceous, shining, smooth, elytra with sutural stria extending from the middle to the apex. Length 1.2 mm.; .05 inch.

Marquette, Lake Superior. This is the smallest species in my collection, and is less contractile than any other known to me.

17. Staphylinus caescareus Cederholm; Er. Staph. 378.

A specimen of this European species, found at Detroit, differs by having the golden pubescence confined to the neck and to the posterior margin of the second dorsal segment. No golden hairs are visible either at the base and apex of the prothorax or on the sides of the ventral segments.

18. Batrisus simplex. Rufous, shining, sparsely pubescent. Head
slightly scabrous, vertex slightly elevated and convex, surrounded by a shallow curved impression. Prothorax campanulate, with the dorsal and lateral striae deep; behind the middle between the striae each side is an acute conical tubercle, and still nearer the base two very small teeth. Elytra indistinctly and sparsely punctulate. Antennae with the joints 3–8 not longer than wide, 9th and 10th rounded gradually larger, 11th still larger, oval, pointed. Hind tibiae with long terminal spur. Length 2 mm.; .08 inch.

♀ Head finely scabrous, front protuberant anteriorly and retuse, with an apical concavity.

♂ Head nearly smooth, vertex entirely smooth, front gradually declivous not prominent.

Detroit; one pair. Sufficiently distinct by the feeble sculpture of the head, and the absence of antennal sexual characters.

19. Orthoperus scutellaris. Oblong-oval, slightly convex, piceous, black, glabrous, not very shining. Scutellum large, very distinct. Elytra narrowly margined behind with testaceous. Length .7 mm.; .027 inch.

Michipicoton River, north shore of Lake Superior; also found in Illinois, and abundantly in British Columbia, at Lake Labache. This species is double the size of O. glaber, and less rounded. It is recognized at once by the very distinct scutellum.

Under a high magnifying power the elytra are seen to be finely strigose, and very sparsely and indistinctly punctulate.

20. Orthoperus suturalis. Oval, rounded, slightly convex, piceous black, glabrous, shining. Scutellum distinct. Elytra with a very fine sutural stria slightly visible from the middle to the tip. Length .5 mm.; .02 inch.

Enterprise, Florida. Smaller, or of the same size and form as O. glaber, but easily known by the distinct scutellum, and fine sutural stria. The elytra are very sparsely and indistinctly punctulate as in the preceding.

21. Orthoperus elongatus. Oblong-elongate, slightly convex, piceous, moderately shining. Scutellum distinct. Elytra with a very fine sutural stria effaced behind, but curving in front around the base and ending half way between the scutellum and the humerus; tips separately rounded, with the apex of the abdomen more prominent than in the other species. Length .5 mm.; .02 inch.
Tampa, Florida. Smaller and narrower than the other species, having much the form of *Ptilium*.

22. *Lathridius opaculus*. Elongate, blackish piceous, opaque. Antennae one-half longer than the head. Prothorax slightly convex, wider than long, a little narrowed behind, sides rounded in front, subsinate behind the middle, margin not reflexed; disc transversely impressed near the base. Elytra elongate-oval, one-fourth wider than the prothorax, striae fine punctulate, interspaces flat, disc oblique and broadly impressed in front of the middle; sutural stria more deeply impressed behind the middle. Length 1.5 mm.; .06 inch.

**Detroit, Illinois, Mass., and Maryland.** In some specimens the prothorax is obsoletely channeled.

23. *Lathridius maculatus*. Less elongate, blackish piceous, opaque. Head and prothorax broadly channeled, the latter feebly convex, wider than long, narrowed behind. sides finely serrate, not reflexed, rounded in front, sinuate towards the base; disc deeply transversely impressed behind the middle. Elytra nearly one-half wider than the prothorax, truncate at base, widest just behind the middle, sub-depressed, striae fine, punctured, sutural and two outer ones deeper, especially near the tip: color testaceseous, tessellated with black quadrate spots, margin blackish; disc deeply obliquely impressed near the base. Length 1.9 mm.; .075 inch.

**Detroit.** Allied to these two species is the following:

24. *Lathridius duplicatus*. Moderately elongate, blackish piceous, opaque. Prothorax one-half wider than long, narrowed behind, sides finely serrate, rounded in front, oblique behind, hind angles obtuse; disc feebly impressed in front of the middle, and with a shallow transverse impression behind the middle. Elytra one-third wider than the prothorax, elongate-oval, striae composed of punctures, not regularly arranged, and approximated by pairs; the sutural and two outer ones are slightly impressed near the tip. Legs rufo-piceous. Length 1.9 mm.; .075 inch.

**Illinois, and Detroit.** This and the two preceding species belong to the group *Enicmus* Thomson, in which the prosternum extends to the hind margin of the prothorax, the antennæ are shorter than the head and prothorax, with the three outer joints enlarged; and the prothorax is not strongly margined at the sides.

In *L. sculptilis* only two joints of the antennæ form the club; it thus belongs to *Coninomus* Thomson. In *L. hieratus*, a still more remarkable peculiarity, first mentioned to me by Dr. Horn, is seen; the prosternum extends only a short distance behind the coxae, and is enclosed by the epimera, which coalesce on the median line as in Rhynchophora; the front
coxae are also conical, prominent and contiguous. The antennae are slender and longer than the head and thorax, as in the true Lathridii with costate prothorax. These differences in structure entitle it to be ranked as a distinct genus for which the name Stephostethus may be adopted.

The two following species belong to Enicmus, though the antennae are more slender and a little longer than in those above described, and the sides of the prothorax are flattened.

25. Lathridius tenuicornis. Robust, depressed, dark brown, head and prothorax opaque, scabrous, slightly channeled. Prothorax more than one-half longer than wide, narrowed before and behind, sides strongly rounded, oblique towards the base, margin finely serrate, flattened but not reflexed; disc with a transverse slightly curved impression in front of the base, extending nearly to the sides. Elytra oval, wider than the prothorax, strongly margined, impressed near the base, shining; striae scarcely impressed, finely punctured, interspaces flat, each with an obsolete row of very fine points. Antennae shorter than the head and prothorax, slender, three outer joints longer, but very slightly thickened. Length 2 mm.; .08 inch.

California, near Sonoma.

26. Lathridius laticollis. Less robust, sub-depressed, brown, antennae, legs and antennae rufous. Head and prothorax opaque, scabrous, feebly channeled, the latter nearly twice as wide as long, formed and sculptured as in L. tenuicornis, but less rounded on the sides. Elytra elongate-oval, very little wider than the prothorax, truncate at base, strongly margined at the sides, slightly impressed near the base; striae punctured, scarcely impressed, fainter behind; interspaces nearly smooth, flat. Antennae two-thirds as long as the head and prothorax, slender, outer three joints a little thickened. Length 1.5 mm.; .06 inch.

Detroit. This species is very closely related to L. tenuicornis, and differs only by the prothorax being less rounded on the sides, and the elytra but little wider than it.

ODONTOSPINDUS nov. gen. SPHINDIDE.

General characters as in Sphindus, except:
Body elongate, glabrous; sides of the prothorax but feebly rounded, with 6 or 7 distinct teeth; elytra with striae not impressed but strongly punctured. Flanks of prothorax not concave for the reception of the antennae. Antennae, legs, tarsi and sterna precisely as in Sphindus.

This genus would seem to indicate a relation between the families Sphindidæ and Derodontidæ.

27. O. denticolli. Elongate, sub-cylindrical, brown, glabrous. Head finely punctured, transverse frontal impression deep, vertex, with a broad but not deep channel. Prothorax twice as wide as long, slightly narrowed in front, strongly but not coarsely punctured, sides nearly straight (PARATOR), or slightly rounded (PUNCTA), with 6 or 7 distinct teeth, hind

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angles obtuse, base slightly rounded, very finely margined. Scutellum large, acuminite behind. Elytra nearly four times as long as the prothorax, but not wider; striae not impressed, strongly punctured; scutellar stria long; behind the base there is a shallow impression. Antennæ paler at base, club large, two-jointed; eyes convex prominent. Length 2.7 mm.; .10 inch.

Detroit; one specimen. I am indebted to Dr. Horn for other specimens from Canada and California.

**EURYSPHINDUS** nov. gen. *Sphindidae.*

General characters as in *Sphindus,* except:

Body broadly oval, moderately convex, clothed with erect hairs; prothorax narrowed in front, rounded on the sides; elytra with striae feebly impressed, strongly punctured. Flanks of prothorax deeply and widely concave beneath. Eyes small, frontal suture finely impressed, not deep.

28. *E. hirtus.* Blackish brown, shining, pubescent with stiff erect hairs. Head sparsely punctulate, frontal suture fine, eyes small, not prominent, but convex. Prothorax more than twice as wide as its length, narrowed in front, sides slightly flattened, edge acute, crenulate, scarcely margined, base sub-sinuate not margined, disc strongly not coarsely punctured. Scutellum large, finely punctured. Elytra with striae of well marked punctures, interspaces feebly convex, rugosely punctulate; humeral callus rather prominent, paler brown. Beneath punctured, tibiae and tarsi paler. Length 1.6 mm.; .06 inch.

Detroit; one specimen. In the Munich Catalogue *Sphindus* is placed at the end of the *Ptilinidae,* a position for which it is unsuited, on account of the much smaller coxal cavities the proternum distinctly separates the coxae, which are themselves, though transverse, small and not prominent. The form of the antennæ and tarsi also forbids a reference to the *Ptilinidae.* To these characters I have to mention, that the antennæ, in repose, are flexed in a different manner, the slender part being laid each side along the prosternal suture, and the club bent suddenly outwards, behind the front leg. In *Eurysphindus* the flanks of the prothorax are deeply concave for the reception of these organs, in *Sphindus* the concavity is much less; and in *Odontosphindus* the depression is obsolete, though the form of the antennæ is the same in all three genera. I may here observe that the club of the antennæ is described as three-jointed; the 8th joint is so much
smaller than the 9th and 10th, and moreover, so little different in width and length from the 7th, that it seems more natural to view it as belonging rather to the stem than to the club, which would thus be properly designated as two-jointed.

**MYCETOPHAGUS** Hallw. *

The species known to occur in our fauna are eleven in number, three of which will now for the first time be described, two of these presenting characters worthy of special mention.

*M. confusus* departs remarkably in sculpture from the other species, to a degree that one of the generic characteristics becomes lost. There is no arrangement of punctures in strike except very feebly at middle near the base, while the punctures of the intervals become so numerous and large that the punctuation becomes confused as in *Triphylus*.

*M. tenuifasciatus* has a peculiar male sexual character, consisting of a transverse row of fine silken hairs on the first abdominal segment. No other species in our fauna has any other male character than that afforded by the anterior tarsi which are three-jointed, in the female four-jointed.

In the vast majority of our species the antennæ are either somewhat fusiform or gradually thickened to tip; two, however, have the last three joints of equal width and rather suddenly wider than the preceding. Other characters of less importance are made use of in the following synoptic table.

**Table of species of MYCETOPHAGUS.**

<table>
<thead>
<tr>
<th>Elytra striato-punctate</th>
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<tr>
<td>Elytra confusedly punctured</td>
<td>6.</td>
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<tr>
<td>1. Antennæ gradually broader externally or sub-fusiform</td>
<td>2. Antennæ with last three joints rather suddenly larger</td>
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<td></td>
<td>Prosternum nearly smooth. Antennæ not longer than head and thorax</td>
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<tr>
<td>Abdomen densely and finely punctured, sub-opaque.</td>
<td>Prosternum nearly smooth at middle</td>
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<tr>
<td></td>
<td>Prosternum densely and coarsely punctured</td>
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* For this synopsis of *Mycetophagidae*, and the descriptions of the new species belonging to the family, I am indebted to the kindness of Dr. G. H. Horn.
4. Margin of thorax entire:
   Form rather broad, thorax densely and freely punctured...........
   pluriguttatus.

   Form slender, thorax coarsely and deeply punctured Melsheimeri.
Margin of thorax serrulate:
   Elytra maculate with yellow spots..................pluripunctatus.
   Elytra piceous brown...............................pini.

5. Elytra nearly black. Male with brush of hair on first ventral........
   tenuifasciatus, n. sp.
   Elytra piceous, maculate with yellow. Male without brush..........obsoletus, n. sp.

6. Elytra maculate with large yellow spots.............confusus, n. sp.

   With Melsheimeri I have united obscurus, the latter seeming to be
   merely an unicolorous form. M. pini and pluripunctatus would seem to
   occupy the above relationship, but the latter is always more slender and
   less depressed.

   Of the above species californicus and pluriguttatus are peculiar to Cali-
   fornia, confusus to Colorado, tenuifasciatus extends across the north of our
   territory, while the other species are widely distributed in the Atlantic and
   Gulf States.

29. Mycetophagus californicus Horn, n. sp. Oval, piceous, feebly
   shining, sparsely clothed with brownish pubescence. Head moderately
   densely punctate. Antennae brownish, base and terminal joint paler, the
   latter nearly as long as the two preceding. Thorax transverse, broadest
   at base, sides arcuate and gradually narrower to apex, margin not serrulate,
   surface moderately densely punctured with coarse and fine punctures, basal
   impressions moderately deep. Elytra nearly black, with a yellow oblique
   spot at the humeri, and a transverse fascia at apical third, not attaining the
   suture nor margin, surface with stric of small sub-quadrate punctures not
   closely placed, intervals flat, irregularly biseriately punctulate. Body be-
   neath and legs brownish, prosternum nearly smooth, abdomen finely but
   not densely punctulate. Length .16 inch; 4 mm.

   This species is of the same general form as punctatus but smaller. The
   elytral markings in the two species are of the same type but in the present
   the yellow color is less extended. The antennae are not longer than the
   head and thorax. The abdomen of the male is simple, the first joint of the
   anterior tarsi slender and moderately long.

   Two specimens, Lake Tahoe, California, Crotch.

30. Mycetophagus tenuifasciatus Horn, n. sp. Oval, piceous
   black, feebly shining, sparsely pubescent. Head moderately densely punc-
   tate. Antennae piceous, last three joints broader. Thorax transverse, sides
   arcuate, margin not denticulate, base very slightly narrowed, disc densely
   punctured with coarse and fine punctures intermixed, those toward the sides
   coarse, basal impressions feeble. Elytra with stric of moderate punctures
   rather closely placed, intervals finely biseriately punctulate. Abdomen
finely punctulate, sparsely at middle, more densely at the sides. Legs nearly black. Length .20 inch; 5 mm.

In addition to the short black pubescence clothing the elytra there are very narrow sinuous bands of grayish pubescence, the first at basal third, the second behind the middle, and also an apical spot. The median band divides near the middle of each elytra and sends one branch forward, another backward to the margin. When the pubescence of the bands is removed the surface beneath is somewhat paler.

The punctuation of the surface of the thorax varies somewhat. In a specimen from Marquette, Mich., the entire surface of the thorax is as coarsely punctured as at the sides, and the elytral sculpture also stronger.

In addition to the anterior tarsi being three-jointed, the male has a tuft of silken hairs arising from an arcuate line at the middle of the first ventral segment.

Occurs from the White Mountains of New Hampshire to Michigan, Colorado and British Columbia.

31. **M. confusus** Horn, n. sp.

Oval, piceous, sparsely pubescent, elytra maculate with yellow. Head densely punctured. Antennae as long as head and thorax, outer four joints stouter. Thorax transverse, arcuately narrowed from base to apex, surface densely and coarsely punctured, basal impressions moderately deep, margin not serrulate. Elytra densely punctulate with a feebly striate arrangement at middle near the base, color piceous, maculate with large yellow spots as in *flavus*, the posterior band, however, not attaining the apex. Body beneath and legs rufo-piceous, prosternum sparsely punctate, abdomen densely punctate. Length .18 inch; 4.5 mm.

One ♀ specimen, Colorado, Morrison.

32. **Diplocœlus angusticollis** Horn, n. sp. Oblong-oval, piceous, moderately shining, sparsely pubescent. Head coarsely and moderately densely punctured. Thorax trapezoidal, narrowed in front, sides very feebly arcuate, hind angles suddenly broader covering the base of the elytra, surface coarsely and deeply punctured, with three feebly elevated lines at the sides which are less distinct in front. Elytra oblong-oval, with rows of coarse closely placed punctures, intervals with a single row of fine punctures, surface sparsely clothed with fine recumbent pubescence, with short, semi-erect, stout hairs arising from the interstitial punctures. Abdomen alutaceous, sparsely punctate and finely pubescent. Length .13 inch; 3.25 mm.

This is the only species described with the thorax much narrowed in front. Its aspect is somewhat that of a *Throes*. 

One specimen, Marquette, Mich.

It seems to me that the opinion of Mr. Reitter is correct that *Marginus* does not appear to be sufficiently distinct
from *Diplocelus* (Verhandl., k. k. Zool. Bot. Gesells. Wien, 1877, p. 189). We have in our fauna, by this arrangement, three species, of which the one above described is new. They are as follows:

*Table of species of Diplocelus.*

Lateral lines of thorax well marked.

Thorax narrowed in front, sides nearly straight, hind angles prominent externally.................................................angusticollis.

Thorax not narrowed in front, sides regularly arcuate.................brunneus.

Lateral lines of thorax obsolete..............................................rudis.

**D. brunneus** Loc., New species, 1863, p. 73, has the thorax equally wide at apex and base, and the lines at the sides of the thorax well marked. The elytra are slightly wider than the thorax and very sparsely clothed with a recumbent pubescence, the interstitial punctures bearing short semi-erect hairs. Length .14 inch; 3.5 mm.

Occurs from Pennsylvania to Illinois.


A much smaller species than either of the preceding, resembling at first glance a *Philothermus*. The thorax is rather broader than the elytra, coarsely and densely punctured, with a feeble trace of one of the lines only. The surface is pubescent as in *brunneus*. Length .08 inch; 2 mm.

In describing this species Mr. Reitter says the intervals are without fine punctures. They are nearly obsolete in some specimens but quite distinct in others.

**D. mus** Reitter, loc. cit., p. 188.

Under this name a species is described by Mr. Reitter, who is in doubt whether it came from "Amer. occ." or the West India Islands. It seems to be Mexican.

*Table of species of Litargus.*

The species may be distinguished in the following manner:

Terminal joint of antenna oval, scarcely longer and never wider than the preceding.................................................1.

Terminal joint of antenna truncate at tip, usually longer and always wider than the preceding.................................................2.

1. Club of antennae rather loose; thorax rather finely punctured and depressed, basal impressions distinct......................1. sexpunctatus.

Club of antennae compact; thorax coarsely punctured, convex basal impressions obsolete.................................4. didesmus.
2. Form rather convex, elytra coarsely not densely punctate. Thorax without basal impressions.

Thorax more finely punctate than the elytra, the latter with the pubescence in distinct rows, last joint of antennae not longer than the length....................3. *tetraspilotus*.

Thorax as coarsely punctate as the elytra, the latter without any serrate arrangement of pubescence, last joint of antennae notably longer than the length....................5. *nebulosus*.

Form depressed, elytra rather finely and densely punctate. Thorax with basal impressions.

Thorax densely punctulate, pubescence of elytra partly serrate, partly recumbent; last joint of antennae nearly as long as the two preceding together..........................2. *balteatus*.


Piceous, depressed, moderately shining, each elytron with three yellow spots. Thorax sub-opaque, moderately densely punctate. Elytra densely punctate, shining, sparsely pubescent and with semi-erect hairs in rows. Length 2.75 mm.; .11 inch.

Pennsylvania, South Carolina, Illinois. This species and the next are the only ones with distinct basal thoracic impression and with a depressed form of body.


The form, color and sculpture resemble the preceding species. The pubescence of the elytra is rather more evident while the serrated hairs are rather less distinct. The color of the elytra is piceous with yellow spots, as follows: one humeral, another post-scute, and a transverse band behind the middle angulated in front at the middle of each elytra. Length 2-2.75 mm.; .08-.11 inch.

The terminal joint of the antennae is broader than the preceding, truncate at tip, and nearly as long as the ninth and tenth together.

Occurs from Missouri to Colorado, Arizona and California.

(3.) L. *tetraspilotus* Lec. loc. cit.

Oval, moderately convex, piceous, shining, sparsely pubescent. Antennae with club rather loose, three-jointed, the last joint a little longer and broader than the preceding, and truncate at tip. Thorax less coarsely punctured than the elytra, intervals between the punctures alutaceous, basal impressions absent, basal margin rather suddenly sinuate on each side of the middle. Elytra rather coarsely and sparsely punctate, punctures vaguely arranged in rows, surface shining, color piceous, with two yellow spots on each side, one slightly in front of middle, the other larger, one-third from apex, hairs all semi-erect and in distinct rows. Length 2 mm.; .08 inch.
This species and nebulosus are the only ones in which a distinct situation occurs on each side of the middle of the base of the thorax.

Occurs from Pennsylvania to Georgia and Missouri.

(4.) **L. didesmus** LeC. loc. cit. p. 15.
Similar in form, color and sculpture to the preceding, and differing as follows:

> Club of antennæ rather compact, three-jointed, the eighth joint, however, slightly wider than the seventh, terminal joint oval, not as wide as the preceding. Thorax rather coarsely punctate, not alutaceous, basal impressions wanting, basal margin squarely truncate. Elytra coarsely and moderately truncate, punctures not in striae, pubescence partly semi-erect but not striate, color piceous, shining, each elytra with an oblique humeral yellow spot, another slightly behind the middle and also oblique, extending from the margin to the suture. Length 2.25 mm.; .09 inch.

**The yellow markings vary somewhat in extent.**

Occurs from Pennsylvania to Florida.

(5.) **L. nebulosus** LeC. loc. cit.
Resembles didesmus in form and sculpture. The antennæ are as in tetraspidotus. The thorax is as coarsely punctured as the elytra, and not alutaceous, basal impressions wanting, basal margin sinuate on each side of middle. Elytra coarsely punctate, pubescence partly semi-erect but not striate, the color is usually testaceous, with a piceous dentate band behind the middle, another one-third from apex. Length 1.5-2 mm.; .06-.08 inch.

This is our smallest species. It is usually of much paler color than the others, and the elytral markings are sometimes reduced to scattered piceous spots.

Occurs in the Middle States.

**Table of species of Triphyl/us.**

Elongate, not convex; prothorax strongly margined at the sides........ elongatus.

Elongate-oval, convex; prothorax finely margined at the sides. ruficornis.

33. **Rhizopha/us brunneus** Horn, n. sp. Uniformly brownish, moderately shining. Head sparsely punctate. Thorax a little larger than wide, apex and base truncate, sides sub-parallel at middle, slightly arcuate at apex and base, disc convex, coarsely and sparsely punctured. Elytra slightly wider at base than the thorax, and feebly emarginate, disc with rows of moderately coarse punctures which become somewhat finer toward the tip. Prosternum coarsely punctured, side pieces nearly smooth. Metasternum smooth at middle. Abdomen coarsely and sparsely punctured, the first segment smooth at middle. Pygidium sparsely punctate. Length 3 mm.; .12 inch.
Marquette, Lake Superior. The punctures of the entire surface are coarser than in any other of our species. It must be considered the intermediate form between those with the long and those with the broad thorax.

34. *Pedilophorus subcanus.* Longer-oval, convex, rounded behind, obliquely narrowed in front of the elytra, black, irregularly mottled with very short gray pubescence like hoar frost, and thinly clothed with short erect black bristles. Beneath finely, densely punctured, finely pubescent, legs piceous; tarsi paler, fourth joint with a long lobe. Length 4.4 mm; .17 inch.

Escanaba, Lake Superior. In form and pubescence this species resembles *Byrrhus,* but the tarsal lobe requires its reference to the present genus, with which it also agrees in having the mandibles not covered by the prosternum in repose.

35. *Paromalus teres.* Cylindrical, but not slender, shining black; head and prothorax punctulate, elytra finely not densely punctured, each with faint traces of two oblique striae near the base; sutural stria wanting. Pygidium very finely punctulate, under surface finely and sparsely punctured; mesosternum emarginate in front, marked with a fine lateral line; prosternum flattened without striae. Length 2 mm; .08 inch.

Sault St. Marie; one specimen. This species only differs from *P. seminulum* by the cylindrical form, in which it deceptively resembles *Teretrius americanus*; by having the elytra more finely punctured, and by the entire absence of the sutural stria.

The following species may be conveniently described on the present occasion.

36. *Hetaerius Blanchardi.* Oval-quadrate, brown, shining, of the same form as *H. brunneipennis,* sparsely pilose with long slender sub-erect yellowish hairs. Head opaque, finely punctulate, broadly concave. Prothorax with the sides slightly nicked at the middle, lateral lobes of the disc obsolescently punctulate, divided behind the middle by a transverse groove, hinder part deeply margined on both sides; the impressed groove separating the lateral lobe from the disc is much deeper and broader at the base. Elytra with three very fine striae, the inner one effaced behind the middle. Pygidium opaque, very finely and densely punctulate. Prosternum narrow, flat, densely punctulate, lateral edges well defined. Length 2 mm; .08 inch.

Tyngsborough, Mass. Collected by Mr. Frederick Blanchard, to whom I dedicate it with much pleasure, as a mark

PROC. AMER. PHILOS. SOC. XVII. 101. 3x. PRINTED JUNE 11, 1878.
of appreciation of his success in recovering many local species, which would otherwise have remained undetermined.

37. *Egialia rufa*. Elongate, cylindrical, not very convex, rufous. Head finely scabrous, with an obsolete transverse impressed line; epistoma very finely margined, sub-truncate. Prothorax scarcely wider than long, sub-quadrate, sides very slightly rounded, fringed with stiff hairs, serrate towards the base, which is broadly rounded and distinctly margined; front angles prominent, hind angles rounded, disc coarsely sparsely punctured with some fine punctures intermixed. Elytral striae deep, distinctly punctured, interspaces smooth. Scutellum small, smooth. Front tibiae with three large teeth, middle and hind tibiae gradually but moderately dilated, transverse ridges short; spurs of hind tibiae long, hind tarsi two-thirds as long as the tibiae. Length 4.5 mm; .175 inch.

Marquette, Lake Superior, two specimens; California, (precise locality unknown, probably from the Sierra Nevada), one example. The humeri in one Lake Superior specimen are prominent and tuberculate, in the other two rounded; in the former the spurs of the hind tibiae, though not longer, are more slender than in the two with simple humeri. These differences are probably sexual, but cannot be fully investigated without more specimens.

For the easy recognition of our species of this genus I have enlarged the table given by Dr. Horn (Trans. Am. Ent. Soc., 1871, 293), as follows:

**Table of species of *Egialia*.**

<table>
<thead>
<tr>
<th>Species</th>
<th>Description</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. rufa</td>
<td>Cylindrical, rufous, hind tibiae with two transverse ridges</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>2. cylindrica</td>
<td>Sub-cylindrical, black, hind tibiae serrate; elytral interspaces punctured.</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>3. lacustris</td>
<td>Prothorax finely punctured; black, sub-ovate.</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>4. conferta</td>
<td>Robust, slightly ovate, black; prothorax coarsely punctured.</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>5. latispina</td>
<td>Robust-ovate, black; prothorax coarsely punctured.</td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
</tbody>
</table>
5. Elongate-ovate, rufous, hind tibiae with very short, thick cylindrical spurs

7. spissipes, n. sp.

38. *Egialia latispina*. Robust, sub-ovate, convex, black. Head less finely scabrous; epistoma finely margined, sub-truncate. Prothorax more than twice as wide as its length, narrowed in front, rounded on the sides and fringed with stiff yellow hairs; sides impressed near the front angles, which are small; base not margined; disc coarsely sparsely punctured, without intermixed small punctures, sides nearly smooth, with the lateral fovea large, as in *E. crassa*. Elytra with strongly punctured striae, interspaces moderately convex. Scutellum small, convex at the middle. Front tibiae with three large teeth, middle and hind tibiae strongly and gradually thickened, with two long prominent transverse ridges; spurs of hind tibiae long and thick, flattened and obliquely truncate as in *E. crassa*. Length 3.7 mm; .15 inch.

Mojave Desert, Mr. Crotch, two specimens. Allied to *E. crassa*, but differs by the less ovate body, and distinctly punctured elytral striae.

39. *Egialia spissipes*. Sub-cylindrical, sub-ovate, a little wider behind, rufous. Head finely scabrous, epistoma very finely margined, sub-truncate in front. Prothorax one-half wider than long, not narrowed in front, rounded on the sides and fringed with stiff hairs; front angles prominent, hind angles rounded, base not margined; disc indistinctly rugoso-punctate. Scutellum small, bipunctate. Elytral striae deep, slightly punctured, interspaces flat. Front tibiae with two very large teeth and one small one; middle tibiae gradually thickened sub-serrate, hind tibiae conical, very much thickened, not serrate, spurs short and very thick, tarsi very short. Length 4.5 mm; .175 inch.

Marquette, Lake Superior; one specimen.

40. *Phausis inaccensa*. Elongate, gray, slightly pubescent. Prothorax wider than long, semicircularly rounded at the tip and sides, the latter strongly incurved at the base, hind angles dentiform, disc dark, convex, smooth, sides very widely flattened, scabrous, pale gray; near the apex are two large colorless transparent spots. Elytra reticulato-punctate, but less coarsely than in *P. reticulata*, with the longitudinal elevated lines very faint, sides rather strongly margined. Beneath densely punctured, gray, meso- and metasternum dirty testaceous; antennæ and legs gray. Length 6.3 mm; .25 inch.

Marquette; two ♂, one of which has been kindly sent me by Mr. Schwarz. This species is rather larger and a little less slender than *P. reticulata*, and is easily known by the entire absence of phosphorescent spots on the abdomen. I may here mention that a ♀ of the last named species in the collection
of Dr. Horn has short elytra, much as in the \( \frac{2}{5} \) of *Photinus (Gynaptera) scintillans*. This insect has a very strong resemblance to *Lamprohiza splendidula* of Europe, but is generically distinct by the longer antennæ, and by the small acicular twelfth joint of those organs. Specifically, it differs by the disc of the prothorax being smooth, the transparent spots more oval, not curved, and by the hind angles of the prothorax being greatly retracted.


A very singular series of this insect was collected at Detroit. In two individuals, both antennæ have ten joints, that is to say, there are five small joints between the rounded second joint and the first of the elongated joints. In one specimen the right antennæ has eleven, while the left has ten joints; this difference is produced by the division of the fourth joint into two parts. In another specimen the right antenna has ten, while the left has but nine joints; and it is again the fourth joint of the left that is divided, so as to form the fourth and fifth of the right, the distal part resulting from this division, or the fifth joint of the eleven-jointed antenna, is even a little wider than the fourth joint. It is thus apparent, that in this type of the Serricorn series, the increase of number of joints from nine to eleven is produced by a power of segmentation, or vegetative repetition residing in the fourth joint of the antenna.

Another inference from this series of specimens is that the nominal species of this genus may have been unduly multiplied, and that they must be defined by other than antennal characters. A renewed examination of the specimens in my collection, indicates that all the species recognized by me in the memoir above cited are valid, and easily distinguished by the characters there given.

**41. Xyletinus lugubris.** Oval, convex, blackish, piceous, dull with very fine dense punctuation, and very short pruinose pubescence. Prothorax more than twice as wide as its length, very convex, devious near the base, narrowed in front, sides rounded, incurved near the base which is slightly bisinuate. Elytra strongly striate, scutellar stria long. Beneath black, finely punctulate. Length 2.5 mm.; .10 inch.

Marquette, Lake Superior. Found also in Massachusetts, and Nebraska. This species is allied to *X. funatus*, but is smaller and less robust, and easily known by the prothorax more convex transversely and more devious towards the base.

Several specimens of *X. funatus* were collected by Mr. Crotch at Calaveras, California, which only differ from those found at Lake Superior by the smaller size, darker color and
less deep elytral striae. The following species seems to differ by the much coarser pubescence, and by the sides of the prothorax not at all flattened.

42. *Xyletinus pubescens*. Oval, convex, piceous, opaque, with fine rugose punctuation, densely closed with rather coarse yellowish pubescence. Prothorax more than twice as wide as long, narrowed in front, rounded at the sides, which are not at all flattened, transversely convex, slightly declivous towards the base. Elytra with deep impunctured stria, scutellar stria long, interspaces flat. Beneath densely punctulate and pubescent. Length 2.8 mm.; 11 inch.

Bosque Co., Texas; one specimen; Mr. G. W. Belfrage.

**MICROMALTHUS** n. g. *Lymexylide?*

- Body elongate, head wide, with rounded, convex eyes; prothorax wider than long, narrowed behind, elytra a little shorter than the abdomen, substriate, smooth at the apex; resembling in miniature a narrow *Hydnocera*, but greatly differing by the antennae, palpi and tarsi.

Antennae shorter than the head and prothorax; 1st and 2d joints rounded, as wide as long; 3d small, 4-10th wider, and becoming gradually transverse, 11th oval, not wider than the 10th; inserted on the edge of the front, before the eyes, which are convex, prominent, rounded, not emarginate, and rather finely granulated. Maxillary palpi with the last joint moderately large, oval, pointed; labial similar but much smaller; gular sutures straight, widely separated. Prothorax transverse, without angles, narrowed behind, not margined on the sides. Legs rather long, slender, tibiae without spurs, tarsi 5-jointed, as long as the tibia, joints 1-4 equal, not lobed, 5th as long as the others united, claws simple. Front coxae oblique, conical, prominent, contiguous at the apex; middle coxae large, oblique, conical, not continuous, hind coxae transverse, conical, prominent. Abdomen with six free and nearly equal ventral segments. Prolateral sutures not visible; side pieces of metathorax long and narrow.

No sexual difference can be observed in any of the specimens collected, two small spicules project from the tip of the abdomen in each of them.

43. *M. debilis*. Piceous, shining, antennae, palpi and legs yellow, head smooth, front transversely depressed. Prothorax smooth, with a faint transverse impression. Elytra feebly scabrous, nearly smooth at the tip, striate except at base and tip. Beneath punctulate, slightly pubescent; two or three dorsal segments exposed. Length 2.2 mm.; .85 inch.

Detroit, in decomposing wood, August. I have referred this genus to Lymexylide on account of the resemblance of the antennae and coxae to those of *Hylecoccus*. In such a feeble and ill-developed form we should naturally expect the peculiar sexual characters seen in the palpi of the other genera to disappear.
44. **Phymatodes maculicollis.** Blackish, piceous, finely sparsely pubescent. Head and prothorax finely not densely punctured, the latter a little wider than long, rounded at the sides, rufous, with a broad black dorsal stripe. Elytra not wider than the prothorax, densely punctured. Beneath sparsely punctulate, prothorax rufous, legs piceous, coxae and thighs (except at base) blackish. Front coxae contiguous; mesosternum triangular, middle coxae slightly separated. Antennae slender, filiform, a little more than half as long as the body, 4th joint equal to 5th. Length 6.3 mm.; .25 inch.

Isle Royale, Lake Superior; but one specimen found.

45. **Typocerus sparsus.** Black, shining, pubescent with coarse black hair. Head rather finely punctured. Prothorax sparsely and coarsely punctured, margined at base and apex with golden hair. Elytra sparsely and coarsely punctured, punctures becoming finer towards the tips, which are dehiscent by the curvature of the suture; bidentate, the outer tooth longer than the sutural one; ornamented with a transverse yellow spot very near the base, and three transverse yellow bands extending from the side margin to the suture. Beneath punctulate, pubescent with yellowish gray hair. Antennae (♂) two-thirds as long as the body, not serrate, sixth and following joints with an elongate depressed sensitive space, extending from base to tip or nearly so. Length 10 mm.; .40 inch.

Escanaba, Lake Superior. This species resembles in appearance *T. zebratus*, but is at once recognized by the sparse punctation of the prothorax and elytra.

46. **Chlamys cribripennis.** Sub-quadrate, coppery bronze, of the same form and color as *C. assimilis*, from which it differs by the prothorax more shining, finely strigose, impunctured, with the dorsal elevation only obsoletely divided at the highest part. The elytra have the elevations similarly placed, but smaller, and the interspaces are very coarsely, but not densely punctured. The pygidium is less opaque, in fact, somewhat shining, and more deeply punctured, and without the shallow rounded impressions seen in that species. Antennae fulvous, labrum black. Length 2.5 mm.; .10 inch.

Detroit: one specimen.

47. **Phyllotreta robusta.** Less elongate than usual, black with a greenish bronze lustre. Head punctured, vertex with a short, fine, longitudinal impressed line. Prothorax twice as wide as long, strongly punctured, slightly narrowed in front, sides rounded, base truncate, not margined. Elytra oval, wider than the prothorax, rounded on the sides, similarly punctured; pale yellow, with a wide sutural stripe narrowed near the base, and rounded behind at about one-fifth from the tip, where it ends; the side margin is blackish from the base nearly to the tip, and the color is a little wider about the middle; there are besides two spots on each elytron, one occupying the humeral callus, and attaining both the base and side
margin, the other at the middle and near the blackish lateral margin, though separate from it. Antennae slender, more than one-half as long as the body, black, first three joints brown. Beneath black, tibiae and tarsi piceo-testaceous. Length 2 mm.; .08 inch.

Detroit; one specimen. Quite different from any other striped species in our fauna, and representing the European P. biguttata Foudras. Alt. 251.

The adoption of the Kirbyan name Orchestrus for this genus by Mr. Crotch (Proc. Ac. Nat. Sc. Phila. 1873, 65) in preference to Phyllotreta Foudras, seems to me inexpedient for the following reasons:

Kirby (Faun. Proc. Am. IV, 217), characterizes a sub-genus Orchestrus by a very brief formula, which is applicable to several groups of the old genus Haltica, to which generic names are now affixed.

His sub-genus was evidently defined for the purpose of describing two striped species of large size now enrolled in Disonycha Chevr., but in order to make his volume (exclusively devoted to North American species), more intelligible to the English student, he casually observes that his sub-genus corresponds with section b. 1,84 of Stephens, "of which H. nemorum is the type."

Now while unwilling to dispute that H. nemorum is the type of Stephens' unnamed British group, it is quite apparent that the remark of Mr. Kirby indicates simply an error of judgment or observation in not perceiving the differences (if there be any), between his large American species, for which the sub-genus was established, and the small European species; and thus the sub-generic name belongs properly to the former group.

The name Orchestrus, therefore, unless it is dropped entirely in consequence of its heterogeneous limitation, can be used only to supplant Disonycha Chevr. (1844), and the present group must be known as Phylloreta, under which name it was first characterized by Foudras in 1860

48. Chaetocnema rudis. Oval, convex, bronzed, not shining. Head finely punctured. Prothorax rather densely and strongly punctured, very little narrowed in front, sides slightly rounded, finely margined, base not margined. Elytra with rows of deep punctures, the inner ones slightly confused near the base; space between the scutellar stria and the suture irregularly punctured. Beneath punctured, tibiae and tarsi brown. Length 1.8 mm.; .07 inch

Marquette, Lake Superior; one specimen. This species belongs in the table (ante. p. 419), after cribrata, from which it differs by the much less confused elytral striae.

49. Myctochares gracilis. Elongate, piceous-black, shining, finely and sparsely pubescent. Head punctured, front depressed, vaguely foveate. Antennae nearly half as long as the body, piceous, base brown; 2d joint small, 3d a little longer than the 4th. Eyes convex, prominent. Prothorax wider than the head, wider than long, narrowed and much
rounded on the sides in front; strongly punctured, disc broadly longitudi-
nally impressed behind, flattened and explanate at the hind angles, which
are rectangular; impressed each side at the base, which is truncate and
not margined. Elytra a little wider than the prothorax, parallel, strie
punctured, scarcely impressed; interspaces transversely sparsely rugose
and finely punctured. Beneath shining, trunk finely punctured. Ab-
domem sparsely punctulate. Front coxae separated by the prosternum,
which is narrow and punctured. Length 5.5 mm.; .22 inch.

Marquette, Lake Superior; one specimen. This species is
related to *M. bicolor*, but is quite different in the less deeply
striate elytra, the more strongly punctured prothorax and
the dark antennae and legs.

For the purpose of more clearly defining several new species,
my table (New Sp. Col. Smiths. 8vo., 138) may be expanded
as follows:

<table>
<thead>
<tr>
<th>Table of species of <em>Mycetochares</em>.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Front coxa separated by the prosternum.</td>
</tr>
<tr>
<td>3. Prothorax as wide as the elytra, or nearly so.</td>
</tr>
<tr>
<td>4. Pubescence long, rather dense, prosternum very narrow.</td>
</tr>
<tr>
<td>5. Prothorax very wide, sparsely punctulate.</td>
</tr>
<tr>
<td>2. Black or piceous, prothorax finely punctured.</td>
</tr>
<tr>
<td>7. Elytra black, with spots.</td>
</tr>
<tr>
<td>8. Elytra with three basal foveae.</td>
</tr>
<tr>
<td>10. Antennae, legs and under surface ferruginous; last two ventral segments piceous; prothoracic margin not flattened.</td>
</tr>
<tr>
<td>11. Elytra black, without spots; antennae stouter and legs black.</td>
</tr>
<tr>
<td>14. Elytra black, with spots.</td>
</tr>
<tr>
<td>15. Elytra black, without spots.</td>
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<tr>
<td>17. Elytra black, without spots.</td>
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<tr>
<td>22. Elytra black, without spots.</td>
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<td>26. Elytra black, without spots.</td>
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<td>27. Elytra black, without spots.</td>
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<td>30. Elytra black, without spots.</td>
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<td>31. Elytra black, without spots.</td>
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<td>32. Elytra black, without spots.</td>
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<td>37. Elytra black, without spots.</td>
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<tr>
<td>40. Elytra black, without spots.</td>
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11. Prothorax with margin not explanate. Prothorax as wide as the elytra, strongly punctured, sides narrowly but strongly explanate. 12. marginata, n. sp.

12. Prothorax wide, strongly punctured, much rounded on the sides, which are not explanate. 13. binotata. Prothorax slightly narrower than the elytra, strongly punctured, sides not explanate. 14. longula, n. sp.

In the Munich Catalogue Mycetophila Gyll. (1810), which antedates Mycetocharides Latr. (1825), is adopted for this genus; the former name was, however, pre-occupied by Meigen (1803), for a genus of Diptera, as is very properly mentioned by Lacordaire (Gen. Col. V., 507, note).

**M. basillaris** (Say) remains unknown. When found, it will be easily recognized by the scarcely punctured prothorax, with three posterior impressions, and the striate elytra having an oblique red spot like the species 3–5 of the table.

50. **Mycetocharides pubipennis.** Dark brown, shining, rather densely clothed, especially on the elytra, with long brown pubescence. Head punctured, eyes more transverse and less prominent than in the other species; antennae paler brown, rather stout, about half as long as the body. Prothorax one-half wider than long, scarcely narrowed in front, not densely nor strongly punctured, broadly longitudinally impressed at the middle of the base, and obliquely near the hind angles; sides moderately rounded, not explanate, base not margined. Elytra not wider than the prothorax, punctured; striae punctured not impressed, nearly obliterated at the sides and behind. Beneath punctulate and finely pubescent, legs piceo-rufous; prosternum extremely narrow between the front coxae. Length 4.8 mm.; .19 inch.

California, at Tejon and San Diego. Easily known by the more transverse and scarcely prominent eyes, and very narrow prosternum.

51. **Mycetocharides laticollis.** Elongate-oval, not convex, above black, shining, elytra each with an oblique red spot near the base; sparsely pubescent. Head and prothorax sparsely punctulate, the latter fully twice as wide as long, widest at the middle, very much rounded on the sides, which are slightly explanate near the hind angles; base extremely finely margined, with three broad shallow impressions, of which the middle one is nearly obsolete. Elytra a little narrower than the prothorax, not densely punctured, with very faint traces of striae near the suture. Antennae rather stout, under surface and legs testaceous-red; palpi and large gular spot yellow. Length 6.3 mm.; .25 inch.

Pennsylvania; under bark of *Populus dilatata* in June; one specimen, Prof. S. S. Haldeman. I confounded this species formerly with **M. fraterna**, from which it differs by

the much more finely and sparsely punctured head and pro-

52. Mycetochares analis. Elongate, black, shining, pubescent. Antennæ brown, slender, one-half as long as the body. Head and prothorax strongly rather densely punctured, the latter twice as wide as long, narrowed in front, rounded on the sides, which are not explanate; base scarcely impressed, indistinctly margined near the hind angles. Elytra very little wider than the prothorax, punctured, striæ punctured, slightly impressed, nearly obliterated at the sides and behind. Beneath finely punctured, dull ferruginous, 4th and 5th ventral segments dark piceous. Front coxe contiguous. Length 7.5 mm.; .30 inch.

Detroit; one specimen. Of the same size, form and sculpture as M. binotata, but differing by the absence of the humeral spot, and the different color of the antennæ, legs and under surface.

53. Mycetochares luxuratis. More elongate, black, shining, pubescent. Antennæ dark brown, rather stout, one-half as long as the body. Head and prothorax strongly punctured, the latter twice as wide as long, sides rounded, especially in front, side margin narrowly but strongly explanate behind the middle, depression extending some distance along the base, which is indistinctly margined; there are three vague shallow basal impressions. Elytra a little wider than the prothorax, punctured, striæ rather strongly impressed. Beneath shining, sparsely finely punctured. Legs piceous. Front coxe contiguous. Length 6.4 mm.; .25 inch.

Detroit; one specimen. A similar one collected in Kansas by Prof. Snow, is slightly immature; the color is brown, with the base of the antennæ and legs testaceous.

54. Mycetochares marginata. Elongate, of the same form as M. binotata but smaller, black, shining, pubescent. Antennæ rather stout, black. Head and prothorax strongly rather densely punctured; the latter twice as wide as long, much rounded on the sides, especially in front, sides behind the middle narrowly but strongly flattened; base with three very faint shallow impressions. Elytra very little wider than the prothorax, punctured, striæ punctured, scarcely impressed, marked with a red humeral rounded spot. Beneath shining, sparsely punctulate. tarsi piceous; front coxe contiguous. Length 5.2 mm.; .21 inch.

Marquette, Lake Superior; one specimen.

55. Mycetochares longula. More elongate, of the same form and size as M. gracilis, black, shining, pubescent. Antennæ stout, black, half as long as the body. Head and prothorax strongly, somewhat rugosely punctured, the latter about one-half wider than long, narrowed in front, rounded on the sides, which are not explanate, with three faint shallow basal
impressions. Elytra a little wider than the prothorax, punctured, striae punctured, slightly impressed, obsolete towards the sides; marked with a small rounded humeral spot. Beneath shining, finely punctured, legs entirely black; front coxae contiguous. Length 6 mm.; .33 inch.

Detroit; June; one specimen.

56. Canita pallipennis. Elongate, rugosely punctured, finely pubescent. Head and prothorax black, the latter more than twice as wide as long, hind angles nearly rectangular, basal impressions broad, distinct. Elytra pale testaceous. Beneath and legs testaceous, abdomen and antennæ darker; second and third joints of the latter small, united shorter than the fourth. Length 2.7 mm.; .10 inch.

Marquette, Lake Superior. Similar to C. pusilla, but with the head and prothorax darker, and the elytra pale.

57. Dirceae fusca. Elongate, fuscose brown, densely rugosely punctured, and clothed with short sericeous brown pubescence. Head perpendicular, more strongly punctured. Antennæ and palpi ferruginous, the former with third joint not longer than the fourth, following joints scarcely diminishing in length, longer than wide, eleventh longer. Prothorax a little longer than wide, apex rounded into the sides; hind angles obtuse, rounded at tip. Elytra with faint traces of three elevated lines. Beneath densely punctate. Length 8.7 mm.; .34 inch.

Marquette, Lake Superior, Virginia and North Carolina. Larger than D. concolor, and easily known by the antennæ being ferruginous, and more slender, with the joints longer than wide.

58. Hallomenus serricornis. Elongate, rounded at each end, not convex, blackish, shining, finely densely punctured and pubescent. Antennæ scarcely longer than the head and prothorax, strongly serrate. Prothorax twice as wide as long, narrowed in front, strongly rounded on the sides, which are very finely margined; base slightly bisinuate, margined near the hind angles, basal impressions broad well-marked. Elytra faintly striate, but the striae are not indicated by rows of punctures. Beneath finely and densely punctulate. Length 6.3 mm.; .25 inch.

Marquette; two specimens. Larger than our other species, and of uniform dark piceous, nearly black color, with strongly serrate antennæ.

Table of the species of Hallomenus.

| Antennæ not serrate, joints sub-quadrate | 2.
| Antennæ strongly serrate, joints triangular | 1. serricornis n sp.
| 2. Finely and distinctly punctured | 3.
| Very finely punctured, yellowish brown, elytra in front and legs paler | 2. punctulatus.
| Pale brown, head fuscose, much smaller (3 mm.) | 4. debilis.
59. **Proctorus armatus** Lea. Rhynch. 212.

Several specimens of this curious insect were found at Marquette, and among them are ♂♀ in which the two processes of the apical edge of the last ventral segment are very short, and scarcely apparent, though the anterior tubercle or spine and the large excavation are as well developed as in the other specimens.

60. **Proctorus decipiens** Lea. ibid. 213, (Eucalus.)

♂ Apical part of last ventral segment suddenly transversely depressed, with a short erect spine each side.

Marquette. The differences in the rostrum upon which I separated *Eucalus* from *Proctorus*, are only sexual; and the peculiar ventral armature of the ♂ shows that they constitute but one genus.

61. **Orchistes canus** Horn,* n. sp. Black, sparsely clothed with grayish pubescence. Antennae testaceous, funicle six-jointed. Thorax broader than long, apex one-third narrower than base, sides arcuate, disc coarsely punctured. Elytra oval, gradually narrowed posteriorly, disc convex, deeply and rather broadly striate, striae with coarse, deep and closely placed punctures, intervals irregularly biseriately punctured, the punctures bearing short grayish hairs. Body beneath and legs black. Length 3 mm.; .12 inch.

The posterior femora are strongly thickened. This species cannot be confounded with any other than *pallicornis*, from which the deeply striate elytra, and very evident grayish pubescence will distinguish it.

Specimens are before me from Isle Royale and Escanaba, Michigan, and from San Juan, Colorado.

62. **Orchistes minutus** Horn. n. sp. Black, sparsely clothed with grayish pubescence. Antennae piceous, scape and first joint of funicle paler, the funicle 6-jointed. Thorax broader than long, apex scarcely narrower than base, sides arcuate, surface coarsely punctured. Elytra oval, broadest at middle, disc slightly flattened, deeply striate, striae with indistinct distant punctures, intervals wrinkled, irregularly, finely, biseriately punctate. Body beneath and legs black. Posterior femora feebly thickened. Length 2 mm.; .08 inch.

This species resembles *rufipes*, but is somewhat smaller, disc of elytra flatter and with entirely black legs, and with the thorax much more arcuate at middle.

Four specimens, California, from Mr. James Behrens, collected probably near Sausalito.

*Dr. Horn has kindly prepared the table of this genus and the descriptions of the two new species.
Table of Species of Orchestes.

Funiculus of antennae 6-jointed.
Posterior femora much stouter than the middle.
Legs entirely yellow.
Pubescence of surface fulvous and conspicuous............puberulus.
Legs black, tarsi sometimes pale.
Elytra feebly striate, pubescence scarcely evident........pallicornis.
Elytra deeply striate, pubescence grayish, persistent........canus, n. sp.
Posterior femora scarcely stouter than the middle. Elytra deeply striate; species very small.
Legs entirely black.............................minutus, n. sp.
Legs yellow, posterior femora infuscate.....................rufipes.

Funiculus of antennae 7-jointed.
Pubescence above almost entirely black, a feeble grayish band at basal third. Scutellum densely white......................niger.
Pubescence above forming a somewhat saddle-shaped design in rather dense white pubescence;
Legs in part yellow, thorax broader at apex than long........ephippiatus.
Legs entirely black, thorax not broader at apex than long................subhirtus.

With O. niger, I have united parvicollis Lec., of which I have now five specimens not essentially differing. The distribution is not remarkable (Nova Scotia to California) as O. subhirtus occurs also in California, while O. pallicornis extends from Nova Scotia to Texas, and to Puget Sound.


Detroit and Marquette. The European synonymy of this species may be found in the references given above. The differences between this genus and Alyca (Lec. Rhynch. 209), do not seem sufficient to warrant the retention of the latter. The species upon it was established, Erirhinus ephippiatus Say, differs from bipunctatus by finer punctuation, and pale yellow color, with a large sutural dark spot on the elytra. There are other species indicated by the specimens in my collection, but I do not feel prepared to define them accurately without a larger series.

64. Acalyptus Carpini Herbst, Col. vi, 204; pl. 74, f. 3; Gyll. Schönh. Curc. iii, 447; &c.

Michigan and Massachusetts; first known from Northern Europe. A small blackish insect, densely clothed with silvery gray sericeous pubescence, and easily known by the ventral sutures being straight the pygidium exposed, and
the claws simple and divergent. The antennae and legs are yellow: sometimes the elytra are rufous, with the suture blackish.

65. *Zygobaris subcalva*. Of the same size and form as *Z. conspersa*, sub-rhomboidal, black, rather shining, thinly clothed with short pubescence, and without scales. Beak as long as the head and prothorax, curved, slightly thickened at the base, punctulate; head finely punctate. Prothorax not wider than long, gradually narrowed in front, sides nearly straight, constricted near the tip; surface densely, not coarsely punctured, base bisinuate. Elytra wider behind the base, humeri oblique, strike deep, interspaces rather wide, flat, each with a row of small punctures. Beneath densely punctured, finely, sparsely pubescent; claws small, approximate, but scarcely connate at base. Length 2 mm.; .08 inch.

Detroit; one specimen found; I have two others from Pennsylvania. Differs from *Z. conspersa* chiefly by the finer punctuation, and the absence of scales.

66. *Pityophthorus annectens*. Elongate-cylindrical, brown, shining, with a very few slender erect scarcely serrate yellow hairs. Prothorax longer than wide, in front roughened almost concentrically for about one-third the length, sides and base finely sparsely punctured, punctures becoming larger, as they approach the roughened surface. Elytra with approximate rows of small punctures, interspaces transversely rugose; apical declivity retuse, deeply impressed near the suture, which is elevated; sutural tip rather acute. Front tibie with two small teeth. Length 16 mm.; .06 inch.

♂. Head broadly concave, opaque with shallow punctures, concavity fringed with long yellow hairs.

♀. Head slightly convex, strongly and deeply punctured.

Tampa, Florida, on yellow pine; Mr. E. A. Schwarz. This species is of slender form, and is most nearly allied to *P. nitidulus*, but is smaller, and has the prothorax more finely punctured. The color is also different, the Californian and Alaskan *nitidulus* being black, while this is always brown.

67. *Pityophthorus consimitis*. Yellow brown, shining, with a few erect yellow hairs, of the same form and sculpture as *P. annectens*, except that the obtuse elevation of the apical declivity of the elytra, and the corresponding part of the suture are sparsely cretate. The antennae and legs are yellow, and the form is perhaps a trifle more robust. Length 1.6 mm.; .06 inch.

♂. Head flat, slightly pubescent, with a large, sub-quadrate, densely punctured opaque spot occupying nearly the whole upper surface, and divided by a longitudinal impressed line; sides shining, sparsely punctured.

♀. Head slightly convex, strongly punctured.

Marquette, Lake Superior, Detroit. The females of this
and the preceding are undistinguishable, except by the characters given above; the ♂ ♀ are however easily recognized.

68. Pityophthorus hirticeps. Yellow brown, shining, cylindrical, less slender than the two preceding species, sparsely retuse with fine, erect yellow hairs. Prothorax a little longer than wide, roughened concentrically for one-third its length; sides and posterior part strongly, rather densely punctured, with a narrow smooth median space. Elytra with approximate rows of punctures, interspaces irregularly transversely rugose: apical declivity retuse and crenate, deeply concave near the suture, which is elevated and also crenate. Length 1.6 mm.; .06 inch.

♂. Head broadly concave and opaque, fringed with long yellow hair.

♀. Head slightly convex, strongly punctured.

Marquette, Lake Superior. Related to the two preceding, agreeing with P. annectens in sexual characters, but with the crenations of the apical declivity of the elytra stronger than in P. consimilis, while the form is a little more robust than in either.

69. Pityophthorus pusio. Cylindrical, shining, piceous, with a few erect yellow hairs behind the middle of the elytra. Prothorax not longer than wide, roughened in front almost to the middle, strongly and densely punctured at the sides and behind, with a large, smooth, well-defined dorsal space. Elytra with small punctures, arranged in tolerably regular rows, apical declivity broadly concave, slightly retuse each side, with about three very small teeth; suture elevated, also with three or four slight inequalities. Front tibiae with two very faint small teeth. Length 1.6 mm.; .06 inch.

Marquette, Lake Superior; one specimen. The head is retracted so that the front cannot be seen. This species is of the size and form of P. pulicarius, but the elytral sculpture and the apical declivity are quite different; it is more nearly related to the Californian P. puncticollis, but differs by the more robust form, and by the sparse crenations of the apical declivity, which are wanting in that species.

70. Pityophthorus opaculus. Cylindrical, slender, testaceous, head and disc of prothorax darker; anterior half rather strongly asperate, sides and posterior half sub-rugosely punctulate, dorsal line smooth, narrow. Elytra finely alutaceous, nearly opaque, marked with scarcely perceptible distant stric of very fine punctures; apical declivity neither retuse nor concave, suture elevated, limited by a distinct striæ. Length 1.3 mm.; .05 inch.

Marquette; one specimen. This species must be placed after P. comatus in my table (Rhynch. 352). The head is punctured, and slightly convex, the legs and antennæ are yellow.

71. Pityophthorus plagiatus; Xyleborus plagiatus Lec., Tr. Am. Ent. Soc. 1868, 161; Rhynch 361.
Marquette; not rare. The club is transversely annulated, and it therefore belongs to *Pityophthorus*; the sexual differences indicate that *Xyloborus hamatus* Lec., Am. Ent. Soc. 1874, 72, is the ♀ of *carinulatus* Lec. ibid. (*Pityophthorus carinulatus* Lec., Rhynch. 352).


Marquette, Lake Superior; rare. This species, as is shown by the examination of well preserved specimens, has the club transversely annulated, and therefore belongs to *Pityophthorus.* There seems to be no sexual differences in the declivity of the elytra, but the ♀ has the head fringed with very long hair.

73. *Xyloborus punctipennis.* Slender, cylindrical, piceous, shining, thinly clothed with long erect yellow hair, granulato-asperate for more than one-half the length, sides and behind densely and coarsely punctured; smooth median line rather wide, very distinct. Elytra coarsely punctured, though not in altogether regular rows, suture elevated, and sutural stria deep for the whole length; declivity oblique, retuse, concave part coarsely punctured; there are two acute discoidal cusps, and several small indistinct marginal ones, the most anterior of which is near the suture and more prominent. Front tibiae moderately dilated, bidentate. Length 2.5 mm.; .10 inch.

Marquette, Lake Superior; one ♀ specimen. This species might be easily confounded with *Pityophthorus sparsus,* but on comparison the difference in the antennal club is quite obvious; in the present case it is thicker, and obliquely truncate at tip, so that the proximal half at least is smooth and shining, and limited by a curved line. The punctures of the prothorax and elytra are coarser and more numerous, and the apical declivity is also punctured.

74. *Xylocleptes decipiens.* Slender, cylindrical, brown, shining, sparsely clothed with erect yellow hairs; antenna and legs yellow. Prothorax longer than wide, slightly asperate in front with transverse rugosities; sides and behind coarsely but not densely punctured; median line and a smooth space each side well defined. Elytra ♀ coarsely punctured, punctures not arranged in rows; declivity nearly perpendicular, scarcely retuse, slightly impressed along the suture, which is feebly elevated. Head convex, finely punctured; front tibiae moderately dilated, serrate with four or five very small teeth. Length 1.3 mm.; .05 inch.

Detroit; one specimen. This species greatly resembles in sculpture *Pityophthorus palicarius,* but is more slender, and the
antennal club is very different; the sutures are long curves, concentric with the apical margin, and the first joint is glabrous, shining and elliptical in form.

To this genus should be referred the Alaskan Bostrichus concinnus Manuh. Bull. Mosc. 1852, 358; Tomicus conc. Lec., Tr. Am. Ent. Soc. 1868, 164; Rhynch. 367. Only ♀♀ have thus far been collected.

75. Tomicus balsameus. Blackish piceous, or brown, cylindrical, shining, clothed with long erect yellow hairs. Prothorax longer than wide, asperate for about one-half the length, then strongly but not very densely punctured at the sides and behind; median space smooth, narrow, badly defined. Elytra with striae composed of large rather distant punctures, interspaces with equally large but very distant punctures; declivity concave, sparsely not deeply punctured, margin with several small teeth and two large ones; the apical part of the margin is not a continuous ridge. Front tibiae dilated, with four distinct teeth. Length 2.3 mm.; .09 inch.

♂ Head flat, shining, hairy with very long yellow hairs; the four larger teeth of the apical declivity less prominent.

♀ Head finely punctured; carinate with an acute elevated line; four larger teeth of apical declivity very prominent.

Central New York, where it has seriously injured the forests of Abies balsamea. For an account of the ravages of this insect see the Report of the Botanist in the 28th Annual Report of the New York State Museum of Natural History, 1874, p. 32–38. I am indebted to Mr. J. A. Lintner, of the State Museum, at Albany, for a series of specimens. Some care will be necessary to distinguish this insect from Xyleborus punctipennis, but apart from the differences of the antennal club, the prothorax of T. balsameus is less densely punctured, the striae are more distinctly formed, and the apical declivity is less punctured, with the teeth (♀) more prominent, and not distinctly separated from the elevation of the margin of the declivity. The front tibiae are more distinctly toothed. The sutures of the club are straight and transverse, so that it belongs to the division Orthotomicus Ferrari, and may be placed in the table (Rhynch. 363), after latidens, to which it has no resemblance.


PROC. AMER. PHILOS. SOC. XVII. 101. 3Z. PRINTED JUNE 13, 1878.
tured in rows, interspaces with rows of very short stout bristles. Eyes extending to the under surface of the head, not widely but distinctly separated beneath. Club of antennae with broadly curved sutures. Length 1.7 mm.; .07 inch.

♂. Scape of antennae fringed with very long hair; (front not visible, the head being retracted).

Detroit; one specimen. To be placed in the table, (Rhynch. 368), before M. rudis.

77. Micracis asperulus. Slender, cylindrical, black, entirely opaque. Head not concave, scarcely punctured. Prothorax more strongly asperate in front than in the preceding, scarcely punctured behind, sprinkled with small yellowish scale-like hairs. Elytra obsolete striate, densely rugosely punctured, interspaces with rows of very short stout bristles as in M. opacicollis. Eyes very narrowly separated beneath. Antennae ferruginous, club with broadly curved sutures. Legs ferruginous. Length 1.7 mm.; .07 inch.

♂. Scape of antennae fringed with very long hair.

Detroit; in dead oak twigs. Of the same size and form as the preceding, but quite different in sculpture.

78. Scolytus unispinosus Lev. Rhynch. 372.

Marquette, Lake Superior; one specimen. This differs from the two specimens from Oregon upon which the species was established, by the punctures of the elytra being not so small, and by the spine of the first ventral segment being much less developed, becoming in fact a small tubercle; the elytra are fringed with brown. I consider none of these as specific characters.

79. Scolytus rugulosus Ratzburg, Ins i, 280; pl. x f. 10.

This is a suitable opportunity to notice the introduction of this European species into the United States. I have received specimens from Elmira, N. Y., where it attacks peach trees. According to Ratzburg it is rare in Germany, but is found upon plum and apple trees.

80. Choragus Harrisii. Elongate-oval, sub-cylindrical, blackish-brown, shining, finely pubescent. Prothorax finely less densely punctured, not opaque; elytra with deep coarsely punctured striæ, interspaces not wider than the striæ, scarcely punctulate. Length 1.2 mm.; .05 inch.

Detroit: August; one specimen. Differs from our other two species by being more distinctly (though very finely) pubescent and by neither the prothorax nor elytra being opaque.
2. List of Coleoptera found in the Lake Superior Region.

By H. G. Hubbard and E. A. Schwarz.

Abbreviations of Localities:

B. Bachewauung Bay.
E. Escanaba.
EH. Eagle Harbor.
I. Isle Royale.
LP. La Pointe.

* Species found by Dr. LeConte, mostly catalogued in Agassiz' Lake Superior, p. 203—239, which have not since occurred.

CICINDELIDÆ.

Cicindela longilabris Say. E.S.M.T.
patruela Dej. M.
purpurea Ol. E. M.
tranquebarica Hbst.
12-guttata Dej. Mi.

repanda Dej. E. M.
hirticollis Say. E. H. M.
punctulata Fabr.

CARABIDÆ.

Omophron americanum Dej. M.
tesselatum Dej. M.
Elaphrus olivaceus Lec. E.
Clairvillei Kby. E. M.
fuliginosus Say. E.
riparius Linn. M.
ruscarius Say.*

Blethisa multipunctata Linn. E.
quadricollis Hald. E. M.
Loricera cæruleascens Linn. M.
Notiophilus æneus Hbst. M.
sibiricus Mots. M.

Nebria Sahlbergi Fisch. T. Mi. Mr.
suturalis Lec.* Black Bay.
pallipes Say.* M.

Calosoma scrutator Fabr. E.
frigidum Kby. M.
calidum Fabr. T.
Carabus serratus Say.*
sylvosus Say.*
treadatus Fabr. var.*

Cychrus Lecontei Dej. Mr. B. (fragments.)
Nomaretus bilobus Say. M. Mi.
Clivina americana Dej.*

Dyschirius nigripes Lec.*
æneolus Lec. M. T.
longulus Lec.*
globulosus Say. E. M. Mr.
sphericollis Say. M.
brevispinus Lec. n. sp. M.

Casononia pensylvanica Linn. M.
Loxopeza tricolor Say. E.

Aphelogenia furcata Lec.* EH.
Lebia pulchella Dej. M.
pleuritica Lec.* EH.
viridis Say. E. M.
var. moesta Lec.* Mr.
pumila Dej. S.
ornata Say. M.
fuscata Dej.* Eagle Harbor.

Dianchomena scapularis Dej. M.

Dictya divisa Lec.* (Lebius) : EH.
Aphelogenia furcata Lec. M.
Dromius piceus Dej. M. I.
Aristus subsulcatus Dej.*
Metabletus americanus Dej.
Blechrus linearis Lec.*
Cymindis cribricollis Dej. E. S. B.
Callida smaragdina Dej. E. M.
Rhombodera pallipes Lec. B.
Calathus ingratus Dej.
gregarius Say.*
mollis Mots. G. Mr. Mi. I.
impunctatus Say. P. Mi. M.
Platynus tenebricosus Gemm. M. Mi
decens Say. E. Mi. M.
sinuatus Dej. S. M.
marginatus Lec.*
tenuicollis Lec.*
anchomenoides Randl. M.
extensicollis Say.*
decorus Say.*
molestus Lec. S. M.
melanarius Dej. M. Mr.
metallescens Lec. M.
tenuis Lec. M.
carbo Lec. E. M.
mutatus Gemm. E. M.
cupripennis Say. S. M.
aeruginosus Dej. E. I.
subcordatus Lec. E.
cupreus Dej. S.
ruficornis Lec. M.
lutulentus Leconte M. ; black var.
icornis Lec. S. M. B.
sordens Kby.
picicorinus Kby.*
lutulentus Lec. E. M.
nigriceps Lec. M.
obsoletus Say.
bembidioïdes Kirby.*
ocotocul Maunh.
Olisthopus parvatus Say.* P. M.
Pterostichus adoxus Say.*
honestus Say.*
coracinus Newm. B. Mi.
stygicus Say.*
punctatissimus Rand. I. Mi.
Pterostichus Sayi Brullé.*
corvinus Dej.*
caudicalis Say.
lucublandus Say. S. M.
convexicollis Say.* S.
luctuosus Dej. E. M.
mutus Say E. M.
Luczotii Dej.
erthropus Dej. S.
patrulís Dej.* ElH.
mandibularis Kby. var.
M. Mr. I.

Myas foveatus Lec.* ElH.

Amara arenaria Lec. M.
avida Say. S.
elongata Lec. M.
lator Kby. E. Mr. I.
septentronialis Lec. E. M.
angustata Say. M.
pallipes Kby. S.
impuncticollis Say. M. I.
fallax Lec. M.
politá Lec. E. M.
erratica St. E. M. Mr. Mr.
interstitialis Dej. M.
obesa Say. E. S. M.
gibba Lec. E. M. B.
subænea Lec. E. M. B.
musculus Say. M.

Badister micans Lec. E.

obtusus Lec. n. sp. M.

Diplochila laticollis Lec. E.

var. major Lec. E.

Chlænius sericeus Forst. E. M.
nemoralis Dej.*
pensylvanicus Say. E. Mr.
cordicollis Kirby.*
impunctifrons Say. E.
niger Rand. E. M.
tomentosus Say. E.

Brachylobus lithophilus Say, M.

Anomoglossus emarginatus Say. E
pusillus Say. E.

Lachnocrepis parallela Say. E.

Miscodera americana Mann. G.

Nomius pygmæus Dej. M.
Psydrus piceus Lec.* EH.
Geopinus incrassatus Dej. E.M.Mr.
Agonoderus comma Fabr.
pallipes Fabr. Mr.
partiarius Say. M.
Anisodactylus agricola Say. E. M.
Harrissi Lec. M.
discoideus Dej. M.
baltimoresensis Say. E. Mr.
sericans Harr. E.
Spongopus verticalis Lec. E.
Anisotarsus terminatus Say. Mr.
Bradyceillus badilipennis Hald* EH.
nigrinus Dej. M. Mi.
cognatus Gyll.Mi.S.
cordicollis Lec. M. I.
rupestris Say. M.
Selenophorus opalinus Lec. E. M.
Harpalus compar Lec. Mr.
megacephalus Lec. M. I.
fulvilabris Mannh. M. Mr. I.
pleuriticus Kby. E. S. M.
herbivagus Say. E. M.
opacipennis Hald. M.
inoccuus Lec. M.
rufimanus Lec. E. M. I.
Lewisi Lec. E. M.
lacticeps Lec. E. M. I.
basilaris Kby. M.
Stenolophus carbonarius Dej.*
fuliginosus Dej. M.
ochroleucus Say.*
conjunctus Say. E. M.
carus Lec. E. S. Mr.
Patrobus longicornis Say. E. I.
tenuis Lec. Mr. M. E.
Trechus micans Lee.
Amerizus oblongulus Mannh. M.
Bembidium impressum Fabr. M. Mr.
paludosum Sturm. M. Mr.
coxendix Say.*
antiquum Dej. Mr.
chalceum Dej. M. Mr.
salebratum Lec.* L. P.
nitidum Kirby.*
concolor Kby. Mr. I.
Bembidium longulum Lec. Mr.
nigrum Dej.*
planatum Lec. I.
tetracyptum Mannh. M.
simplex Lec. M. Mr.
fugax Lec.* North shore.
transversale Dej. M. Mr. I.
lucidum Lec. S. M. Mr.
rupestre Dej.*
scopulinum Kby.
picipes Kby.*
nitens Lec. Mr.
arquitum Lec. n.sp. M.
versutum Lec. n.sp. M.
patruel Dej. M. Mr. I.
versicolor Lec.
sulcatum Lec. S.
aflne Say. Mr.
anguliferum Lec. M.
cautum Lec. var. M.
mutatum Gemm. M.
axillare Lec.* S.
Tachys nanus Gyllh. B.
incurvus Say. E. M.

HALIPLIDÆ.

Halilus borealis Lec. E.
cribriarius Lec. Mr. M.
ruficollis Degeer.*
longulus Lec.*
Cnemidotus edentulus Lec. E.

DYTISCIDÆ.

Hydrovatus cuspidatus Germ.*
Hydroporus inequalis Fab. M. B.
picatus Kby.*
impressopunctatus
Sch. E. B.
dissimilis Harris.*
suturalis Lec.*
lacustris Say. B.
affinis Say. B.
fuscatus Crotch.*
sjitulus Lec. Mr.
Hydroporus consimilis Lec.*
sericus Lec.*
griseostriatus Degeer.*
rotundatus Lec. B.
apinus Payk.* North Shore.
supubescens Lec. M. B. Mr.
puberulus Mannh. B.
tenebrosus Lec. M. B.
tartaricus Lec.*
caliginosus Lec. M.
vrulis Lec. M.
tristis Payk.
notabilis Lec.* North Shore.
collaris Lec. B.
persimilis Cr. P. Mr.
oblitus Aubé. P. Mr.
conoideus Lec. M. E.
Laccophilus maculosus Germ. B.
proximus Say.*
atristernalis? Cr. M.
Graphoderes cinereus Linn. M.
liberus Say.*
Hydaticus piceus Lec. E.
stagnalis Fab. E. M.
Scutopterus angustus Lec. M.
Colymbetes sculptilis Harr. E. B.
Dytiscus Harrisii Kby.*
confluens Say. M.
Cordieri Aubé.* Nth Sh.
fasciventris Say. M.
verticalis Say.* Nth Sh.
Rhantus binotatus Harr. E. B.
flavogriseus Cr. M.
bistriatus Bergstr.*
sinuatus Lec. M.
Ilybius confusus Aubé. M.
picipes Kby. E. M.
bignutulus Germ. M.
fraterculus Lec. M.
ignarns Lec. E. M.
Coptotomus interrogatus Fabr. E.
Copolatus Cherrolatii Aubé.* EII.
Hybiosoma bifaria Kirby.* EII.
Gaulodytes erythropterus Aubé.*
Gaulodytes ovoides Cr. E. Mr.
semipunctatus Kirby.*

Gaulodytes lutosus Cr. M.
leptasis Lec. n.sp. M.
parallelus Lec. M.
in fuscat us Aubé.* N. Sh.
scapularis Mannh. M. B.
longulus Lec. n.sp. M.
obtusatus Say.*
punctulatus Aubé.*
fimbriatus Lec. M.
gagates Aubé.*

GYRINIDÆ.

Dineutes assimilis Aub. M.
Gyrinus confinis Lec. M. B.
fraterculus Comp. S. B.
limbatus Say. M. B.
ænusolus Lec. S. B.
dichrous Lec. M. B.
ventralis Kby. B.
aquiris Lec. E. B.
maculiventris Lec. S. B.
affinis Aub. S. B.
picipes Aub. M. B.
lugens Zimm. M.
alis Say. S.
pectoralis Lec. S.

HYDROPHILIDÆ.

Helophorus oblongus Lec.* EII.
locustris Lec. M.
nitidulus Lec.* EII.
lineatus Say. M.
inquinatus Mannh. S. M.
tuberculatus Gyll. S. M.
one unnamed species.

Hydrochus scabrat us Muls.*
squamifer Lec. M.
rufipes Mels.*
Ochthebius cribricollis Lec.* EII.
nitidus Lec.* EII.

Hydraena pensylvanica Ksw. S.M.
Hydrophilus triangularis Say. E.
Tropisternus nimbat us Say. B.
glaber Hbst. E.
Tropisternus mixtus Lea. E.
Hydrocharis obtusatus Say. E.
Laccobius agilis Rand. M.
Chætarthria pallida Lea. E.H.
Philhydæus bifidus Lea. M.
ochræcus Melsh. B. M.
consors Lea. E.
cinctus Lea. E.
perplexus Lea. M. B.
fimbriatus Melsh. E.S.B.
Hydrobius fuscipes Linn. E. M. B.
tesselatus Ziegl. M.
digestus Lea. M. I.
subonpreus Say.
Cercyon flavipes Er. M.
centromaculatum St. M.
ocellatum Say. B.
anæ Er. M.
one unnamed species. M.
Cryptopleurum vagans Lea. M. S.

TRICHOPTERYGIDÆ.
Ptenidium sp. M. G. B. Mi.
Ptilium canadense Lea. M. B. Mr.
Trichopteryx several unnamed sp.
Pteryx brunnea Lea. S. M.
testacea Lea. M.
Ptinella quercus Lea. B.

STAPHYLINIDÆ.

(Aleocarini not determined.)
Gymnusa brevicolliis Grav. M.
variegata Kiesenw. M.
one new species. M.
Dinopsis americana Kr. M.
Tachinus memnonius Grav. B. Mr.
tachyphoroides Horn. M.B.
repanus Horn. M.
addendus Horn. M. B.
luridus Er. S. B.
picipes Er. M. B.
furnipennis Say. M. I.
figidus Er. B. G. Mi.
circumcinctus Mkl. M. Mi.
Tachinus nitiduloides Horn.*
Leucoparyphus silphoides Linn.*
Tachypturus jocosus Say.
chrysomelinus Linn.
nanus Er. M.
brunneus Fab.
Erchomus ventriculus Say. M. B.
Conosoma littoreum Linn. M.
Knoxi Lea. B.
crassum Grav. M.
basale Er. M.
Bolitobius diminutus Er. M.
intrusus Horn. M.
cingulatus Mannh. I.
cincticoliss Say. S. B. I.
anticus Horn. B. Mi.
pygmaeus Fab. S. Mi.
trinitatus Er.*
obsoletus Say. M. B. Mi.
cinctus Grav. Mi.
longiceps Lea. Mi.

Bryoporus rufescens Lea. M.
Mycetoporus lepidus Grav.S.G.Mr.
tenuis Horn. B. Mr.
consors Lea. M.B.Ml.
amERICANUS Er.
pictus Horn. M.

Habrocerus magnus Lea. n.sp. M.I.
Acylophorus pronus Er. E. M.
Euryporus puncticollis Er. M.
Heterothops n.sp. M. B.

Quedius lævigatus Gyllh. M. G. I.
capucinus Grav. M.
sublimbatus Mots. Mr.
aeacens Mkl. Mr.
molochnus Grav.B.G.Mr.M.
4 undetermined species.

Staphylinus vulpinus Nordm. E.
Lecontei Fauv. M.

Philonthus cyanipennis Fab. B.
blandus Grav. M.
debilis Grav.
lomatus Er. E. S. M.
aterrimus Grav.
sobrinus Er. M.
pæderoides Lea. M.
several unnamed species.
Lathrobium grande Lec.* punctulatum Lec. E. M. I. similis Lec. B. nigrum Lec. concolor Lec.* N. Sh. longiusculum Grav.* collare Er. E.
Scopaeus sp. E.
Platystethus americanus Er. M. Oxytelus sculptus Grav. M. fuscipennis Mannh. M. Mr. nanus Er. M. Apocellus sphæricollis Say. E. M. Trogophilus quadrupunctatus Say. M. Mr. several unnamed species.

PSELAPHIDÆ.


SILPHIDÆ.

Silpha americana Linne. G.
Catops opacus Say.*
    brunnipeennis Mannh. S. I.
    terminans Lec. B. M. I.
Colon dentatum Lee. Mr.
magnicolle Mkl. ? M. Mr.
    three unnamed species.
Hydnobius substratiatus Lec. Mr.
Anisotoma assimilis Lec. M. Mr. I.
punctostriata Kby. M. Mi.
collaris Lec. Mr.
    strigata Lec. M.
Cyrtusa picipennis Lec. M.
Liodes globosa Lec. M. I.
polita Lec. M.
discolor Melsh. M.
basalis Lec. M.
Agathidium globatile Lec. n.sp. M.
exiguum Melsh. M.B.
revolvens Lec. I.
politum Lec. B. Mr.
differre Lec. M.
    parvulum Lec. n.sp. M.
Clambus gibbulus Lec. M. I.

BRATHINIDÆ.
Brathinus nitidus Lec. M.
    varicornis Lec. M.B.Mr.

SCYDMÆNIDÆ.
Scydmænus subpunctatus Lec.Mr.
    n. sp. near subpunctatus, Mr.
    sp. near analis. S.
analis Lec. ? M.
clavipes Say. S.
fulvus Lec. M.

Euthia scitula Mkl. M.

CORYLOPHIDÆ.
Orthoperus scutellaris Lec. n. sp.
    S. Mr.
Sacium lugubre Lec. M.
    obscurum Lec. M.

Sacific fasciatum Say. Mr.

SCAPHIDIIDÆ.
Scaphidium 4-guttatum Say. M.
Scaphium castanipes Kby. B. G.
    Mr. I.
Scaphisoma convexum Say. M. B.
sutural Lec. M.
    terminatum Lec. M.

LATHRIDIIDÆ.
Lathridius liratus Lec. I.
    minutus Linne. I.
cordicollis Mannh. ? M.
Corticaria grossa Lec. M.
serricollis Lec. Mr. I.
deutigera Lec. M. Mi.
deleta Mannh.
rugulosa Lec. M.
americana Mannh. S. M. G.
cavicollis Mannh. S. M. Mr.
pumila Melsh. M.
    three unnamed species.

ENDOMYCHIDÆ.
Lycopeirdina ferruginea Lec. B. I.
Mysetina perpulchra Newm. M.
vittata Fabr. M.
Endomychus biguttatus Say. S.

MYCETOPOHAGIDÆ.
Mycetophasus flexuosus Say. E.
obsoletus Lec. var.? M.
tenuifasciatus Horn, n.sp. M.
pluripunctatus Lec. M.
Diplocoelus angusticollis Horn,
    n. sp. M.
Litargus tetraspilotus Lec. M.
    6-punctatus Say. M.

SPHINDIDÆ.
Sphindus americanus Lec. M.
CIOIDÆ.
Cis creberrimus Mell. M. I.
Cis brevisetosus Cr. 4 M.
fuscipes Mell. M.
three unnamed species.
Enneaithron sp. M.

EROTYLIDÆ.
Triplax macra Lee. M.
thoracica Say M.

CRYPTOPHAGIDÆ.
Cryptophagus, 7 unnamed species.
Paramecosoma serratum Gyllh. n. sp. E.
Atomaria ephippiata Zimm. P.
13 unnamed species.

CUCUJIDÆ.
Pediacus fuscus E.
depressus Hbst. S. M.
Lathropus vernalis Lee. M.
Læmophiloës bigottatus Say M.
adustus Lee. M.
Dendrophagus glaber Lee. M.
Brontes dubius Fabr. M.

COYDIIDÆ.
Ditoma quadriguttata Say M.
Syncita nigripennis Lee. M.
Lasconotus borealis Horn M.
Philothermus glabriculius Lee. M.
Cerylon castaneum Say E. M. B.

RHIZOPHAGIDÆ.
Rhizophagus dimidiatus Mannh. B.
brunneus Horn, n. sp. M.

TROGOSITIDÆ.
Tenebroides collaris St. M.

Tenebroides castanea Melsh. M.
Peltis ferruginea Linu. M.
Grynnocharis 4-lineata Melsh. M.
Calitys scabra Thumb. E. M.
Thymalus fulgidus Er. M. B. Mr.

NITIDULIDÆ.
Byturus n. sp. ? M.
Colastus truncatus Rand M.
Carpophilus brachypterius Say E.G.
discoidens Lee.
Epuræa helvolæ Er. M.
rufa Say. M.
Erichsonii Reitter.*
immunda Sturm. M.
truncatella Mann. M.
planulata Er. M.
æstiva Linn. M.
labilis Ev.
Nitidula ziczac Say. M.
Soronia grisea Linn. M.
Omosita discoidea Fab. I.
Stelidota sp. M.
Meligethes seminulum Lee.
Cylloides biplagiatus Lee. M.
Thalyra concolor Lee.* Ny'h Sh.
Ips 4-guttatus Fabr. M.
sanguinolentus Oliv. M.
confluens Say.*

PHALACRIDÆ.
Phalacrus politus Melsh. M. I.
n. sp. ? M. B.
Olibrus striatulus Lee. B.
consimilis Melsh. M. Mr.
nitidus Melsh. S.

COCCINELLIDÆ.
Hippodamia 5-signata Kby. E.
glacialis Fabr.*
15-maculata Muls. B.
13-punctata Linn. M. Mr.
parenthesis Say. M. Mr.
Anisosticta strigata Thunb. M.
Coccinella affinis Rand. E. M.
  trifasciata Linn. M. I.
  9-notata Hbst. M.
  transversalis Muls. B. I.
  5-notata Kirby.*
Cycloneda sanguinea Linn. Mr. I.
Harmonia picta Rand E. M. I.
Anisocalvia 14-guttata Linn. M.
  12-maculata Gebl. M.
Anatis 15-punctata Ol.
Mysia pullata Say. E. M.
Chilocorus bivulnerus Muls. M.
Exochomus marginipennis Lec. M.
Pentillia marginata Lec. n. sp. M.
Brachiacantha ursina Fabr. small var.*
Hyperaspis dissoluta Crotch.*
  signata Oliv. M.
  fimbriolata Mels.* N'th Sh.
  disconotata Lec.* N'th Sh.
  bigeminata Randl. M.
  undulata Say. E. M.
  macrens Lec.* North Shore.
Scymnus ornatus Lec. M.
  americanus Muls. S. M.
  fratermus Lec. M.
  consobrinus Lec. M.
  lacustris Lec. E. M. I.
  abbreviatus Lec. M.
  nanus Lec. M.
  punctum Lec. E. M.
  n. sp. M.
BYRRHIDÆ.
Simplocaria metallica Sturm. N S.
Pedilophorus subcanus Lec. n.sp.
  E. M.
Cytilus trivittatus Melsh.
Byrrhus americanus Lec. E. M.
  cyclophorus Kby. E. M.
  geminatus Lec. I.
  Pettitii Horn E. M.
  eximius Lec. N'th Sh.
  murinus Fabr. M.
Syncalypta echinata Lec. M.
  PSEPHENIDÆ.
  Psephenus Lecontei Lec. E.
  PARNICIÆ.
  Helichus striatus Lec. M.
  ELMIDÆ.
  Elmis 4-notatus Say. M.
    fastiditus Lec* North Shore.
  HETEROCERIDÆ.
  Heterocerus substriatus Kw. M.
    sp. M.
  HISTERIDÆ.
  Hister merdarius Hoffm. E. M.
    interruptus Beauv. E.
    immunis Er. E.
    abbreviatus Fab. M.
    curtatus Lec. S.
    depurator Say.*
    americanus Payk. E.
    subrotundus Say.*
    Lecontei Mars. M.
    parallelus Say. M.
    basalis Lec. M. I.
    cylindricus Payk. M.
Paromalus teres Lec. n.sp. S.
    bistriatus Er.*
    Saprinus oregonensis Lec.*
      pensylvanicus Payk.*
      assimilis Payk.*
      sphaeroides Lec.
      fratermus Say. M. G. Mr.
      mancus Say. E. M. B.
Plegaderus Sayi Mars. S. M. I.
  LUCANIDÆ.
  Platycerus depressus Lec. M.
    quercus Weber.
  Ceruchus piceus Web. M.
SCARABÆIDÆ.

Aphodius pinguis Hald. M. 
hyperboreus Lec. E. 
ru Nicol Melsh. M. 
granarius Linn. M. 
vittatus Say. M. 
consentaneus Lec. * N’th Sh. 
Dialytes striatulus Say. M. 
Atænius stercorator Fab. M. 
Ægalia lacustris Lec. M. Mr. 
conferta Horn. Duluth. 
rufa Lec. n. sp. M. 
spissipes Lec. n.sp. M. 
Odontæus cornigerus Melsh Mr. 
Geotrupes Egeriei Germ. Mr. 
Trox unistriatus Beauv. M. 
Hoplia tristis Lec. * 
Dichelonycha elongata Fab. E. M. 
subvittata Lec. M. 
testacea Kirby. * 
Backii Kirby. * North Shore. 
aboricollis Bum. M. 
Serica vespertina Schh. M. Mr. 
tristis Lec. B. M. 
sericæa Ill. G. M. 
Diplotaxis sordida Say. M. 
liberta Germ. E. M. 
Lachnosterna fusca Froelh.* 
futilis Lec. 
Cotalpa lanigera Linn. * M. 
Ligyrus relictus Say. E. 
Trichius affinis Gory. E. M. S. I. 

BUPRESTIDÆ.

Chalcophora virginiensis Dr. M. 
Dicerca prolongata Lec. E. M. 
divariata Say. M. 
tenebrosa Kby. M. Mr. I. 
manca Lee. M. 
lugubris Lec. M. 
Buprestis lineata Fabr. E. M. 
consularis Gory. E. M. 
Nuttalli Kirby. * 
maculiventris Say. 

Buprestis fasciata Fabr. E. M. I. 
var. Langii Mannh. I. 
sulcicollis Lec. M. 
striata Fabr. M. 
Melanophila longipes Say. S. M. 
fulgoguttata Harr. E. M. I. 
æneola Melsh. M. 
Chrysosbothris femorata Lec. M. 
fioricola Gory. E. M. 
dentipes Germ. 
trinervia Kby. M. B. I. 
scabripennis Lapi. M. B. 
Harrisii Hentz. M. 
Agrius torquatus Lec. M. 
bilineatus Web. M. 
vittaticollis Rand. E. 
torpidus Lec. M. 
plumbeus Lec. * 
politus Say. M. 
egenus Gory. M. 
lacustris Lec. * 

THROSCIDÆ.

Throscus alienus Bonv. S. B. 
punctatus Bonv. M. 
Chevroleti Bonv. M. 

ELATERIDÆ.

Tharops obliqua Say. M. 
Deltometopus amnicornis Say. M 
Fornax calceatus Say. * E. II. 
Microhagus triangularis Say. M. 
Hypocelus terminalis Lec. M. 
Adelocera aurata Say. M. 
brevicornis Lec. E. M. 
Alaus ocularis Linn. M. 
myops Fab. M. 
Cardiophorus amictus Melsh. E. 
convexus Lec. E. M. 
Cryptohypnus abbreviatus Say. M. 
bicolor Esch. M. S. I. 
tumescens Lec. S. I. 
striatulus Lec. * 
pectoralis Say. M. Mr. 
Cryptohypnus futilis Lec. Mr.
Hubbard and Schwarz.

Elater semicinctus Rand. M.
linteus Say.*

Vitiosus Lec. M.
apicatus Say. M.
luctuosus Lec.*
socer Lec. E. M.
molestus Lec.*
fuscatus Melsh. M.

Pedalis Cand. E. M.
nigrinus Payk. var. ? E. M. I.
lacustris Lec. M.
fusculus Lec.*
deletus Lec.*
pullus Cand. E. M.
mixtus Hbst. M. Mi. I.
rubricus Say. E. M.

protervus Lee.

Drasterius dorsalis Say. M.

Megapenthes stigmus Lec. E. M.

Monocrepidius auritus Herbst.*

Agriotes manos Say.*
pubescens Melsh. M.

Fucosus Lec. M.

stabilis Lec. M.

limosus Lec. E.M. Mr. I.
oblongicolis Melsh. E. H.

Dolopius lateralis Esch.

Betaron bigeminatus Rand. M. I.

Melanotus Leonardi Lec. M. I.

Scrobicollis Lec. E. M. I.
castanipes Payk. M.

Communis Gyllh. E.

Limonius aurifer Lec. M.

Confusus Lec.* E. H.

Aeger Lec. M. I.

Pectoralis Lec. M.

Campylus productus Rand. M.

denticornis Kby. M. I.

Athous acanthus Say. E.

Scapularis Say. M.

Reflexus Lec. M. Mr.

Paranomus costalis Payk. I.G. 

* estriatus Lec. M.

Nothodes dubitans Lec. M.

Sericosomus fusiformis Lec. E. M

Sericosomus incongruus Lec. M. I.

Corymbites virens Schh. M.

Resplendens Esch. M. Mi. I.
cylindiformis Herbst.*

carcinicus Esch. M.

Spinosus Lec. E. M. I.
mendax Lec. EII. I.

Insidiosus Lec. M. I.

Falsicus Lec. M. I.
apressus Lec.* EII.

Fallax Say. North Shore.

Medianus Germ. E. M. I.

Triundulatus Rand. M. I.

Hamatus Say.

Propoia Lec. M. Mr. I.
nigricolis Bland. M. I.

Hieroglyphicus Say. E. M.

Aeripennis Kby. M. I.

Splendens Ziegli. M.

Aratus Lec. E. M. I.

Metallicus Payk. M. I.

DASCYLLIDÆ.

Macropogon piceus Lec. I.

Eurypogon niger Melsh. Mr. I.

Cyphon fusciceps Kby. M. Mr.

Piceus Lec. E. M.

Nebulosus Lec. S. M.

Modestus Lec. S.

Pusillus Lec. B. Mr.

Prionocyphon discoideus Say M.

Scirtes tibialis Guér. E.

Encinetus oviformis Lec. M.

terminalis Lec. E. M. I.

LAMPYRIDÆ.

Dictyoptera perfaceta Say. M.

Calopterum typicum Newm. M.

Reticulatum Fabr. E. M.

Caenia dimidiata Fabr.

Basalis Newm. E. M.

Eros coccinatus Say. M.

Crenatus Germ. M.

Thoracicus Randall M.
Eros humeralis Fabr. M.
trilineatus Melsh. M.
modestus Say. M. I.
Lucidota atra Fabr. E.
Photinus corruscus Linn. I. Mr.
var. lacustris Lec. B.
decipiens Harr. M.
borealis Rand. M.
lucifer Melsh. M.
ardens Lec. M.
Phausis inaccensa Lec. n. sp. M.
Photuris pensylvanica DeG. E.

**TELEPHORIDÆ.**

Podabrus modestus Say. E. M. I.
diadema Fabr. E. M.
rugosulus Lec. *
philiphus Eschsch. M.
punctatus Lec. M.
puncticollis Kby. *
lavicolitis Kby. M. Mr. I.
puberulus Lec. *
three undescribed species.

Telephorus carolinus Fabr. M.
rectus Melsh. M.
lineola Fabr.
flavipes Lec.
var. dichrous Lec.
fraxini Say. M.
n. sp.?
rotundicolitis Fabr. M.
Curtisii Kby. M. Mr. I.
tuberculatus Lec. M.

Silis percomis Say. M.
difficilis Lec. M.

Malthodes concavus Lec. M. I.
transversus Lec. I.
fragilis Lec. I.
niger Lec. M. I.

**MALACHIIDÆ.**

Collops vittatus Say. E.
tricolor Say. *

Anthocomus Erichsoni Lec. M.
Attalus nigrellus Lec. M.

**CLERIDÆ.**

Clerus nigripes Say. M.
nigrifrons Say. M.
dubius Fab. M. E.
undatus Say. E. M. I.

Hydnocera difficillis Lec. M.
pallipennis Say. E.
verticalis Say. M.

Corynetes violaceus Linn. M.

**LYMEXYLIDÆ.**

Hylecætus lugubris Say. M.

**PTINIDÆ.**

Ernobius mollis Linn. M.
granulatus Lec. M.

Xestobium squalidum Lec. M.

Oligomerus sericans Melsh. E.

Hadroblemus errans Melsh. M.
carinatus Say. E.

foveatus Kby. M.

Anobium notatum Say. E. M.

Petalium bistratum Say. M.

Theca profunda Lec. M.

Xyletinus fucatus Lec. M.

Dorcatoma pallicorne Lee. M.

Caenocara oculata Say. M.

Ptilinus ruficonis Say. M.

Hendecatomus rugosus Rand. M.

Bostrichus armiger Lee. M.

Amphicerus bicandatus Say. M.

Dinoderus substriatus Payk. E. M.

B. I.
cribratus Lec. M.
densus Lec. M.

**SPONDYLIDÆ.**

Parandra brunnea Fab. E.
Spondylis upiformis Mann. *
E. H.

**CERAMBYCIDÆ.**

Tragosoma Harrisii Lec. E. M.
Asemum moestum Hald. M.
Criocephalus agrestis Kby.
Tetropium cit. namo.pterum Kby.Mi.
Phymatodes dimidiatu Kby. M.
maculicollis Lec. n. sp. I.
Merium Proteus Kby. M.
Gonocalus collaris Kby. M.
Elaphidium villosum Fab. M.
parallelum Newm. M.
Glycobius speciosus Say.*
Calloides nobilis Harris. E. M.
Archopalus fulmanans Fab. E.
Xylotrechus colorus Fab. M.
undulatus Say. M. B. I.
annosus Say. M.
Neoclytus uriticatus Kby. M.
Clytanther ruricola Ol.
Crytophorus gibbulus Lee. I.
Atimia confusa Say. M.
Encyclops caeruleus Say. M.
Rhagium lineatum Oliv.
Centroder a decolorata Harris.
Pachyt a monticola Rand M. I.
liturata Kirby.*
Anthophilax viridis Lee M.
malachiticus Hald. M.
atennis Hald. M.
Acmeops discoidea Hald. M.
Proteus Kby. M. I.
pratersis Laich. M.
Gaurotes cyanipennis Say. M.
Bellamira scalaris Say. E. M.
Typocerus sparsus Lec. n. sp. E.
Leptura plebeja Rand. E. M.
subhamata Rand. E.
capitata Newm. M.
snargens Kby. M. I.
similis Kby. M.
cordifera Ol.*
sexmaculata Linn. M.
nigrella Say. M.
n. sp. ? M. (nigrella ‒ ?)
canadensis Fab. E. M.
rubrica Say. M.
vagans Ol. E. M.
sanguinea Lec. M.
Leptura chrysocoma Kby. S. M. I.
proxima Say. M.
rufula Hald. I.
tibialis Lec. M.
pedalis Lec. M.
vittata Germ. E. M.
pubera Say. M.
phæricollis Say. M.
vibex Newm. M.
mutabilis Newm. M. I.
aspera Lec. S. M.
Monohammus maculosus Hald. M.
scutellatus Say.
confusor Kby.
marmoratus Rand. M.
Acanthoderes decipiens Hald. M.
Leptostylus commixtus Hald. M.
macula Say.*
Sternidius alpha Say. E.
Liopus quercus Fitch. M.
Lepturges symmetrical Hald. M.
Hyperplatys maculatus Hald. M.
Graphisurus fasciatus DeG. M.
pusillus Kby.*
Acanthocinus obsoletus Oliv. M.
Pogonocherus pennicollatus Lec. M.
mixtus Hald. M. Mr. I.
parvulus Lec. M.
Saperda calcarata Say. M.
moesta Lec. E.
concolor Lec. M.

CHRYSONOMELIDÆ.

Donacia piscatrix Lac. M.
porosicollis Lac. M.
hirticollis Kby. E.
proxima Kby.*
magnifica Lec. M.
distincta Lec. E.
subtilis Kunze. E. M.
confusa Lec.*
emarginata Kby. M.
flavipes Kby.*
cuprea Kby. M.
jucunda Lec. M.
Macroplea Melsheimeri Lac. E.
Orsodachna Children. Kby. I.
Zengophora varians Cr. I.
abnormis Lec.
Syneta ferruginea Germ. M. I.
Lema trilineata Oliv. M.
Cryptocephalus sellatus Suffr. E. M. I.
venustus Fabr. E.
4-maculatus Say. E.
catarius Suffr. S. P. Mr.
aurator Lec. S. P.
Pachybrachys carbonarius Hald.?
M.
Modigrum Melsh? S.
sp. S. M. I.
abdominalis Say. *
hepaticus Melsh. M.
Adoxus vitis Linn.
Xanthonia 10-notata Say. *
Heteraspis pubescens Melsh. M.
Paria 6-notata Say. M.
Fidia longipes Melsh. *
Chrysomela 10-lineata Say. E. M.
multiguttis Stal.
philadelphica Linn.
* elegans Ol. M.
Bigsbyana Kby. S. P. G. B.
Prasocuris varipes Cr. S.
Goniocoma pallida Linn. M. B. I.
Phyllodecta vulgatissima Linn. I.
Plagiodera lapponica Linn. M. G.
tremulae Fab. E. M.
scripta Fabr. M.
Phyllodracta decorata Say. E. M.
Diabrotica 12-punctata Ol. M. B. Mr.
Galerucella rufosanginea Say. M.
Gallerucella sagittariae Gyllh. M.
decora Say.
Trirhabda canadensis Kby. E.
flavolimbata Mannh. Mr.
Hypholampsis pilosa Ill. M.
Odior.ychis viara Ill. M.
Disonycha pallipes Cr. M.
alternata Ill. M.

Disonycha punctigera Lec. M. B.
Graptodera bimarginata Say. M.
ignita Ill.*
exapa Say. M. Mr.
Longitarsus sp. M. Mr.
Phyllotreta vittata Fabr. M.
Systena frontalis Fabr. B.
Crepidodera Helixines Linn. S.
Modeeri Linn. M.
Chaetocnema confinis Cr. M.
rudis Lec. n. sp. M.
Psylliodes punctulata Melsh M.
Odontota rubra Web. M.
rosea Web. M.
Cassida nigripes Oliv. M.
Coptocycia guttulata Oliv. M.
purpurata Bohl. M.

TENEBRIONIDÆ.
Phelopsis obcordata Lec. S. M.
Iphthimus opacus Lec. M.
Upis ceramboideos Linn.
Haplaeus concolor Lec. E. M.
Bius estriatus Lec. M.
Blapstinus interruptus Say. E.S.M.
Tribolium madens Charp. M.
Paratenetus punctatus Sol. M.
fuscus Lec. M. S.
Platydema americanum Lap. M.
Scaphidemia acneolum Lec. M. Mr.
Hypophorus parallelus Melsh.
Bolioterus bifurcus Fabr. M.
Bolitophagus corticola Say. E. M.
depressus Rand. M.

CISTELIDÆ.
Hymenorus pilosus Melsh E.
punctulatus Lec.
niger Melsh. E. M. I.
Isomira 4-striata Coup.
Mycetocharas Halodmani Lec. M.
bicolor Coup. M.
binitata Say. M.
gracilis Lec. n. sp. M.

I cannot adopt the changes proposed by Mr. Crotch in the names of this and the next genus.—Lec.
PYROCHROIDÆ.

Ischalia costata Lec. M. B.
Schizotus cervicalis Newm. M.
Dendroides canadensis Latr. E. M.
concolor Newm. M.

ANTHICIDÆ.

Nematoplus collaris Lec. M.
Corphya lugubris Say.*
Notoxus anchora Hentz. E. M.
Anthicus formicarius L. E. M.
floralis Payk. M.
scabriceps Lec.
cervinus L. M.
spretus Lec. M.
coracinus Lec. M.
pallens Lec. E. M.
granularis Lec. M. Mr.

Xylophilus piceus Lec. E. M.
n. sp. M.

MELANDRYIDÆ.

Canifa pallipes Melsh.
pallipennis Lec. n. sp. M.
Tetratoma tesselata Melsh M. M.
Stenotrichelus arctatus Say.* E.H.
Penthe obliquata Fab. M. S.
Synchroa punctata Newm. M.
Phryganophillus collaris Lec. M.
Emmessa connectens Newm. M. I.
Melandrya striata Say. M.
Prothepia undata Lec. M.
Xylita levigata Hellen. M.
decolorata Rand. M.
Scotochroa atra Lec. M.
basalis Lec. E. M. I.
Carebara longula Lec. E.
Spilotus 4-pustulosus Melsh. E. M.
Zilora hispida Lec. M.
Seropalpus striatus Hellen.
Enchodes sericea Hald. M.
Dirceæ liturata Lec. E. M.
fusca Lec. n. sp.

Symphora flavicollis Hald. E. M.
Halomenus obscurus Lec. n. sp. M.
punctulatus Lec. M.
debris Lec. E. M.
Eustrophus confinis Lec. E. M.
bicolor Say. M.
tomentosus Say. M.
Orchésia gracilis Melsh. M.

MORDELLIDÆ.

Anaspis nigra Hald. M. T.
flavipennis Hald. M. Mi.
rufa Say.
Mordella borealis Lec. S. M.
scutellaris Fabr. S. M. Mr.
lineata Melsh. E. M.
serval Say. M.
Glipodes helva Lec. M.
Mordellistena scapularis Say. E.M.
tosta Lec. M.
pectoralis Lec.* North Shore.
nectican Melsh. E. M.
morula Lec.*
guttulata Hellen. M.
pytypera Lec. M.
Pelecotoma flavipes Melsh. M.
Myodites stylopides Newm. P.

MELOIDÆ.

Macrobasis unicolor Kirby.* N. S.
Epicaudina convolvuli Melsh. M.
fissilabris Lec.* North Shore.

CEPHALOLOIDÆ.

Cephaloon lepturides Newm. M.
ungulare Lec. M.

ŒDEMERIDÆ.

Calopus angustus Lec. Mi.
Ditylus coruleus Rand. M.
Asclera rufisellis Say. M.
puncticolis Say. M.
MYCATERIDÆ.

Mycterus scaber Hald. M.

PYTHIDÆ.

Pytho americanus Kby. M.
Cryomodes discicollis Lec. M. I.
Priognathus monilicornis Randall.*
Boros unicolor Say. M. I.
Salpingus virescens Lec. sp. M.
Rhinosimus nitens Lec. M. I.

RHINOMACERIDÆ.

Rhinomacer pilosus Lec. M.
elongatus Lec. M.

RHYNCHITIDÆ.

Rhynchites cyanellus Lec. M.

ATTELABIDÆ.

Attelabus bipustulatus Fabr. M.
rhois Boh. M.

OTIORRHYNCHIDÆ.

Hormorus undulatus Uhler P.
Geoderces melanothrix Kby. B.
Mi.

CURCULIONIDÆ.

Sitones flavescens All. M.
Trichalophus alternatus Say. Mr. I.
Ithycerus noveboracensis Forst. E.
Lepyris geminatus Say. E.
Listronotus latiusculus Boh. M.
Macrops sp. M.
Hypomolyx pinicola Coup. M. Mi.
Hylolitus confusus Kby.
Pissodes strobi Peck.
affinis Rand.
Pissodes dubius Rand. M. I.
Procas picipes Steph. M. Mr.
Eryctus puncticollis Lec. P. B.
Dorytomus laticollis Lec. M. Mr.
brevicollis Lec. M. I.
sp. M.
luridus Mannh. M.
Tanysphyrus Lemnæ Gyllh. M.
Bagous mammillatus Say. M.
Magdalis hispoides Lec. M. I.
perforata Horn E. M.
pallida Say. M.
gentilis Lec. M. I.
olyra Herbst.*
Acalyptus Carpini Herbst. M.
Elleschus bipunctatus Gyllh. M.
Anthonomus scutellatus Gyl. E.M.
signatus Say. M.
rufipennis Lec. M.
corvulus Lec. M. I.
Crataegi Walsh. M. I.
two undescribed species.

? Anthonomus n. sp. M.
Orchestes canus Horn. n. sp. M. I.
pallicornis Say. E. M. I.
subhirtus Horn. n. sp. M.
Piazorhinus scutellaris Gyll. M.
Proctorus armatus Lec. M.
decipens Lec. M.
Tyloderma aereum Say. E.
Cnemogonus Epilobii Payk. M. I.
Cœliodes cruralis Lec. M.
nebulosus Lec. M.
Ceuthorhynchus decipiens Lec. M.
Pelenomus sulcicollis Fabr. M.
Balaninus uniformis Lec. M.

BRENTHIDÆ.

Eupsalis minuta Dr. M.

CALANDRIDÆ.

Sphenophorus ochreus Lec. E.
pertinax Ol. E.
costipennis Horn. E.
Sphenophorus sculptilis Uhler. E.
Dryopterus corticalis Say. M. P.
Nov. genus? near Himatium. S.
Cossonus subareatus Boh. E. M.
Phleophagus apionides Horn. M.
Rhyncolus brunneus Mannh. S. M.

Mi.

SCOLYTIDÆ.

Monarthrum mali Fitch. M.
Pityophthorus materiarius Fitch. M.
sparsus Lec. M.
plagiatus Lec. M.
pulius Zimm. M.
consimilis Lec. n. sp. M.
hirticeps Lec. n. sp. M.
puberulus Lec. M.
pusio Lec. n. sp. M.
opacus Lec. n. sp. M.
Xylocterus bivittatus Kby. M.
Xyleborus caelatus Zimm. M.
Dryocætes septentrionis Mannh.
S. M. Mr. Mi.
affaber Mannh. M.
granicollis Lec. M.
Tomicus calligraphus Germ. M.
cacographus Lec. M.

Tomicus pini Say.
hudsonicus Lec. M.
interruptus Lec. M.
balsaneus Lec. M.
Scolytus unispinosus Lec. M.
Polygraphus rufigenalis Lec.
Phleosinus dentatus Say. M.
punctatus Lec.*
Dendroctonus terebrans Oliv. M.
similis Lec. M.
rufipennis Kby. M. I.
frontalis Fabr.*
Hylastes porculus Er. M.
cavernosus Zimm. M.
Hylurgops pinifex Fitch.

ANTHRIBIDÆ.

Gonotropis gibbosa Lec. M.
Eurymycter fasciatus Lec. M.
Allandrus bifasciatus Lec. M.
Cratoparis lunatus Fabr. M.
Brachytarsus variegatus Say. M.

APIONIDÆ.

Apion sp. M. I.
sp. M.


By H. G. Hubbard and E. A. Schwarz.

Localities:

A. Ann Arbor.
H. Port Huron.

Where no locality is given, Detroit is to be understood.

CICINDELIDÆ.

Cicindela scutellaris var. Lecontei
Hald.
sex-guttata Fabr.
purpurea Oliv.

Cicindela genera Dej. II.
tranquebarica Hbst.
12-guttata Dej.
repanda Dej.
hirticollis Say.
CARABIDÆ.

Omophron robustum Horn. M. americanum Dej.
Elaphrus Clairvillei Kby. II. riparius Linn. rusciarius Say.
Notiophilus æneus Hbst. semistriatus Say. sibiricus Mots.
Hardyi Putz.
Nebria pallipes Say.
Calosoma scrutator Fab. frigidum Kby. calidum Fabr.
Carabus palustris Fisch. vinctus Web.
Cychrus Lecontei Dej.
Scarites subterranæus Fab.
Clivina impressifrons Lec. americana Dej. rufa Lec.? bipustulata Fab.
Galerita Janus Fab.
Casnonia pensylvanica Linn. Plochionus timidus Hald. II.
Loxopeza grandis Hentz. atriventris Say. tricolor Say.
Lebia pulchella Dej. viridis Say. var. moesta Lec. pumila Dej.
Lebia viridipennis Dej. ornata Say. fuscata Dej.
Dianchomena scapularis Dej. Tetragonoderus fasciatus Hald.
Perigona nigriceps Dej. A. Dromius piceus Dej.
Cymindis cribricollis Dej. pilosa Say. americana Dej. A. neglecta Hald.
Pinacodera limbata Dej. plicatilis Say.
Callida punctata Lec.
Calathus gregarius Say. impunctatus Say.
Olisthopus parmatus Say. micans Lec. A.
Lophoglossus scrutator Lec.
Myas cyanescens Dej. Grand Haven.
Diplochila laticollis Lec. var. major Lec.
Dicaelus purpuratus Bon. sculptilis Say. A. teter Bon. Lansing. politus Dej.
Chlaenius tomentosus Say. Lansing (Cooke).
Harpalus herbivagus Say.
   laticeps LeC. Lake Huron
   basilaris Kby. A. H.

Stenolophus fuliginosus Dej.
   plebejus Dej.
   conjunctus Say.
   ochropezus Say.
   hydropicus LeC.
   carus LeC.

Trechus micans LeC.

Bembidium americanum Dej.
   chalceum Dej.
   striola LeC.
   lucidum LeC.
   patruele Dej.
   variegatum Say.
   versicolor LeC.
   sulcatum LeC.
   anguliferum LeC.
   cantum LeC.
   assimile Gyllh.
   4-maculatum Linn.
   pedicellatum LeC.

Tachys proximus Say.
   laevis Say.
   nanus Gyllh.
   flavicauda Say.
   vivax LeC.
   xanthopus LeC.
   incurvus Say.

HALIPLIDÆ.

Haliphus fasciatus Aub.
   punctatus Aub.*
   triopsis Say.
   borealis LeC. M.
   cribrarius LeC.

Cnemidotus edentulus LeC.

DYTISCIDÆ.

Hydrovatus cuspidatus Germ.

Hydroporus inaequalis Fabr.
   convexus Aub.
   turbidus LeC.
   nubilus LeC.

Hydroporus granarius Aub.
   lacustris Say.
   fuscatus Cr.
   flavicollis LeC.
   rotundatus LeC.
   griseostriatus DeG. A.
   undulatus Say.
   mixtus LeC.
   modestus Aub.
   dichrous Melsh.

Hydroporus americannus Aub.
   tartaricus LeC.
   tristis Payk.
   oblitus Aub.
   conoides LeC. H.
   laccophilinus LeC. n. sp.

Suphis semipunctatus LeC. n. sp.

Laccophilus maculosus LeC.
   fasciatus Aub.

Acilius semisulcatus Aub.

Thermonectes basilaris Harr. A.

Graphoderes cinereus Linn. H.

Hydaticus stagnalis Fab. H.
   piceus LeC.

Colymbetes sculptilis Harr.

Dytiscus Harrisii Kby.
   fasciventris Say.

Rhantus binotatus Harr.
   tostus LeC.

Ilybius picipes Kby.
   biguttulus Germ.
   fraterculus LeC.
   ignarus LeC. II.

Matus bicarinatus Say.

Coilotomus interrogatus Fab.

Copelatus glyphicus Say.

Ilybiosoma bifarium Kby. II.

Gauroydes disintegratus Cr. A.
   semipunctatus Kby.
   ovoides LeC. II.
   punctulatus Aub.
   gagates Aub.

GYRINIDÆ.

Dineutes emarginatus Say.
   discolor Aub.*
Dineutes assimilis Aub.
Gyrinus fraterinus Coup.
aeneolus Lec.
limbatus Say.
ventralis Kby.
maculiventris Lec.
picipes Aub.
analis Say.
minutus Fab. II.

HYDROPHILIDÆ.

Helophorus lineatus Say.
tuberculatus Gyllh.
sp. near lacustris.
two new species.

Hydrochus squamifer Lec.
two new sp.

Hydrea pensylvanica Kw.

Hydrophilus ovatus Har.
triangularis Say.

Tropisternus nimbatus Say.
glaber Hbst.
mixtus Lec.

Hydrocharis obtusatus Say.

Berosus striatus Say.

Chaeatarthria pallida Lec.

Philhydrus nebulosus Say.
bifidus Lec.
ochraceus Mels.
consors Lec.
cinctus Say.
perplexus Lec.
fimbriatus Mels.

Hydrobius fuscipes Linn.
digestus Lec.
subcupreus Say.
despectus Lec.
feminalis Lec. n. sp.

Cyclonotum estriatum Say.

Cercyon flavipes Er.
naviculare Zinn.
centromaculatum St.
prætextatum Say.
ocellatum Say.
unipunctatum Linn.

Cercyon anale Er.
two unnamed species.
Cryptopleurum vagans Lec.

TRICHOPTERYGIDÆ.

Nossidium americanum Mots.
n. sp.
Ptenidium evanescens Marsham.
lineatum Lec.?
sp.
Ptinum Collani Mkl.
Smicrus silicornis Fairm.
Trichopteryx aspera Hald.
parallela Mots.
Dohrnii Matth.
Haldemani Lec.
several unnamed species.

Pteryx balteata Lec.
n. sp.
Ptinella quercus Lec.
n. sp.

STAPHYLINIDÆ.

Palagria cingulata Lec.
blinkata Say.
dissecta Er.
venustula Er.
Hoplandria lateralis Melsh.
Homalota trimaculata Er.
analis Grav.
lividipennis Manuh.
numerous unnamed species.

Placusa sp.
Calodera several species.
Bolitochara sp.
Myrmedonia sp. A.
Atemeles cavus Lec. A.

Aleochara lata Grav.
brachyptera Fourc.
nitida Grav.
several unnamed species.

Oxypoda several species.
Phloeopora sp.

Oligota pedalis Lec.
two unnamed species.
Gyrophæna vinula Er. dissimilis Er. flavicornis Melsh.* corruscula Er. socia Er. several unnamed species.

Myllæna fuscipennis Kr. dubia Er. one unnamed species.

Dinopsis americanus Kr. myllænoides Kr. (Numerous undetermined genera of Aleocharini).

Tachinus memnonius Grav. repandus Horn. luridus Er. canadensis Horn. fimbriatus Grav. Schwarzii Horn. Paw Paw. frigidus Er. circumcinctus Mkl. nitiduloides Horn.

Tachyporus maculipennis Lec. elegans Horn. jocosus Say. chrysomelinus Linn. nanus Er. brunneus Fab.

Cilea silphoides Linn.

Erchomus ventriculus Say.

Conosoma littoreum Linn. Knoxii Lec. crassum Grav. pubescens Payk. basale Er. opicum Say. scriptum Horn.

Bolitobius niger Grav. dimidiatus Er. var.? cingulatus Manuh. cincticollis Say. anticus Horn. pygmaeus Fab. trinotatus Er. obsoletus Say.* cinctus Grav.

Bryoporus rufescens Lec. var. testaceus Lec.

Mycetoporus lepidus Er. lucidulus Lec. consors Lec. americanus Er. pictus Horn.

Habrocerus Schwarzii Horn.

Acylophorus flavicollis Sachse. pronus Er.

Heterothops fumigatus Lec. pusio Lec.

Quedius fulgidus Fab. laevigatus Gyllh. vernix Lec. capucinus Grav. molochinus Grav. five unnamed species.

Creophilus villosus Grav.

Leistotrophus cingulatus Grav.

Staphylinus maculosus Grav. vulpinus Nordm. fossator Grav. tomentosus Grav. cinnamopterus Grav. violaceus Grav. varipes Sachse. caesareus Cederh.

Ocypus ater Grav.

Belomchus formosus Grav.

Philonthus cyanipennis Fabr. ænens Rossi. umbratilis Grav. hepaticus Er. blandus Grav. laetulus Say. niger Melsh. scybalarius Nordm. debilis Grav. lomatus Er. fulvipes Fabr. brunneus Grav. aterrimus Grav. baltimorensis Grav. Kuhama-zoo.

apicalis Say.
Philonthus sobrinus Er.
pæderoides Lee.
cinerascens Grav.
several unnamed species.

Xantholinus cephalus Say.
emmesus Grav.
obsidianus Melsh.
obscurus Er.

Leptacinus two n. sp.

Leptolinus longicollis Lee.
sp.

Baptolinus pilicornis Payk.
Plymouth.

Diochus Schaumii Kr.

Lathrobium grande Lee.
punctulatum Lee.
angulare Lee.
puncticolle Kby.
simile Lee.
armatum Say.
nigrum Lee.
tenue Lee.
longiusculum Grav.
collare Er.
several unnamed species.

Cryptobium badium Grav.
bicolor Grav.
pallipes Grav.
latebricola Nordm.
flavicorne Lee.
cribratum Lee.

Stilicus rudis Lee.
angularis Er.
dentatus Say.

Scopæus exiguus Er.
four or five unnamed species.

Lithocharis corticina Grav.
confluentes Say.
ochracea Grav.
one unnamed species.

Sunius prolixus Er.
linearis Er.
binoetus Say.
longiusculus Mannh.
brevipennis Aust.

Pæderus littorarius Grav.

Pæderus palustris Aust.
Palaminus testaceus Er.
normalis Lee.

Stenus Juno Fab.
erythropus Melsh.
fenoratus Say.
egenus Er.
flavicorpus Er.
anularis Er.
punctatus Er.
numerous undescribed species.

Euaesthetus americanus Er.
Edaphus nitidus Lee.

Oxyporus femoralis Grav.
vittatus Grav.
lateralis Grav.

Bledius semiferrugineus Lee.
fuscatus Lee.
analis Lee.
assimilis Er.
anularis Lee.
emarginatus Say.

Oxytelus sculptus Grav.
rugosus Er.
insignitus Grav.
pensylvanicus Er.
nitidulus Grav.
exiguus Er.

Thinobius brachypterus Lee.
imbriatus Lee.

Trogophloeus laticollis Lee.
arcifer Lee.
4-punctatus Say.
numerous undescribed species.

Apocellus sphaericollis Say.
Anthophagus verticalis Say.

Acidotha subcarinata Er.
seriata Lee.

Olophrum rotundicolle Say.
two unnamed species.

Coryphium notatum Lee.

Omalium several unnamed species.

Phloeonomus convexus Zimm.

Megarthrus excisus Lec.
Siagonium americanum Melsh.
Eleusis pallidus Lec.
picipennis Lec.
Glyptoma costale Er.
Pseudopsis sulcata Newm.
Micropeplus tesserula Curtis.

**PSELAPHIDÆ.**

Ceophyllus monilis Lec. Plymouth.
Cedius spinosus Lec.
Tmesiphorus carinatus Say.
Ctenistes picens Lec.
Zimmermanni Lec.
consobrinus Lec.
Tyrus humeralis Aub.
Pselaphus Erichsoni Lec.
Tychius minor Lec.
Bythinus zonatus Br.
Bryaxis conjuncta Lec.

- Brendeli Horn.
dentata Say.
puncticollis Lec.
sabra Brend.
rubicunda Aub.
two doubtful species.

Decarthron abnorme Lec.

- longulum Br.
formiceti Lec.

Batrisus simplex Lec. n. sp.
Schaumii Aubé.
globosus Lec.
spretus Lec.
lineaticollis Aub.

Rhexius insculptus Lec.

Trmium dubium Lec.
americanum Lec.

Euplectus interruptus Lec.
arcautus Lec.

- canaliculatus Lec.
torpidus Lec. n. sp.
crinitus Brendel.

**SILPHIDÆ.**

Necrophorus marginatus Fabr.

Necrophorus Sayi Lap.
pustulatus Hersch.
americ anus Oliv.
orbicollis Say.
tomentosus Web.
vespioides Hbst.

Silpha surinamensis Fab.
lapponica Hbst.
noveboracensis Forst.
inæqualis Fabr.
americana Linn.

Choleva opaca Say.

Ptomaphagus brunneipennis
Mannh.
consobrinus Lec.
oblitus Lec.

Catopomorphus brachyderus Lec.

Colon dentatum Lec.
three unnamed species.

Hydnobius substriatus Lec.

Anisotoma alternata Melsh.
punctostritata Kby.
cellaris Lec.
obsoleta Lec.

Cyrtusa egina Lec.
picipennis Lec.

sp.

Colenis impunctata Lec.

Aglyptus lævis Lec.

Liodes discolor Melsh.
dichroa Lec.

Agathidium oniscoides Beauv.
globatile Lec. n. sp.
exiguum Melsh.
polatinum Lec.

Clambus puberulus Lec.
gibbulus Lec.

**SCYDMÆNIDÆ.**

Eumicrus Zimmermanni Sch. A.
Scydmænus perforatus Schaum.
magister Lec.
flavitarsis Lec.
foesiger Lec.
capillosulus Lec.
ratus Lec.
Scydmaenus clavipes Say.
consobrinus Lec.
bicolor Lec.
salinator Lec.
fatuus Lec.
several unnamed species.

CORYLOPHIDÆ.

Orthoperus glaber Lec.
scutellaris Lec. n. sp.
Corylophus marginicollis Lec.
truncatus Lec.
Sericoderus flavidus Lec.
obscerus Lec.
Sacium fasciatum Say.
unatum Lec.
misellum Lec.

SCAPHIDIIDÆ.

Scaphidium 4-guttatum Say.
var. 4-pustulatum Say.
var. piceum Melsh.
var. obliteratum Lec.
Bœocera concolor Fab.*
apicalis Lec.
Scaphisoma convexum Say.
suturale Lec.
terminatum Melsh.
pusillum Lec.
n. sp.
Toxidium gammaroides Lec.
compressum Zimm.

LATHRIDIIDÆ.

Stephostethus (n. g.) liratus Lec.
Lathridius carinatus Gyllh.
minutus Linn.
maculatus Lec. n. sp.
opacus Lec. n. sp.
laticollis Lec. n. sp.
duplicatus Lec. n. sp.
filiformis Aub.
Corticaria serricollis Lec.

Corticaria deleta Mannh.
rugulosa Lec.
serrata Payk.
elougata Gyllh.
americana Mannh.
angularis Lec.
cavicollis Lec.
pumila Melsh.
picta Lec.
three unnamed species.

DERMESTIDÆ.

Dermestes nubilus Say.
mucoreus Lec.*
lardarius Linn.
talpinus Mann. (introduced).
Attagenus pellio Linn.
meagatoma Fabr.
longulus Lec.
Trogoderma tarsale Melsh.
Cryptorhopalum ruficorne Lec.
hemorhoidale Lec.
Anthrenus thoracicus Melsh.
varius Fabr.
museorum Linn.
Orphilus ater Er.

ENDOMYCHIDÆ.

Lycoperdina ferruginea Lec.
Mycetina perpulchra Newm.
testacea Lec.
vittata Fabr.
Endomychus biguttatus Fab.
Rhanis unicolor Zieg.
Phymaphora pulchella Newm. A.
Mycetæa hirta Melsh.
Rhymbus minor Cr.

MYCETOPHAGIDÆ.

Mycetophagus punctatus Say.
flexuosus Say.
obsoletus Melsh.
bipustulatus Melsh.
Hubbard and Schwarz.

Myctophagus pluripunctatus Lee.
Triphylus humeralis Kby.
Litargus tetraspilotus Lee.
   6-punctatus Say.
   infusatus Lee.
   didesmus Say.
Typhaea fumata Linn.
Diplocebus brunneus Lee.

SPHINDIDÆ.

Odontosphindus denticollis Lee. n. g. and sp.
Sphindus americanus Lee.
Eurysphindus hirtus Lee. n. g. and sp.

CIOIDÆ.

Cis creberrinus Mell.
   brevisetosus Cr.
   fuscipes Mell.
three other species.
Ennearthron Mellyi Mell.?
several other species.

EROTYLIDÆ.

Languria Mozardi Latr.
   gracilis Newm.
Daene 4-maculata Say.
Hypodacne punctata Lee. A.
Megalodacne fasciata Fab.
   heros Say.
Ischyrus 4-punctatus Oliv.
Mycotretus sanguinipennis Say.
   pulchra Say.
Cyrtotriplax humeralis Fab.
   angulata Say.
   unicolor Say.
Triplax festiva Lee.
   macra Lee.
   thoracica Say.
   flavicollis Lee.

CRYPTOPHAGIDÆ.

Antherophagus ochraceus Melsh.
Cryptophagus cellaris Scop.
   croceus Zimm.
   crinitus Zimm.
   nodangulus Zimm.
   several unnamed species.
Paramecosoma serratum Gyllh.
   n. sp.
Tomaria pulchellus Lee.
   Atomaria ephippiata Zimm.
   numerous unnamed species.
Ephistemus apicalis Lee.
Telmatophilus americanus Lee.
Loberus impressus Lee.
Silvanus advena Walth.
   surinamensis Linn.
   bidentatus Fab.
   planatus Germ.
   var. cognatus Lee.
   rectus Lee.
Nausibius dentatus Melsh,
   Telephanus velox Hald.

CUCUJIDÆ.

Catogenus rufus Fab.
Cucujus clavipes Fab.
Pediacus depressus Hbst. II.
Lathropus vernalis Lee.
Laemophloeus biguttatus Say.
   fasciatus Melsh.
   testaceus Fab.
   adustus Lee.
   convexulus Lee. n. sp. II.
Narthecius grandiceps Lee.
   Brontes dubius Fab.

LYCTIDÆ.

Lyctus planicollis Lee. II.
   opaculus Lee.

COLOYDIIDÆ.

Coxelus guttulatus Lee.
Ditoma 4-guttata Say.
Synchita nigripennis Lee.
   parvula Guér. A.
Aulonium parallelopipedum Say.
Colydium lineola Say.
Bothrideres geminatus Say.
Philothermus glabriculus Lec.
Cerylon castanum Say.
  var. unicolor Zieg.

RHYSODIDÆ.
Rhyssodes exaratus Ill.

RHIZOPHAGIDÆ.
Rhizophagus bipunctatus Say.

MONOTOMIDÆ.
Bactridium ephippigerum Germ.
  nanum Er.
  striolatum Reitter.
Monotoma fulvipes Melsh.
  picipes Hbst.
  americana Aub.
  parallela Lec.

TROGOSITIDÆ.
Nemosoma parallelum Melsh.
Tenebrions corticalis Melsh.
  castanea Melsh.
  nana Melsh.
  bimaculata Melsh.
Calitis scabra Thumb.
Thymalus fulgidus Er.

NITIDULIDÆ.
Byturus unicolor Say.
Cercus abdominalis Er.
Brachypterus urticae Fabr.
Colastus semitectus Say.
  unicolor Say.
  truncatus Rand.
Carpophilus niger Say.
  brachypterus Say.
  discoides Lec.
Epurea helvolae Er.

Epurea rufa Say.
  Erichsonii Reitter.
  immunda Sturm.
  avara Rand.
  truncatella Mann.
  ovata Horn. n. sp.
  peltoides Horn. n. sp.
  labilis Er.
Nitidula bipustulata Linn.
  ziczac Say.
  var. humeralis Lec.
Prometopia 6-maculata Say.
Lobiopa undulata Say.
Omosita colon Linn.
Phenolia grossa Fab.
Stelidota 8-maculata Say.
Thalyca concolor Lec.
Cyllodes biplagiatus Lec.
Cyphramus adustus Er.
Amphicrossus ciliatus Ol.
Pallodes silaceus Er.
Cybocephalus nigrifulus Lec.
Cryptarcha ampla Er.
  strigata Fabr.
  liturata Lec.
Ips 4-guttatus Fab.
  obtusus Say.
  sanguinolentus Oliv.
  confluens Say.

PHALACRIDÆ.
Phalacrus politus Melsh.
  n. sp.
Olibrus ergoti Walsh.
  consimilis Melsh.
  nitidus Mels.
Litochrus immaculatus Zimm.

COCCINELLIDÆ.
Megilla maculata DeG.
Hippodamia 13-punctata Linn.
  parenthesis Say.
Anisosticta strigata Thumb.
Cocinella affinis Rand. H.
Cocinella trifasciata Linn.

Cycloneda sanguinea Linn.

Adalia bipunctata Linn.

Anatis 15-punctata Oliv.

Psyllobora 20-maculata Say.

Chilocorus bivulnerus Muls.

Coccus pusilla Lec.

Brachyacantha ursina Fab.

Hyperaspis signata Oliv.

Hyperaspis signata Linn.

Scymnus punctatus Melsh.

Scymnus punctatus Say.

Americanus Muls.

Cercer Muls.

Coccidula lepida Lec.

Pentilia misella Lec.

Pentilia misella Lec.

**BYRRHIDÆ.**

Nosodendron unicolor Say.

Cytilus sericeus Forst.

Trivittatus Melsh. H.

Byrrhus americanus Lec.

Cyclophorus Kby.

Fettiti Horn.

Limnichus punctatus Lec.

Obscurus Lec.

**PSEPHENIDÆ.**

Psephenus Lecontei Lec.

**ELMIDÆ.**

Elmis bicarinatus Lec.

Ancyronyx variegatus Germ.

**HISTERIDÆ.**

Hololepta fossularis Say.

Hister merdarius Hoffm.

Hister interruptus Beauv.

Hister immuvis Er.

Hister cognatus Beauv.

Hister foedatus Lec.

Hister abbreviatus Fab.

Hister civilis Lec.

Hister depurator Say.

Hister furtivus Lec.

Hister curtatus Lec.

Hister bimaculatus Linn.

Hister 16-striatus Say.

Hister americanus Payk.

Hister perplexus Lec.

Hister subrotundus Say.

Hister carolinus Payk.

Hister Lecontei Mars.

Hister coarctatus Lec.

Epiurus ellipticus Lec.

Tribalus americanus Lec.

Onthophilus alternatus Say.

Paromalus aequalis Lec.

Bistriatus Er.

Saprinus rotundatus Kug.

Distinguidus Mars.

Assimilis Payk.

Conformis Lec. A.

Sphaeroides Lec. H.

Fratermus Say. H.

Mancus Say. H.

Patruelis Lec.

Teretrius americanus Lec.

Plegaderus transversus Say. H.

Bacanius punctiformis Lec.

Acritus exiguus Er.

Strigosus Lec.

Æletes politus Lec.

Simplex Lec.

**LUCANIDÆ.**

Lucanus dama Thunb.
Lucanus placidus Say.
Dorcus parallelus Say.
Platycoerus quercus Web.
depressus Lee.
Ceruchus piceus Web.
Passalus cornutus Fab.

**SCARABÆIDÆ.**

Canthon vigilans Lec.
Chœridium histeroides Web.
Copris anaglypticus Say.
minutus Dr.
Onthophilus Hecate Panz.
Janus var. striatus Beauv.
pensylvanicus Har.
Aphodius fossor Linn.
pinguis Hal. H.
fimetarius Linn.
ruricola Mels.
n. sp.?
granarius Linn.
vittatus Say.
inquinatus Hbst.
lentus Horn.
stercorosus Melsh.*
bicolor Say.
oblongus Say.
humeralis Lec.
Dialytes striatulus Say.
Atænius imbricatus Melsh.
graciliis Melsh.
stercorator Fab.
abditus Hal.
Ægialia lacustris Lec.
conferta Horn. M.
Bolboceras farctus Fab.
Odontæus flicornis Say.
cornigerus Melsh.
Geotrupes splendidus Fabr.
semiopacus Jek.
Egerlei Germ.
Blackburnii Fabr.
Balyi Jek.
Nicagus obscurus Lec. H.
Cloëotus aphodiodides Ill.

Trox unistriatus Beauv.
sordidus Lec. *
Æequalis Say.
scaber Linn.
Hoplia trifasciata Say.
Dichelonycha elongata Fabr.
fuscula Lec.
albicollis Burm. H.
Serica vespertina Schll.
tristis Lec. ?
sericea Ill.
Macroductylus subspinosus Fabr.
Diploptaxis sordida Say.
frondicola Say. A.
Endrosa quercus Kn.
Lachnosterna fulvis Lec.
fusca Fröhl.
fraterra Harr.
ciliata Lec.
hirticula Kn.
hirsuta Kn.
crenulata Fröhl.
tristis Fabr.
Strigoderma arboricola Fabr.
Pelidnota punctata Linn.
Cotalpa lanigera Linn.
Ligyrus relictus Say.
Xyloryctes satyrus Fabr.
Euryomia inda Linn.
fulgida Fabr.
Osmoderma scabra Beauv.
Gnorimus maculosus Kn. H.
Trichius piger Fabr.
affinis Gory.
viridulus Fabr.

**BUPRESTIDÆ.**

Chalophora virginiensis Dr. H.
campestris Say.
Dicerca divaricata Say.
obscura Fabr.
asperata Lap.
Pœcilonota cyanipes Say.
Buprestis consularis Gory H.
maculiventris Say. H.
Hubbard and Schwarz.

Buprestis fasciata Fabr. II.
M. striata Fabr.
Melanophila longipes Say II.
fulvoguttata Harr. II.
Anthaxia cyanella Gory.
viridicornis Say.
viridifrons Gory.
quercata Fabr.
Chrysobothris femorata Lee.
dentipes Germ. II.
6-signata Say II.
scitula Gory.
Actenodes acornis Say.
Acmaeodera pulchella Hbst.
culta Web.
Agrius ruficollis Fabr.
torquatus Lee.
defectus Lee.
difficilis Gor. II.
bilineatus Web.,
acutipennis Mannh. H.
plumbeus Lee.
politus Say.
egenus Gory H.
putillus Say.
Taphrocerus gracilis Say.
Brachys ovata Web.
aeresa Melsh.
Pachyscelus purpureus Say.
lævigatus Say.

THROSCIDÆ.
Throscus alienus Bono.
punctatus Bono.
Chevroleti Bono.
constrictor Say.
Drapetes geminatus Say.

ELATERIDÆ.
Tharops obliqua Say.
Deltametopus ammonicornis Say.
Dromoeolus cylindricollis Say. *
Fornax bicolor Melsh. A.
calceatus Say.

Microrhagus humeralis Say.
triangularis Say.
Nematoidea penetrans Lee.
Adelocera impressicollis Say.
discoidea Web.
aurata Say.
obecta Say.
Alaus oculatus Linn.
myops Fabr.
Cardiophorus amictus Melsh.
fenestrate Lec. II.
convexus Lec. II.
Cryptohypnus abbreviatus Say.
choris Say.
pectoralis Say. A.
obliquatulus Melsh.
Elater nigrigollis Hbst.
linteus Say.
discoideus Fab.
semincinctus Rand.
vitosus Lec. A.
apicatus Say.
socer Lec.
fusclatus Melsh.
pedalis Cand.
nigrinus Payk.
sanguinipennis Say.
rubricus Say.
obliquus Say.
Drasterius dorsalis Say.
Monocrepidius auritus Say.
Ludius abruptus Say.
atenuatus Say.
Agriotes mancuses Say.
pubescens Melsh.
fucosus Lec. Lake Huron.
stabilis Lec.
oblungicolli Melsh.
Dolopius lateralis Eschsch.
Glyphonyx recticollis Say. * A.
testaceus Melsh. ?
Melanotus depressus Melsh.
Leonardi Lec.
scribiscollis Lec. II.
castanipes Payk.
fissilis Say.
Melanotus communis Gyllh.
parumpunctatus Melsh.
americanus Hbst.?
Limonius auripilis Say.
aurifer Lee.
griseus Beav.
plebejus Lee.
basilaris Lee.
agonus Say.
Campylus denticornis Kby. II.
Pityobius anguinus Lee. Lansing
Athous Brightwelli Kby.
maculicollis Lee.
cucullatus Say.
fossularis Lee.
scapularis Say.
reflexus Lee. A. II.
Sericosomus viridannus Say. A.
Oxygonus obesus Say. A.
Corymbites vires Sch. II.
vernalis Hentz. Lausing.
tesselatus Linn.
cylindformis Hbst.
pyrrhos Hbst.
sulcicollis Say.
hieroglyphicus Say.
metallicus Germ.
Asaphes baridius Say.
memoninus Hbst.
bilobatus Say.

DASCILLIDÆ.

Dicranoselaphus thoracus Zeigl.
Cyphon pallipes Lee.
fusciceps Kby. II.
piceus Lee.
nebulosus Lee.
modestus Lee.
pusillus Lee.
ruficollis Say.
Prionocyphon discoideus Say.
Helodes pulchella Guér.
thoracica Guér.
explanata Lee.
Scirtes tibialis Guér.

Eucinetus terminalis Lee.
morio Lee.
strigosus Lee.
testaceus Lee.
punctulatus Lee.
Ptilodactyla serricollis Say.

LAMPYRIDÆ.

Calopteron typicum Newm.
var. apicale Lee.
Eros coccinatus Say.
thoracicus Rand.
sculptilis Say.
humeralis Fab. II.
modestus Say.
Lucidota atra Fabr.
Photinus corruscus Linn.
rigricans Say.
angulatus Say.
borealis Rand.
lucifer Mels.
angustatus Lee. H.
ardens Lee.
consanguineus Lee.
n. sp.
Photuris pensylvanica De G.
Phausis inaccensa Lee. n. sp. M.

TELEPHORIDÆ.

Chauliognathus marginatus Fab.
Podabrus tricostatus Say.
flavicollis Lee.
modestus Say.
diadema Fabr.
rugosus Lee.
Telephorus excavatus Lee.
carolinus Fab.
angulatus Say.
lineola Fab.
rectus Melsh.
cruralis Lee.
dichrous Lee.? 
luteicollis Germ.
sclitus Say.
vilis Lee.

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Telephorus fraxini Say.
rotundicollis Say.
tuberculatus Lec.
bilineatus Say.
limbatus Lec.
Silis percomis Say.
Malthodes concavus Lec.
transversus Lec.
exilis Melsh.
fragilis Lec.
parvulus Lec.

MALACHIIDÆ.

Collops 4-macilatus Fabr.
vittatus Say. II.
Anthocomus Erichsonii Lee.
Pseudobæus bicolor Lec.
obitus Lec.
Attalus terminalis Er.
pallifrons Mots.
Pettiti Horn.
morulius Lec.

CLERIDÆ.

Cymatodera inornata Say.
Priocera castanea Newm.
Trichodes Nuttallii Kby.
Clerus nigripes Say.
nigrifrons Say.
thoracicus Oliv.
dubius Fab.
sanguineus Say.
Hydnocera humeralis Say.
var. difficilis Lec.
var. cyanescens Lec.
pallipennis Say.
verticalis Say.
tabida Lec.
longicollis Ziegl.
Phyllobaenus dislocatus Say.
Orthopleura damicornis Fabr.
Laricobius rubidus Lee.
Corynetes violaceus Linn.

LYMEXYLIDÆ.

Hyleccætus lugubris Say.
Micromalthus debilis Lec. n. g. and
sp.

CUPESIDÆ.

Cupes capitata Fab. Kalamazoo.
concolor Westw.

PTINIDÆ.

Ptinus fur Linn.
bimaculatus Melsh.
Eucrada humeralis Melsh.
Ernobius mollis Linn.
Oligomerus sericans Melsh.
Sitodrepa panicea Linn.
Trichodesma gibbosa Say.
Hadrobregmus errans Mels.
carinatus Say.
linearis Lec.
Anobium notatum Say.
Trypopitys sericeus Say.
Petalium bistriatum Say.
Xyletinus mucoreus Lec.? fucatus Lec.
ingubris Lec. n. sp.
Lasioderma serricornè Fab.
Hemiptychus gravis Lec.
ventralis Lec.
Protheca puberula Lec.
Dorcatoma pallicorne Lec.
setulosum Lec.
incomptum Lec.
Cænocara oculata Say.
scymnoides Lec.
intermedia Lec.
Ptlinus ruficornis Say.
Hendecatomus rugosus Rand.
Sinoxylon bidentatum Horn. p.544.
Bostrichus armiger Lee.
truncaticollis Lee.
SPONDYLIDÆ.

Parandra brunnea Fabr.

CERAMBYCIDÆ.

Orthosoma brunneum Forst.
Tragosa Harrisii Lee.
Asemum moestum Hald.
Criocephalus obsoletus Rand.
Smodicum cucujiforme Say.
Dularius brevilineus Say.
Phymatodes variabilis Fabr.
maculicornis Lec. n. sp. I.
Chion cinctus Dr.
Elaphidion incertum Newm.
villosum Fab.
parallelum Newm.
unicolor Rand.
Callimoxys fuscipennis Lec.
Molorchus bimaculatus Say.
Batyle ruder Lec.
Cylene pictus Drury.
Robiniaæ Forst.
Calloides nobilis Say. H.
Arhopalus fulminans Fab.
Xylotrechus colonus Fab.
sagittatus Germ.
undulatus Say.
Neoclytus caprea Say.
erthrocephalus Fab.
Clytanthus ruricola Oliv.
Microclytus gazellula Hald.
Cyrtophorus verrucosus Oliv.
Euderces picipes Fab.
Distenia undata Oliv.
Desmocerus palliatius Forst.
Encyclops ceruleus Say.
Centrodera decolorata Harr. H.
Acmaeops bivittata Say.
Gaurotes cyanipennis Say.
Bellamirâ scalaris Say. H.
Typocerus velutinus Oliv.
sparsus Lec. n. sp. E.
Leptura capitata Newm.
zebra Oliv.

Leptura rubrica Say.
proxima Say.
vittata Germ.
sphericollis Say.
vibex Newm.
aspora Lec.

Psenocerus supernotatus Say.
Monohannus scultellatus Say.
craspus Kby.

Dorcaschema nigrum Say.

Goes oculatus Lec.
Plectroderæ scalaris Fab. Lake Huron.

Acanthoderæ decipiens Hald.

Leptostylus planid orsus Lec.
commixtus Hald. H.
maculata Say.

Sternidius variecutatus Hald.
alpha Say

cineræus Lec.
Xanthoxyli Shimer.

Liopus signatus Lec.
quercus Fitch.
facetus Say.

Lepturgus symmetricus Hald.

Hyperplatys maculatus Hald.
Graphisurus fasciatus DeG.
pusillus Kby.

Acanthocinus obsolletus Oliv.

Hoplosia nubila Lec.
Pogonocherus mixtus Hald. H.

Ecyrus dasycerus Say.

Eupogonius tomentosus Hald. H.
vestitus Say.
subarmatus Lec.

Saperda obliqua Say.

cretata Newm.
vestita Say.
discoidea Fabr.
tridentata Oliv.
lateralis Fab.
mosta Lec. H.
color Lec.

Oberea ocellata Hald.

risa Lec.

Tetraopes tetraophthalmos Forst.
BRUCHIDÆ.

Bruchus pisi Linn.
  alboscutellatus Horn.
  distinguendus Horn.
  calvus Horn. var.
  Hibisci Oliv.
  musculus Say.
  several unnamed or new species.

CHRYSOMELIDÆ.

Donacia piscatrix Lac.
  tuberculata Lac.
  hirticollis Kby.
  proxima Kby.
  subtilis Kunze.
  pubescens Lec.
  confusa Lec.
  femoralis Kby.
  jucunda Lec.
  Kirbyi Lec.
  Macroplea Melsh.eri Lac.
  Orsodachna atra Ahr. A.
  Zeugophora scutellaris Suffr.
  puberula Cr. var.?
  varians Cr.
  consanguinea Cr. *
  Lema brunnicollis Lec.
  trilineata Oliv.
  Chlamys plicata Fab.
  cribripennis Lec. var. p.
  Exema conspersa Mannh.
  Monachus saponatus Fab.
  Cryptocephalus congestus Fab.
    var. sulphuripennis Melsh.
    formosus Melsh.
    sellatus Suffr.
    luturatus Fab.
    venustus Fab.
    Schreibersii Suffr.
    dispersus Hald.
    4-maculatus Say.
    quadruplex Newm.
    catarius Suffr.
  Cryptocephalus auratus Fabr.
    atomus Suffr.
    n. sp.
  Pachybrachys trinotatus Melsh.
    M-nigrum Melsh.
    subfasciatus Hald.
    atomarius Melsh.
    femoratus Oliv.
    infaustus Hald.
    tridens Melsh.
    abdominalis Say.
    hepaticus Melsh.
  Adoxus vitis Linn. H.
  Xanthonia 10-notata Say.
    villosula Melsh.
  Heteraspis pubescens Melsh.
  Chrysochus auratus Fab.
  Paria 6-notata Say.
  Colaspis brunnea Fab.
    praetexta Say.
    tristis Oliv.
  Chrysomela olivicollis Kby.
    10-lineata Say.
    suturalis Fabr.
    similis Rog.
    elegans Ol.
    multiguttis Stål.
    philadelphica Linn.
    Bigsbyana Kby.
  Gastrophysa Polygoni Linn.
  Prasocris Phellandrii Ill. H.
    varipes Cr.
    obliquata Cr.
  Phyllopecta vulgarissima Linn.
  Plagioderia scripta Fab.
  Cerotoma lineata Fabr.
  Phyllobrotica decorata Say.
    discoidea Fabr.
  Lyperus meraca Fabr.
  Diabrotica 12-punctata Oliv.
    vittata Fabr.
  Galeruca americana Fabr.
    Sagittaria clyllich.
    decora Say.
    notata Fab.
  Trirhabda canadensis Kby.
Hypolampsis Clarkii Cr. II.

GEdionychis gibbitarsis Say.

vians Ill. var. scripticollis Say.

thyamoides Cr.

6-maculata Ill.

quercata Fabr.

scalaris Melsh.

Disonycha limbicollis Lec.

var. pallipes Cr.

alternata Ill.

triangularis Say.

collata Fabr.

Graptodera bimarginata Say.

carinata Germ.

expta Say.

rufa Linn.

one unnamed species.

Longitarsus melanurus Melsh.

testaceus Lec.

several unnamed species.

Batophila spuria Lec.

Phyllotreta Zimmermanni Cr.

vittata Fab.

bipustulata Fabr.

robusta Lec. n. sp.

Dibolia aerea Melsh.

Systema frontalis Fabr.

marginalis Ill.

Crepidodera Helxines Linn.

atriventris Melsh.

Modeeri Linn.

Epitrix cucumeris Harr.

hirtipennis Melsh.

Mantura floridana Cr.

Chætocnema denticulata Ill.

parepunctata Cr.

confinis Cr.

rudis Lec. n. sp. M.

protensa Lec.

flavicornis Lec.

Psylliodes punctulata Melsh.

Blepharida rhois Forst.

Stenisma metallica Fabr.

collaris Baly.

Odontota scapularis Oliv.

Odontota rubra Web.

trosea Web.

Microrhopala porcata Melsh.

Physionota unipunctata Say.

Cassida nigripes Oliv.

Coptocycla aurichalcea Fab.

guttata Oliv.

purpurata Boh.

clavata Fabr.

TENEBRIONIDÆ.

Nyctobates pensylvanica De G.

barbata Kn. II.

Merinus lævis Oliv.

Upis ceramboides Linn.


concolor Lec. II.

Scotobates calcaratus Fab.

Xylopinus saperdiioides Oliv.

Tenebrio obscurus Fab.

molitor Linn.

castaneus Kn.

tenebrioides Beauv.

Blapstinus maestus Melsh.

interruptus Say.

Dioedus punctatus Lec.

Echocerus maxillosus Fab.

Uloma impressa Melsh.

mentalís Horn.

Paratenetus punctatus Sol.

gibbipennis MotJ. 

Diaperis Hydni Fab.

Hoplocephala bicornis Oliv.

Platydena excavatum Say.

ruficorne St.

americanum Lap.

picilabrum Melsh.

subcostatum Lap.

Scaphidema æneolium Lec.

Hypophlebus parallellus Fab. H.

Pentaphyllus pallidus Lec.

Bolitotherus bifurcus Fab.

Bolitophagus corticola Say. H.

Rhipidandrus paradoxus Beauv.
Meracantha contracta Beauv.
Strongylium tenuicolle Say.

**CISTELIDÆ.**

Hymenorus pliosus Mels. var. obscurus Say. var.?
punctulatus Lec.
niger Mels.
rufipes Lec. H.
Cistela brevis Say.
sericea Say.
Isomira 4-striata Coup.
Mycetochara Haldemani Lec. foveata Lec.
tenuis Lec.
binotata Say. H.
longula Lec. n. sp.
lugubris Lec. n. sp.
analis Lec. n. sp.
marginata Lec. n. sp. M.
gracilis Lec. n. sp. M.

Capnochroa fuliginosa Melsh.
Androchirius luteipes Lec.

**LAGRIIDÆ.**

Arthromacra ænea Say.

**PYROCHROIDÆ.**

Pyrochroa flabellata Fab.
fermoralis Lec.
Schizotus cervicalis Newm.
Dendroides canadensis Latr.
concolor Newm.

**ANTHICIDÆ.**

Corphyra Newmani Lec.
lugubris Say.
labiata Say.
terminalis Say.
elegans Hentz.
Notoxus anchora Hentz.
monodon Fab.
Tomoderus interruptus Laf.

Anticus formicarius Laf.
Anticus florals Payk.
difficilis Lec.
sabriceps Lec.
cervinus Laf.
spretus Lec.
fulvipes Laf.
coracinus Lec.
pallens Lec. H.
granularis Lec.
n. sp.

Xylophilus piceus Lec.
fasciatus Mels.
signatus Hald.
basalis Lec.
n. sp.?

**MELANDRYIDÆ.**

Canifa plagiata Mels.
pallipes Mels.
pallipennis Lec. n. sp. M.
Penthe obliquata Fabr.
pimelia Fabr.
Synchoa punctata Newm.
Emmesa labiata Say.
Melandrya striata Say.
Spilotus 4-pustulosus Melsh.
Mystaxis simulator Newm.
Serropalpus striatus Hellen. H.
Dicroea liturata Lec.
fusca Lec. n. sp. M.
Symphora flavicollis Hald.

Hallomenus scapularis Mels.
debilis Lec.
serricornis Lec. n. sp. M.

Eustrophus confinis Lec.
bicolor Say.
bifasciatus Say.
tomentosus Say.

Orchesia castanea Melsh.
gracilis Melsh.

**MORDELLIDÆ.**

Pentaria trifasciata Melsh.
Anaapis flavipennis Hald.
Anaspis rufa Say.

Mordella melæna Grav.

Mordellistena trifasciata Say.

Glipodes helva Lee.

Mordella melaena Grav.
scutellaris Fab.
irrorata Lec.
baltimoresis Zimm.
marginita Mels.
lineata Mels.
undulata Mels.

Glipodes helva Lee.

Mordellistena trifasciata Say.
lutea Mels.
ornata Mels.
scapularis Say.
tosta Lec.
picicornis Lec.
cervicalis Lec.
fulvicollis Mels.
impatiens Lec.
nigricans Mels.
guttulata Hellm.
pustulata Mels.
convicta Lec.
ambusta Lee.
marginalis Say.
fuscata Mels.
discolor Mels.
n. sp.

Myodites Walshii Lee.

MELOIDÆ.

Meloe rugipennis Lec.

Macrobasis unicolor Kby.

Epicauts Convoluli Mels H.
vittata Fabr.
cineræa Forst.
pensylvanica De G.

CÉDEMERIDÆ.

Ditylus coeruleus Rand. Lake Huron
Asclera rufficollis Say.
puncticollis Say.

MYCTERIDÆ.

Lacconotus punctatus Lec.

PYTHIDÆ.

Salpingus virescens Lec.
two other species.

Rhinocirrus nitens Lec.

RHYNCHITIDÆ.

Auletes ater Lec. II.

Cassandrae Lec.

Eugnamptus angustatus Gyllh.
var. collaris Gyllh.

Rhynchites aeneus Boh.
cyanellus Lec.

Pterocolus ovatus Gyllh.

ATTELABIDÆ.

Attelabus analis Ill.

Rhois Boh.

OTIORHYNCHIDÆ.

Hormorus undulatus Uhler. Lake Huron.

Panscopus erinaceus Say.

Anametis grisea Horn.

Phyxelis rigidus Say.

Otiornychus ligneus Oliv.

Cercepus chrysorrhœus Say.

Pandeleiteius hilaris Hbst.

Cyphomimus dorsalis Horn.

CURCULIONIDÆ.

Sitones flavescens Marsh.
tibialis Germ.

Ithycerus noveboracensis Forst.

Phytonomus comptus Say.
nigrorostris Gyllh.

Lepyrus geminatus Say.
Listronotus tuberosus Lec.  
callosus Lec.  
inæqualipennis Boh.  
caudatus Say.  
appendiculatus Boh.  
frontalis Lec.  
latinculus Boh.  
Macrops solutus Boh.  
several unnamed species.  
Hypomolyx pīnicola Coup. II.  
Hylobius pales Boh. H.  
confusus Kly.  
Pissodes Strobi Peck. II.  
Lixus rubellus Rand.  
rectus Lec.  
mucidus Lec.  
concavus Say.  
Grypidius Equiseti Gyllh.  
Eryciis puncticollis Lee.  
Dorytomus laticollis Lec.  
brevicollis Lec.  
luridus Mannh.  
Acalyptus Carpini Linn.  
Desmoris constrictus Say.  
Pachytychius discoideus Lec.  
Smicronyx ovipennis Lec.  
ychiioides Lee.  
vestitus Lec.  
squamulatus Lec.  
Endalus limatinius Lap.  
ovalis Lec.  
Tanysphyrus Lemnae Gyllh.  
Onychylis nigrostris Boh.  
longulus Lec.  
Anchodemus angustus Lec.  
Hubbardi Lec.  
Schwarz Lec.  
Lissorhoptrus simplex Say.  
apiculatus Gyllh.  
Bagous mamillatus Say.  
obliquus Lec.  
amercanus Lec.  
magister Lec.  
nebulosus Lec.  
bittuberosus Lec.  
transversus Lec.  
Otidocephalus Chevrolati Horn.  
perforatus Horn.  
Magdalis hispoidees Lec. II.  
barbita Say.  
oyra Hbst.  
salicis Horn.  
inaconsipacia Horn.  
pandura Say.  
armicollis Say.  
pallida Say.  
Anthonomus 4-gibbus Say  
nebulosus Lec.  
scutellatus Gyllh.  
signatus Say.  
rubidus Lec.  
sycophanta Walsh.  
rufipennis Lec.  
suturalis Lec.  
n. sp. near flavicornis.  
corvulus Lec.  
disjunctus Lec.  
crateegi Walsh.  
n. sp. near crateegi.  
deiciens Lec.  
Orchestes pallicornis Say.  
niger Horn.  
subhirtus Horn.  
ephipriatus Say.  
Elleschus ephipriatus Say.  
Prionomerus calceatus Say.  
Piazorhinus scutellaris Gyllh.  
Proctorus decipiens Lec.  
Plocetes Ulmi Lec.  
Gymnetron teter Schh.  
Conotrachelus albicinctus Lec.  
nemuphar Harr.  
seniculus Lec.  
elegans Boh.  
Crataegi Walsh.  
posticatus Boh.  
anaglypticus Fahr.  
Rhyseematus lineaticollis Say.  
Zaglyptus striatus Lec.  
Acalles rigidus Lec.  
Acalles sordidus Lec. A.  
Tyloderma foveolatum Say. II.
Tyloderma variegatum Horn.  
Cryptorrhynchus parochus Say.  
Cryptorrhynchus bisignatus Say.  
fusca Say.  
fallax Say.  
ferratus Say.  

Piazurus oculatus Say.  
Copturus quercus Gyll.  
Acoptus suturalis Lee.  
Mononychus vulpeculus Boh.  
Craponius inaequalis Say.  

the av. acephalus Germ.  
asper Lee.  
curraris Lee.  
nelusosus Lee.  
Acalloides ventricosus Lee.  

Ceuthorhynchus Rapæ Gyll.  
sulcipennis Lee.  
decipiens Lee.  
puvio Mannh.  
semirufus Lee.  
puberulus Lee.  
Erysimi Fab.  
n. sp.  
Phytobius velatus Gyll.  
Pelonomius sulcicollis Fahr.  

squamulos Lee.  
Cælogaster Zimmermanni Lee.  
cretura Hbst.  
Rhinoncus pericarpius Gyll.  
pyrrhopus Boh.  
longulus Lee.  

Trichobasis trinotata Say.  

Baris striata Say.  
tunescens Lee.  

Pseudobaris nigra Say.  
T-sigum Boh.  

Ampelogypter Sesostriis Lee.  

ter Lee.  

Madarus undulatus Boh.  
Stethobasis corpulenta Lee.  

Centrinius scutellum-album Say.  
rectirostris Lee.  
prolixus Lee.  
confinis Lee.  

Zygobasis conspersa Lee.  
subcalva Lee.  n. sp.  
Barilepton cribricolle Lee.  
quadrifolle Lee.  
filiforme Lee.  
Balaninus uniformis Lee.  
nasicus Lee.  

BRENTHIDÆ.  

Eupsalis minuta Drury.  

CALANDRIDÆ.  

pertinax Oliv. South Haven.  
robustus Horn. South Haven.  
costipennis Horn.  
cariosus Oliv.  
sculptilis Uhler.  
melanoccephalus Fab.  
placidus Say.  
Rhodobenus 13-punctatus Ill.  
Calandra Oryzae Fabr.  
Dryophthorus corticalis Say.  

Cossus concinus Boh.  
n. sp.  

Allomimus dubius Horn. A.  
Phloeophagus apionides Horn.  
minor Horn.  
Rhynocoles oregonensis Horn.  

Stenoscelis brevis Boh.  

SCOLYTIDÆ.  

Monarthrum fasciatum Say.  
mali Fitch.  
Pityophthorus materarius Fitch.  

minutissimus Harr.  
cariniceps Lee.  
puberulus Lee. H.  
consilinis Lee. n. sp.  
hirticeps Lee. n. sp. M.  
pusbio Lee. n. sp. M.  
opacus Lee. n. sp. M.  

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4. **Description of the Larva of Micromalthus debilis Lee.**

By H. G. Hubbard.

Color transparent white, mandibles and anal appendage castaneous.

Form cylindrical, very slightly flattened beneath, hardly narrowed laterally in front and behind. Body glabrous, except a few hardly visible hairs upon the sides, without legs. Length 0.10–0.12 inch.; width about 0.03 inches.

Head not quite as broad as the segments of the abdomen, convex, transverse, enlarged posteriorly; sides rounded, convex; anterior border nearly straight, posterior border emarginate; above and below a few long bristles. No ocelli.

Antenne short, inserted in depressions on the anterior angles of the head, of four joints increasing in length, the first very short, transverse, the second smaller, about as long as broad, the third longer than the preceding, with a short oval lobe below, before the tip, the fourth twice as long as the third, slender, blade-shaped, tipped with a minute spine.

Labrum transverse, somewhat enlarged anteriorly, borders nearly straight, anterior angles rounded, with long stout spines above and below. Mandibles as long as the antennae, stout, curved, three-toothed with a large hatchet-shaped basal lobe, obliquely ridged upon the under surface.

Maxilla, very large and prominent, longer than the mandibles; with palpi of three joints, the first and second short, cylindrical, the third as long as the first and second united, more slender, flat, and divided nearly to the base into two superimposed lobes bearing papillae; maxillary lobe
divided anteriorly by a deep notch into two portions, the apical, smaller and narrower than the basal, blade-shaped, tipped with a long slender spine, and bearing four long and stout teeth projecting at right angles to the lobe, like the blades of a half-opened penknife; the basal portion with two rows of teeth on the border, and a slender tooth and bristle at the apex.

Labium consisting firstly, of an elongated, triangular mentum, with the apex thickened in a conical protuberance, bearing a pair of bristles near the middle, and another pair upon the thickened tip; secondly, of a transverse palpiger, bearing small fleshy palpi of two subequal joints, and its anterior border prolonged between them in a conical projection; thirdly, of an elongated, convex, corneous ligula, enlarged anteriorly, with straight borders and a pair of bristles near the tip. Behind and above the mentum and plainly seen through the transparent tissues, is a broadly triangular, horn-like piece, the base of which extends between the hinges of the mandibles, and the apex reaches as far as the middle of the ligula; upon the upper surface oblique grooves on each side correspond with the ridges upon the basal lobes of the mandibles, into which they lock when the mandibles are closed.

Thoracic segments slightly thicker than the abdomen, the first longer, the two following subequal in length.

Abdomen cylindrical or slightly depressed, of nine segments, the first eight subequal, transverse, each with a few long bristles, the ninth conical, scatteringly covered with long bristles, terminating abruptly in two minute toothed appendages, one proceeding from the dorsal surface, and arching downwards, the other from the ventral surface, curving upwards, and resembling two hands with partly extended fingers, having the palms turned towards each other. The upper and longer appendage appears to be tubular for one-third of its length from the base, the remainder is concave beneath, and terminates in two terminal and six lateral teeth, directed downwards, their bases forming longitudinal ridges on the concave under surface. The lower appendage is shorter, more strongly curved, and in the opposite direction, concave above, expanded into a palm at the end, with eight teeth as in the preceding; the concave upper surface is distinctly denticate.

The larva lives in damp situations, in the soft, crumbling wood of old oak logs, which have become entirely disintegrated and colored dark red, probably by a microscopic fungus. A number of larvae, pupae, and imagos were found together in a small portion of such a log on August 17th, 1874, at Detroit, Michigan.

As Dr. LeConte has placed this insect in the family Lymexyliidae, it will be interesting to compare its larva with that of *Hylecoetus lugubris* Say, specimens of which are before me. The larvae of *Hylecoetus* were taken from cylindrical burrows in the solid wood of the American linden. It

*This piece and the mandibles, the forms and relative positions of which are shown in fig. 9 of the plate, though very conspicuous in dissections under the microscope, are omitted in fig. 5 in order to avoid obscuring overlying parts.*
has a cylindrical body of twelve segments; a globular head, with two large ocelli, which are, however, covered by the epidermis; the first thoracic segment is enlarged, and partly covers the head, like a hood; the three thoracic segments bear well-developed legs; and the abdomen terminates in a long tapering style, toothed and concave on the upper surface, and turning upwards at the end; the stigmata are large and in their normal positions, one pair beneath, on the thorax, and eight pairs on the sides of the abdominal segments.

The antennæ are four-jointed, exceedingly minute and stout, and, as in {	extit{Micromalthus}}, have the third joint lobed beneath, an apical spine, and occupy similar positions on the anterior angles of the head; the maxillæ also have the lobe divided into an upper and lower portion, although the separation is not very distinct, and appears under the lens as a corneous line, the spines upon the lobe are slender and not markedly different upon the two portions. The labrum and labium are stout and thick, but do not present important structural differences from the same parts in {	extit{Micromalthus}}. The mandibles are simple or slightly notched, the basal lobes not prominent, but finely ridged, and closing upon a triangular corneous piece which lies above the mentum. All the parts of the mouth in {	extit{Hylocætus}} are smaller, stouter, and simpler in their structural details than the corresponding organs in {	extit{Micromalthus}}, differences which perhaps have some relation to the harder material in which the former lives. Notwithstanding the striking difference in their external forms, the important structural analogies between the antennæ and mouth parts, seem to indicate a relationship between these two larval forms.

\textit{Explanation of Plate 15.}

\textit{Micromalthus debilis} Lcc., Imago, central figure.
1. " " Larva, enlarged twelve times.
2.—Head and thoracic segments, lateral view; much enlarged.
3.—Terminal segments, showing the anal appendages, lateral view.
4.—Head from above, very much enlarged.
5.—Head from below, with mandibles omitted.
6.—Right maxilla, seen from below.
7.—Right antenna, from below.
8.—Anal appendages, seen from below, very much enlarged.
9.—Corneous triangular piece lying above the mentum, with the left mandible thrown back, seen from above; the ridges upon the under surface of the mandible are indicated by dotted lines.

\textit{Note.—For the sake of distinctness, the appendages in fig. 3 are drawn too large in proportion to the segments. The proportions are more correctly given in figs 1 and 8.}
**Index of Species Described.**

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<tr>
<td>Dyschirius brevispinus</td>
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