59.57,62S(75.9)

Article XVII.—STAPHYLINIDÆ FROM FLORIDA IN THE COL-LECTION OF THE AMERICAN MUSEUM OF NATURAL HISTORY, WITH DESCRIPTIONS OF NEW GENERA AND SPECIES¹

By Howard Notman

PLATE XXXIX

Lispinus tenuis LeConte

This species is given as a synonym of L. tenellus Erichson, in the Junk-Schenkling Catalogue. Erichson's species was described from Colombia, South America and the West Indies and he uses the adjective nitidus (shining), whereas LeConte's species is described as subnitidus (feebly shining). The specimens at hand are very distinctly longitud-inally strigose and dull in lustre and it seems very probable that they should be regarded as a species distinct from L. tenellus.

Miami, March 10.

Thoracophorus costalis (Erichson).

Punta Gorda, November 17; (Leng). Enterprise, October 25, November 15, "under bark."

Omalium humerosum (Fauvel).

Enterprise, October 19.

TROGOPHLOUS Mannerheim

Trogophlœus maculicollis, new species

Form rather slender, parallel, subdepressed. Color dark castaneous; head and abdomen blackish; thorax with a large, nubilous blackish spot on the disk, extending to the apical margin; basal joint of the antennæ and the legs pale flavate, Pubescence very fine and inconspicuous. Integuments slightly shining on elytra and abdomen, distinctly less so on the thorax and head. Head and thorax very finely but strongly granulate-punctate, the margin of the thorax granulose. Punctures on the elytra clearly separated but very close, one-half their diameters apart, fine, shallow, umbilicate. Punctuation of the abdomen like that of the elytra but distinctly finer and denser. Head slightly transverse, a little narrower than the thorax. Antennal tuberculations strong, eyes large, moderately convex, coarsely granulate; tempora straight, one-third the diameter of the eyes, distinctly but obtusely angulate. Antennæ slightly longer than the head and thorax, feebly incrassate; second and third joints elongate, subequal; fourth and fifth just visibly elongate; the tenth as long as

¹In the preparation of this paper especial acknowledgements are due to Mr. C. W. Leng for the privilege of using the proof-sheets of his new 'List of the Coleoptera of North America' which has greatly expedited the work. Acknowledgements are also due to Col. T. L. Casey, Mr. E. T. Cresson, Jr., Librarian of the American Entomological Society, and to Mr. A. J. Mutchler of The American Museum of Natural History.

[Vol. XLII

wide. Thorax four-fifths the width of the elytra, one-third wider than long, widest at apical third where the sides are narrowly rounded, thence straight and strongly convergent to the apical angles which are produced, subdentiform; slightly more strongly convergent and feebly sinuate to the base which is slightly more than one-half the greatest width and very distinctly narrower than the apex; disk rather distinctly bi-impressed. Elytra just perceptibly wider than long, about one-third longer than the thorax, strongly longitudinally impressed near the suture. Abdomen narrower than the thorax, distinctly wider to the apex of the fourth segment; sides feebly arcuate. Length, 2.45-2.8 mm.; width, .5-.6 mm. Twenty-three specimens.

Type, labeled "Fla." Seven paratypes: 2, Cape Sable; 1, Key West; 4, labeled "Fla." Other specimens, Enterprise, November 22 and December 12; Titusville, November 8, at light; (Lutz).

This species is closely related to *fulvipes* Erichson described from Porto Rico. Erichson, however, states that in *fulvipes* the apical margin of the elytra is often paler. No trace of this is to be found in the twentytwo specimens at hand, not even in a pale-colored immature example. The elytra are in fact distinctly somewhat nubilously darker in the outer apical angles. The dark cloud on the thorax, also, is entirely constant. *T. texanus* Casey, which is given as a synonym of *fulvipes*, differs by its broader thorax and more widely spaced elytral punctures and probably more rounded tempora.

Trogophlœus basicornis, new species

Form somewhat robust and convex. Color dark castaneous; head and abdomen black; tarsi, tibiæ, and basal joint of the antennæ pale flavate. Integuments rather shining. Head and thorax with the punctures fine, distinct, separated by about half their diameters; punctures of the elytra twice the diameters of those on the thorax and separated by more than their diameters; the punctures somewhat bronzed; abdomen rather s rongly micro-reticula'e but very finely and sparsely punctate. Head scarcely transverse, very slightly narrower than the thorax; antennal tuberculations not very strong; eyes small but convex and coarsely granulate; tempora equal in length to the eve, strongly rounded and equally prominent. Antennæ as long as the head and thorax, slender, second joint almost as long as the next two and very much thicker, as thick as the first; third joint distinctly, fourth very slightly elongate; ninth and tenth joints distinctly larger, as long as wide. Thorax about three-fourths the width of the elytra, one-third wider than long, widest before the middle, sides nearly parallel anteriorly, rounded and nearly s raight posteriorly, base about two-thirds the greatest width; angles not distinct, discal impressions very feeble. Elytra scarcely transverse, about one-half longer than the thorax, sutural impressions very feeble. Abdomen slightly narrower than the elytra at base, subparallel to the apex of the fifth segment. Length, 1.75-2 mm.; width, .4 mm. Three specimens.

Type and paratype, labeled "Fla." and one specimen, Enterprise, September 14.

This species is related to T. nanulus Casey and T. modestus Casey but differs by its slender antennæ with the outer joints not transverse. The antennal structure is like that of T. corticinus Grav. and T. gracilis Mannerheim European specimens of which are at hand. The basal joint in *corticinus* is dark, however, and the fourth joint in *gracilis* is smaller and distinctly transverse. In both these species the elytra are longer than wide.

Oxytelus insignitus Gravenhorst.

Chokoloskee, April 8; South Bay, Lake Okeechobee, May 1, beating; Everglade, April 15, in traps; (Grossbeck).

Oxytelus nanus Erichson.

Gainsville, October 1, under cow dung; Monticello, October 8, in cheese traps; (Mutchler).

BLEDIUS Stephens

Series Armati

1.	Flanks of the thorax convex.
2.	Thorax scarcely wider than long; lateral thoracic angles obsolete
3.	Head narrower; elytra rufo-piceous; size larger, 5.5–6 mmarmatus Say. Head wider, nearly as wide as the thorax; elytra piceous black; size smaller, 4.3–4.9 mmarizonensis Fall.
4.	Apex of the thorax truncate; apical angles distinctstrenuus Casey. Apex of the thorax broadly rounded; apical angles broadly rounded furtivus Casey.
5.	Under surface of the thorax without an impressed line parallel to the margin6. Under surface of the thorax with an impressed line parallel with the margin8.
6.	Elytra finely and densely punctate
·7.	Elytra much longer than the thorax
8.	Median line of the thorax indistinct and incomplete9. Median line of the thorax distinct, entire11.
9.	Head without a tubercle but with a fovca
10.	Thorax opaque
11.	Thorax finely punctate 12. Thorax coarsely punctate 14.
12.	Elytral punctuation closer; punctures separated by about their own diameter 13. Elytral punctuation sparser; punctures separated by more than twice their diameteragonus Casey.

Bulletin American Museum of Natural History

13.	Median thoracic line feebly impressed; head finely and strongly punctate; elytra one-third longer than the thoraxlectus Casey. Median thoracic line more strongly impressed; head with faw fine and scattered
•	punctures; elytra one-fifth longer than the thoraxepiscopalis Fall.
14.	Head without a tubercle
15.	Head with an impression on the vertex
16.	Dorsal line of the thorax fine, feebly impressed17. Dorsal line of the thorax wide and very deeply impressedeximius Casey.
17.	Elytra finely and densely punctatecuspidatus LeConte. Elytra feebly, sparsely, and somewhat coarsely punctatetenuis Casey.

Bledius nigriceps, new species

Form rather slender, parallel, strongly convex. Color of head black; abdomen piceous black; thorax rufous; elytra testaceous, rather broadly blackish along the suture; antennæ rufous, legs testaceous. Head moderately shining, uniformly, finely but strongly granulate-reticulate; thorax and elytra very strongly shining, thorax very feebly reticulate near the margins; abdomen moderately shining, rather feebly reticulate. Head about four-fifths the width of the thorax, feebly convex, without punctures; antennal tubercles large and strong; anterior angles of the epistoma with small but strong and acute teeth; vertex with a rather large, broadly rounded tuberculation; epistomal suture fine, arcuate, scarcely impressed. Antennæ reaching the middle of the thorax; third joint as long as the second, as long as the next two; tenth joint one-third wider than long. Thorax as wide as the base of the elytra, four-fifths the width of the apex, as wide as long, sides parallel and straight for apical two-thirds thence broadly rounded to the base, lateral and basal angles completely rounded; apex subtruncate, apical angles rounded; disk very sparsely, unevenly, rather coarsely and indistinctly punctate; median line wide, entire and strongly impressed. Elytra about one-fourth longer than wide, suture about one-fourth longer than the thorax, sides nearly straight; glabrous, punctures coarse but not dense, separated by somewhat less than their diameters. Abdomen parallel to the apex of the fourth segment, not as wide as the elytra, nearly impunctate. Length, 4-4.5 mm.; width, .75-1 mm. ♂, ♀. Seven specimens.

Type and five paratypes, Fort Meyers, March 30, at light; (Grossbeck). One specimen from the type locality.

Series Semiferruginei

1.	Basal thoracic angles rounded, indistinct
	Basal thoracic angles not rounded, somewhat prominentturgidus Casey.
2.	Thoracic episterna not triangular, sutures parallel with the side margin of the under surface of the thorax
	of the pronotum
3.	Dorsal line of the thorax present4.
	Dorsal line of the thorax wanting

696

1920]

4.	Dorsal line faintanalis LeConte. Dorsal line well impressedpiceus Fall.
5.	Thorax very densely punctate; punctures moderate in sizeassimilis Casey- Thorax coarsely but not densely puncturednitidicollis LeConte
6.	Sides of the thorax very much rounded
7.	Head not or obsoletely punctured
8.	Thorax wider than long, densely puncturedrotundicollis LeConte. Thorax not wider than long, more coarsely puncturedfumatus LeConte.
9.	Head shining, not reticulate 10. Head more or less dull 13.
10.	Head punctured
11.	Head and thorax sparsely not very coarsely punctured; thorax longer than wide
	Head and thorax very coarsely and rather closely punctured; thorax as long as wide
12.	Thorax feebly reticulate laterallyspecularis Fall. Thorax strongly granulate-reticulate throughoutregularis Fall.
13.	Thorax more or less strongly reticulate, dull
14.	 Black, elytra paler. Head more or less distinctly punctate. Median thoracic line more or less strongly impressed
15.	Tenth antennal joint as long as wide; sides of the thorax straight anteriorly.
	Tenth antennal joint slightly transverse; sides of the thorax slightly arcuate anteriorly
16.	Thorax and abdomen black 17. Abdomen rufo-testaceous, thorax more or less darker 19.
17.	Outer antennal joints more or less transverse; thorax finely reticulate; head uniformly reticulate
18.	Elytra distinctly longer than the thorax, suture one-fifth longer, brownish black; antennal joints less transverse; thoracic episterna less narrowed anteriorly, width at the front angles one-half that at the coxal fissures. <i>deceptivus</i> Fall. Elytra scarcely longer than the thorax, rufo-castaneous, blackish on the base and suture; antennal joints more transverse; thoracic episterna more narrowed anteriorly
19.	Thorax coarsely and densely puncturedrubiginosus Erichson. Thorax finely and sparsely puncturedgravidus Casey.

,

Bledius canaliculatus, new species

Form rather slender, parallel, convex. Color rufo-piceous, head and thorax black; antennæ and legs rufo-test aceous, the former slightly infuscate distally. Integumen's shining throughout; abdomen, only, feebly and partially reticulate. Head as wide as the thorax; eyes large and very convex; antennal and epistomal tubercles feeble; epis'omal suture distinctly impressed; a feeble impunctate tuberculation on the vertex with a fovea behind it; sides of the front with numerous large, rather deep punctures separated by less than their diameters, those on the clypeus less distinct. Antennæ long and slender, nearly reaching the base of the thorax; third joint slightly shorter than the second; fourth and fifth elongate, fourth scarcely shorter than the third, fifth slightly shorter than the fourth; outer joints gradually and very moderately larger; tenth as long as wide. Thorax as long as wide, three-fourths as wide as the elytra, sides in the anterior two-thirds straight and parallel thence broadly rounded posteriorly, angles and base completely obsolete; apex just visibly arcuate, apical angles rounded. Median line rather wide but feebly impressed; punctures large, deep, separated by about their diameters, showing a marked tendency to canaliculation especially on the sides. Elytra as long as wide, on the suture about onefifth longer than the thorax; punctures distinctly smaller than those on the thorax but as closely placed, evenly distributed; pubescence whitish, rather long and conspicuous but not dense, that on the abdomen longer and pale fulvous. Abdomen scarcely narrower than the ap x of the elytra, sides subparallel to the apex of the fourth segment; punctures fine and very sparse dorsally, more numerous, rather coarser but very indistinct ventrally. Length, 5 mm.; width, 1 mm. One specimen.

Type, Fort Myers, March 30, at light; (Grossbeck).

Bledius punctatissimus LeConte.

Pablo Beach (on the beach just above high-tide mark), November 4, in or under dung, boards, etc.; Punta Gorda, November 16, sweep-

ing grasses on edge of standing rain-pool; (Leng).

Bledius basalis LeConte.

Dunedin, March 4; (Blatchley). Pablo Beach (on the beach just above high-tide mark), November 4, in or under dung, boards, etc.; (Leng).

Bledius dimidiatus LeConte.

Enterprise, October 1.

Bledius cordatus (Say).

Marco, April 17, at light; (Grossbeck).

Osorius politus LeConte.

Titusville, November 8; (Lutz).

OSORIUS Latreille

Osorius brevicornis, new species

Form elongate, parallel, cylindrical. Color black; front of the head, antennæ, legs, thorax and elytra rufous; elytra slightly paler. Head feebly reticulate, shining with rather numerous, moderate-sized and somewhat indistinct punctures, divided by a median smooth line of moderate width; thorax still more feebly reticulate, strongly shining, with irregular series of elongate punctures divided medially by a

smooth line, punctures slightly larger and more distinct than those on the head, not very closely placed, separated by more than their diameters; elytra strongly shining but somewhat rugose with the punctuation rather indistinct except near the base where the punctures are about the size of those on the thorax; abdomen rather more finely and closely punctured but not rugose. Head slightly transverse, as wide as the thorax, strongly arcuato-angulate anteriorly, front and vertex evenly convex; even small, distant more than their diameters from the base. Antennæ short, rather stout scarcely reaching the middle of the thorax; first joint very long, as long as the next five; second joint stout, about one-half longer than wide; third shorter, but slightly elongate, one-fourth as long as wide; fifth and sixth globular, visibly transverse; remaining joints suddenly somewhat larger, all transverse, eight to ten one-third wider than long; terminal joint very slightly elongate, a little longer than the tenth; mentum trap zoidal, scarcely transverse, narrower in front, strongly granulose. Thorax closely connate with the head, a very little longer than wide, sides somewhat strongly narrowed posteriorly, feebly arcuate, apical angles acute, basal rounded. Elytra parallel, scarcely wider or longer than the thorax, distinctly impressed along he suture. Abdomen as wide as the elytra at base, sides straight and distinctly divergent to the apex of the fifth segment where it is distinctly wider than any part of the body. Length, 4.5 mm.; width, .75 mm. One specimen.

Type, Pensacola, October 11, sweeping; (Mutchler).

This species may be distinguished from O. latipes Erichson as represented by a Kentucky specimen agreeing with Erichson's description, by its color, more indistinctly punctured head and elytra, abdomen wider posteriorly, but especially in the antennal structure. The outer joints in O. latipes are as long as wide and the funicular joints all visibly elongate; the third is nearly twice as long as wide, whereas the third in O. brevicornis is not more than one-fourth longer.

STENUS Latreille

Stenus teter, new species

Form rather slender. Pubescence short and fine, very inconspicuous. Head rather small, twice as wide as long; interocular lines meeting at about two lengths in advance; interocular surface rather broad, slightly more than twice the width of the eye; sulcations broad, rather shallow, separated by a short, not very prominent, but h ghly polished tuberculation; punctures rather coarse and close, separated by about one-half their diameters, more or less coalescent in groups of two or three; interspaces very shining. Antennæ somewhat longer than the width of the head; basal joints black, the remainder dark piceous; slender; joints three to seven decreasing gradually in leng h, seventh a little stouter, eighth very slightly elongate, club moderate; maxillary palpi dark piceous throughout, moderate in length. Thorax nearly one-third longer than wide, widest a little in front of the middle where it is three-fourths the wid h of the head, thence nearly straight and slightly convergent to the anterior ang'es, convergent and distinctly sinuate to the posterior angles, apex arcuate, equal in width to the base which is nearly straight; surface rather uneven, more or less distinctly impressed on the sides, with a fine, almost linear, median canaliculation which is subentire; punctures rather coarse, slightly larger than those of the head,

1920]

unevenly distributed, closer and more or less canaliculate in the lateral impressions where they are separated by half their diameters, more widely spaced in irregular median areas; interspaces highly polished. Elytra at base just visibly wider than the head, as wide as long, suture one-fifth longer than the thorax, sides parallel, feebly arcuate; surface very uneven, strongly impressed along the suture; a humero-discal impression and an apico-lateral impression; punctures similar in size and arrangement to those on the thorax. Abdomen nearly as wide as the elytra at base, very gradually decreasing in width to the apex of the fourth segment, punctuation fine and confined more or less to the sides of the segments; transverse carinæ four-cuspid, the cusps subsimilar. Legs rather long and slender, dark piceous, first joint of the posterior tarsi as long as the next two, a little shorter than the last, fourth simple. Length, 3.75-4.25 mm.; width, .7-.8 mm. σ^7 , Q. Two specimens.

Male.—Fifth ventral segment just perceptibly sinuate at middle, sixth with a very broad and shallow emargination, occupying the whole width of the segment, seventh segment truncate with a rather long acute tooth at either end.

Female.—Sixth segment broadly rounded.

Type male and allotype female, Enterprise, December 15, "débris, L. shore."

This species is evidently related to *S. pluto* Casey. It may be distinguished by its narrower elytra with coarser punctuation and uneven surface and by its narrower and more elongate thorax.

Stenus sectilifer Casey.

Titusville, November 8; (Lutz). Punta Gorda, November 16; (Leng).

Stenus meridionalis (Casey).

Enterprise, November 22, December 12 and 15. Fort Meyers, November 15, at roadside pool, apparently rather permanent; (Lutz).

Stenus callosus Erichson.

Monticello, October 8, dredging lakes in cypress swamp at Lake Micesoukee; (Mutchler). Titusville, November 8, in a roadside pond, probably part of a wet-weather run; (Lutz).

Stenus lutzi, new species

Form slightly robust, convex. Subglabrous. Integuments very highly polished. Head large, twice as wide as long; interocular surface flat, twice as wide as the eye; ocular lines meeting at about one length in advance; a median, fusiform, impunctate callosity on the vertex and indistinct callosities either side near the eye; supraantennal ridges smooth and polished; punctures moderate in size and close-set, separated by about one-third their diameters. Antennæ longer than the width of the head, slender, rather pale brownish testaceous; club darker, third joint nearly as long as the next two which are of equal length and distinctly longer than the sixth; seventh incrassate, elongate; eighth slightly transverse; ninth and tenth subequal in length; terminal joint much longer. Thorax three-fourths the width of the head, widest at the middle where it is just visibly narrower than long, sides arcuate and 1920] .

convergent anteriorly, equally convergent and sinuate posteriorly, apex arcuate and equal to the base which is much less arcuate. Punctures coarse, distinctly larger than those on the head, more widely and unevenly spaced on the disk, with a median, fusiform, highly polished smooth area, on the sides separated by about half their widths. Elytra strongly convex, at base slightly narrower than the head, suture slightly longer than the thorax, conjointly slightly transverse, sides rather strongly divergent posteriorly so that the apex is distinctly wider than the head; suture feebly impressed, punctures equal in size to those on the thorax, sparse along the suture, more dense laterally where they are separated by about their diameters; sides strongly rounded apically. Abdomen much narrower than the elytra, unmargined; transverse carinæ without cusps; segments rather closely punctured in the basal impressions, nearly impunctate apically, punctures much finer than those on the elytra. Legs of moderate size; basal joint of the posterior tarsi as long as the next three, fourth deeply bilobed; color pale brownish testaceous, femora indefinitely darker to the knees. Length, 3 mm.; width, .75 mm. One specimen.

Female.—Sixth ventral segment evenly rounded posteriorly.

Type female, Monticello, October 8, dredging lakes in cypress swamp, at Lake Micesoukee; (Mutchler).

This species is very distinct from S. callosus Erichson by its large head, short transverse elytra, with the sides strongly divergent posteriorly and the slightly darker legs with indefinitely infuscate femoral apices.

Pinophilus latipes Gravenhorst.

Fort Meyers, March 30, April 1 and 22 at light; (Grossbeck). Key West.

Palaminus testaceus Erichson.

Enterprise, October 25.

Palaminus contortus LeConte.

Lake Island, February 25; (Blatchley).

Gastrolobium bicolor (Gravenhorst).

Enterprise, November 22.

Hesperobium cinctum (Say).

Fort Meyers, March 30, at light; (Grossbeck).

Pæderus littoreus Austin.

Clearwater, April 30; (Van Duzee). Newberry, November 18, under boards, near pines in sandy field; (Leng).

Pæderus floridanus Austin.

Fort Meyers, November 12, at light; (Lutz).

Pæderus obliteratus LeConte.

Sanford, April 4; (Blatchley). Enterprise, November 12, December 12.

TETARTOPEUS Czwalina

Tetartopeus nigriceps, new species

Form elongate, subfusiform, scarcely convex. Color piceous, head black, elytra with the outer apical angles sharply testaceous; labrum, mouth-parts and the two basal joints of the antennæ rufous; legs dull testaceous; the apex of the abdomen not distinctly paler; apical joint of the antennæ paler. Head to the bases of the antennæ as wide as long, orb cular; the eyes moderate in size, at less than twice their diameters from the base. Head behind the eyes convergent throughout, in the female perfectly circular, in the male the base is just visibly truncate and the sides feebly subangulate; neck one-third the width of the head, surface distinctly, more or less closely punctate with a smooth area on the vertex, rather coarse punctures mixed with fine. Antennæ even in thickness, attaining the base of the thorax; first joint considerably longer; the second slightly shorter; the third somewhat longer than the remaining which are of equal length, about twice as long as wide. Gular sutures at apex separated by about one-eighth the width of the head, straight and slightly convergent to the base; under side of the head not closely, rather finely and indistinctly punctured. Thorax scarcely wider than the head (σ), just visibly so (φ), a little less than one-third longer than wide, about two-thirds the width of the elytra, sides very feebly arcuate (σ) , absolutely parallel (\circ) ; angles all equally moderately rounded, surface rather coarsely and closely punctate with a smooth median line equal in width to the thickness of the first antennal joint. Elytra a little less than one-third longer than wide, just visibly more elongate in the female; the suture a sixth longer than the thorax, sides parallel, apex somewhat strongly emarginate, surface strongly and rather closely punctate, the punctures very slightly smaller than those on the thorax. First joint of the posterior tarsi distinctly shorter than either the second or the third. Length, 8 mm.; width, 1.4-1.5 mm. σ^2 , φ . Two specimens.

Type male and paratype female, labeled "Fla."

Male.—The second ventral segment of the abdomen slightly flattened and glabrous medially, the third, fourth, and fifth longitudinally impressed, the sixth with a rather deep and narrow and acutely triangular emargination about one-third the length of the segment. The sixth dorsal broadly rounded.

Female.—The sixth ventral segment with a broad lobe, at base two-thirds the width of the segment, broadly rounded at the apex, length about two-thirds that of the segment. The sixth dorsal segment strongly angulate.

The shape of the head in this species allies it to T. nigrescens Casey but the sexual characters are those of T. angularis LeConte from which it differs considerably in proportions.

Pseudolathra analis (LeConte).

Enterprise, December 15.

Linolathra dimidiata (Say).

Enterprise, December 12 and 15.

Lathrobiella ventralis (LeConte).

Enterprise, November 17, December 12 and 14.

Lithocharis ochracea (Gravenhorst).

Enterprise, October 12, November 22.

Sciocharis Arribálzaga

(Sciocharella Casey)

Sciocharis (Sciocharella) quadriceps, new species.

Form elongate, moderately slender, rather depressed. Color brownish testaceous; head darker, tinged with piceous; elytra paler, tes aceous. Body evenly, finely, rather indistinctly micro-reticulate and punctate throughout, punctures little more than a circular ring with a minute hair at the center; lus re feebly shining. Head to the bases of the antennæ slightly transverse; sides parallel, base trunca'e, posterior angles moderately rounded; eyes round, moderate in size, distant somewhat more than their own diameters from the base. Labrum narrowly and deeply emarginate medially with a denticle either side of the emargination. Antennæ as long as the head and thorax; first two joints greatly thickened; second nearly as long as the next two. Gular sutures well separated at base, about one-seventh the width of the head, parallel for a short distance then arcuate and rather strongly divergent to the base. Neck a little less than one-half the wid h of the head. Tho ax as wide as long, about four-fifths the width of the elytra, visibly narrower than the head, base and apex equally moderately arcuate, angles rounded, anterior slightly more distinct than the basal. Elytra scarcely wider than the head, slightly longer than the thorax, about one-fourth longer than wide, sides parallel, apex dis incluy emarginate. Abdomen a little narrower than the elytra, parallel to the apex of the fourth segment. Prosternum not carinate, somewhat convex medially. Anterior tarsi not dila'ed; four basal joints of the posterior tarsi subequal in length, terminal joint as long as the preceding three. Length, 2.5–2.75 mm.; width, 4 mm. J, Q. Nine specimens.

Male.—Fifth ventral abdominal segment with a broad, short median lobe, not quite one-third the width of the segment; sixth with a deep, cuspidiform median emargination.

Type male and allotype female, labeled "Fla." Paratypes: four, Enterprise, October 12 and 19, rubbish; three, labeled "Fla."

This species differs from S. delicatula Casey in its larger size, larger eyes and narrower, somewhat elongate elytra.

Scopæus carolinæ Casey.

Enterprise, October 27, November 1 and 19, "débris, L. shore."

Scopæus macilentus Casey.

Enterprise, October 25.

Scopæopsis opaca (LeConte).

Enterprise, November 19 and 22, Titusville, November 8, sifting leaves in forest; (Lutz).

Stilicus angularis Erichson.

Enterprise, October 15 and 19.

Stamnoderus pallidus Casey.

Enterprise, October 19, "palm."

Astenus binotatus (Say).

Punta Gorda, November 16, sifting débris on beach of Charlotte Harbor; (Leng).

Astenus spectrum (Casey).

Enterprise, November 15, December 12.

Astenus fusciceps (Casey).

Cape Sable.

Leptogenius brevicornis Casey.

Enterprise, December 15.

Gyrohypnus temporalis (LeConte). Enterprise, December 12.

Gyrohypnus luteiventris Casey.

Newberry, November 18, beating pine; (Leng).

Lithocharodes nigripennis (LeConte).

Enterprise, October 19, November 19 and 22, December 12.

Diochus schaumi Kraatz.

Enterprise, December 12, 14 and 15. Titusville.

Ophioömma, new genus

Labial palpi with the penultimate joint large, somewhat inflated; terminal joint very small, elongate, parallel, the apex truncate. Maxillary palpi with the penultimate joint with short, coarse hairs, oval, internal edge more arcuate, the apex oblique; the terminal joint very small, conical, acute.

Head broad, flattened, quadrangular, front truncate; labrum large, strongly obliquely truncate either side with a deep triangular, median emargination; antennæ inserted at the apical angles of the epistoma, some distance before the eyes, not closely approximate. Eyes small, distant from the base; neck narrow; one-third the width of the head; gular sutures approximate anteriorly, arcuate and strongly divergent posteriorly, separated at the base by one-third the width of the head. Antennæ short, distinctly capitate; first joint stout elongate, second very short. Mandibles with strong tooth near the apex.

Thorax with the side margin acute, entire, becoming inferior anteriorly; prosternum truncate at apex, moderate before the coxæ, which are separated by a thin vertical lamina which attains the mesosternum; cavities moderately open.

Intermediate coxæ contiguous; mesosternum rather long, posterior projection acute between the coxæ, with a large, round, deep, median fovea; metasternum short, posterior coxæ conical, prominent, contiguous.

Abdomen inflated, segments gradually increasing in length posteriorly.

Legs slender and moderate in length.

Antennæ and legs pubescent.

This genus seems best placed in the Xantholini with the genus *Hyptioma* Casey from which it is distinguishable by its divergent gular sutures, narrow neck, capitate antennæ and foveate mesosternum.

704

Ophioömma rufa, new species

Form elongate, parallel, somewhat ventricose. Color uniform dull rufous; legs and antennæ scarcely paler. Pubescence short, pale, inconspicuous. Head and thorax with the punctures rather fine, separated on both by a narrow impunctate median line; punctures without arrangement, more dense on the sides of the head behind the eyes. Punctures on the elytra coarser and more distinct, slightly rugulose. Abdomen finely, evenly, rather indistinctly and not closely punctate. Head behind the antennæ about one-fourth wider than long; eyes small, not prominent, at more than twice their diameters from the base, sides nearly straight, slightly divergent posteriorly, posterior angles rather narrowly rounded; base truncate; front strongly narrowed before the eyes; antennæ separated at base by a little more than one-third the width of the head. Head beneath with large, widely spaced, perforate punctures bearing setæ. Antennæ reaching the middle of the thorax; first joint stout, elongate; second one-half the length of the first, as long as wide, equal in length to the third and stouter; joints four to eight moniliform; the last three abruptly slightly larger; nine and ten slightly transverse; eleven scarcely as long as the two preceding, not much longer than wide, acutely pointed. Thorax just visibly narrower than the head; widest at the apex where it is just visibly wider than long; apex arcuate, anterior angles cbtuse but distinct, sides nearly straight and slightly convergent to the broadly rounded posterior angles; base scarcely truncate, distinctly pedunculate. Elytra slightly narrower than the thorax at base, as wide at apex; sides straight, conjointly about one-fourth wider than long; suture not overlapping, four-fifths the length of the thorax. Abdomen as wide as the elytra at base with the sides broadly arcuate, widest at the apex of the third segment where it is distinctly wider than the head. Anterior tarsi dilated and pubescent beneath. Posterior tarsi with the first joint elongate, as long as the next two and also as the terminal joint; joints two to four of equal length. Length, 2.3 mm.; width, .5 mm. Two specimens.

Type and paratype, Punta Gorda, November 16, sifting débris on beach of Charlotte Harbor; (Leng).

This species resembles the smaller *Lathrobia*, but seems structurally related to the Xantholini.

Cafius bistriatus (Erichson).

Punta Gorda, November 11, sifting débris on shore at mouth of Peace River, at high-tide mark, November 12; (Leng).

Neobisnius umbripennis (LeConte).

Enterprise, October 12, November 22. Pebbly Beach, Jacksonville, May 9.

Actobius cinerascens (Gravenhorst).

Enterprise, November 1 and 22, December 12 and 14.

Actobius parcus Horn.

Enterprise, October 15.

Philonthus hepaticus Erichson.

Enterprise, September 17 and 21, October 1, November 22. Punta Gorda, November 12, sifting débris on beach of the Charlotte Harbor at high-water mark; (Leng).

Philonthus flavolimbatus Erichson.

Enterprise, September 17, October 12.

Philonthus gopheri Hubbard.

Three specimens marked "Fla." and three Enterprise, October 15, one of these labeled "Gophers Hole."

Philonthus alumnus Erichson.

Enterprise, October 19, November 22, December 15. Fort Meyers, April 22; Everglade, April 9, at light; (Grossbeck).

- **Philonthus fulvipes**(Fabricius).
 - Sanford, May; (Van Duzee).
- Philonthus lomatus Erichson.

Enterprise, December 12 and 14. Key West.

Belonuchus formosus (Gravenhorst).

Three specimens in which the head and thorax are entirely red, do not differ in other respects from those typically colored.

Enterprise, October 16, December 12. Cape Sable. New River.

Creophilus maxillosus var. villosus (Gravenhorst).

Enterprise, November 1. Fort Meyers, April 26, from a hog's head; (Grossbeck).

Tanygnathus bicolor Casey.

De Funiak Springs, October 17, under board; (Mutchler).

Acylophorus pronus Erichson.

Enterprise, December 14.

Tachyporus macropterus Stephens.

Enterprise, September 14, October 16 and 25, November 22.

Erchomus ventriculus (Say).

Key West.

Erchomus lævis (LeConte).

Dunedin, January 15 (Blatchley). Enterprise, December 14.

Conosoma ornatum (Sharp).

Two specimens agree in all respects with the description of the above species, with the exception of slight differences in color which Sharp states is variable.

Enterprise, September 22.

Conosoma basalis Erichson.

Enterprise, November 15 and 22.

Conoscma scriptus (Horn).

Enterprise, November 20.

Brycporus rufescens LeConte.

Ortega, near Jacksonville, November 3, sifting thin leaf covering, mainly pine needles, of sandy soil; (Leng).

706

Boletobius pygmæus (Fabricius).

Pensacola, October 13, in mushroom fungus; (Mutchler).

```
Deinopsis myllænoides Kraatz.
```

Enterprise, November 11.

Myllæna Erichson

The following synopsis of this genus, being based in large part on descriptions alone, must be considered somewhat tentative. European specimens of the three European species listed from North America are at hand. In regard to Mullana minuta Gravenhorst, it should be noted that the following phrase is used in the original description: "Coleoptra elytris quadratis"; and that in the preceding description of Aleochara (Myllæna) dubia the following phrase is used: "Coleoptra elvtris latitudine paulo longioribus, subquadratis" (Gravenhorst, Mon. Col. Microp., pp. 174–176). Erichson, in the 'Genera et Species Staphylinorum' (pp. 209–211), does not give the proportions of the elytra; and Ganglbauer, in the 'Kafer von Mittleleuropa,' in the generic diagnosis, states: "Die Flugeldecken so lang oder kurzer als der Halsschild:" in his descriptions of the species dubia and minuta, he states: "Flugeldecken so lang als der Halsschild." In specimens of five European species sent to the author, including those noted, the elvtra are conjointly distinctly transverse.

In regard to *Myllæna vulpina* Bernhauer it should be noted that the original description (Deutsche Ent. Zeits., 1907, p. 381.) states: "Die Flugeldecken langer als der Halsschild." Blatchley in the 'Coleoptera of Indiana,' however, states: "The elytra as wide and as long as thorax." The specimens at hand identified as *vulpina* Bernhauer agree with Blatchley's description in this point.

Because of the excellence of Col. Casey's descriptions, the author feels justified in offering the following synopsis as an aid to the student of this somewhat obscure genus.

1.	Elytra not distinctly shorter than the thorax2.
	Elytra distinctly shorter than the thorax; suture not more than four-fifths the
	length of the latter
· 2.	Antennæ longer; the tenth joint one-half or more longer than wide3. Antennæ shorter; the tenth joint at most one-fourth longer than wide11.
3.	Thorax narrow, one-third wider than long4.
	Thorax broader, about one-half wider than long6.
, [']	Thorax still broader, three-fifths wider than longinsipiens Casey.

1920]

4. Head large, three-fifths the width of the thorax; antennæ dark.....5. Head smaller, one-half the width of the thorax; antennæ pale.

vulpina	Bernhauer.
---------	------------

	· ····F ····· =
5.	Posterior angles of the thorax more obtuse, not prominent; antennæ longer. intermedia Erichson.
	$Posterior \ angles \ of \ the \ thorax \ prominent; \ antennæ \ shorter \ . \ fuscipennis \ Kraatz.$
6.	Posterior thoracic angles projecting slightly posteriorly
7.	Size larger; more than 2 mm.; fifth abdominal segment one-half as wide as the
	base
8.	Thoracic base broadly arcuate and sinuate laterally9. Thoracic base feebly arcuate; elytral sinuses large and deep10.
9.	Basal angles of thorax right; elytral sinuses unusually feebleinsomnis Casey. Basal angles of thorax strongly obtuse; elytral sinuses deepdubia Gravenhorst.
10.	 Pubescence uniform; eleventh antennal joint much shorter than the two preceding; elytral suture nearly as long as the thoraxdissimulans Casey. Pubescence not uniform, longer erect hairs mixed with the dense decumbent pubescence; eleventh antennal joint nearly as long as the two preceding; elytral suture very slightly shorter than the thoraxmolesta Casey.
11.	Head small, about one-half as wide as the thorax
12.	Thorax narrower, less than one-half wider than long; elytra not longer than the thorax. 13. Thorax broader, three-fifths wider than long; elytra longer then the thorax. umbra Casey.
13.	Thorax a little less than one-half wider than long, widest a little behind the middle; sides straight thence to the apex. Abdomen more strongly narrowed; fifth segment distinctly less than one-half the width of the base. currax, new species.
	Thorax one-third wider than long; sides evenly arcuate from base to apex. Abdomen less narrowed; fifth segment rather more than one-half the width of the baseminuta Gravenhorst.
14.	Head smaller, three-fifths the width of the thorax
15.	Thorax narrow, one-third wider than long
16	Destanian them also an also and also and an all in the link the law on them wide

16. Posterior thoracic angles rounded; antennal joints slightly longer than wide. *cuneata*, new species.

708

7	Posterior thoracic angles distinct; antennal joints almost wider than long. fenyesi Bernhauer.
17.	Thorax with sides evenly arcuate; basal angles feebly prominent posteriorly. $frivola$ Casey.
3	Thorax widest behind the middle; base without lateral sinuations; posterior angles broadly roundedobscurata Casey.
18 .	Thorax more transverse, three-fifths or more wider than long19. Thorax less transverse, not much more than one-half wider than long21.
19.	Head larger, three -fifths as wide as the thorax
20.	 Elytra shorter, suture two-thirds the length of the thorax. Abdomen more narrowed; fifth segment but little more than one-half as wide as the base. Lustre more shiningimpellens Casey. Elytra longer, suture four-fifths the length of the thorax. Abdomen less narrowed; fifth segment nearly two-thirds as wide as the base. Lustre duller. brevicollis Casey.
21.	Antennæ more elongate; tenth joint one-half or more longer than wide
22.	Head small, one-half as wide as the thorax 23. Head larger, three-fifths as wide as the thorax immunda Casey.
23.	Elytra longer; suture about four-fifths as long as the thorax
24.	 Size smaller, 2 mm. Abdomen less narrowed; fifth segment more than one-half as wide as the base; angulation of the sixth segment in the male twice as long. Lustre dull
25.	Punctuation moderately dense. Thorax with the base slightly sinuate laterally. The fifth abdominal segment slightly more than one-half as wide as the base
26.	Thorax wider, one-half wider than long
27.	Color piceous-black. Elytra longer, three-fourths the length of the thorax. Vestiture not uniform; longer erect hairs mixed with the decumbent pubes- cence

Myllæna cuneata, new species

Rather s'ender, moderate'y convex, somewhat shining. Color piceous; basal portions of the five basa' segmen s blackish; an'ennæ and legs slightly paler. Pubescence fine, pale decumbent and uniform. Punctures fine and dense. Head large, three-fif hs as wide as he thorax. An'ennæ (σ^3) moderate'y long, slightly increasate; the outer join s about one-fif h longer than wide, the terminal joint wider, acutely pointed, not as long as the two preceding. Thorax slightly less than one-third wider than long, feebly and evenly arcua e from base to apex; base scarcely arcuate, lateral sinuations just perceptible; posterior angles ob use and rather broadly rounded. Ely ra parallel, dis inctly transverse, equal in wide to the thorax; the suture very slightly shorter, the lateral sinues deep. Abdomen slightly narrower than the elytra, strongly narrowed, the fif h segment scarcely one-half the width of the base, the six h with the apical angulation in the male broader than long; the apex strongly rounded. Leng h, 1.5–1.75 mm.; wid h, 4.5 mm. σ^3 , Q. Fif een specimens.

Type male and allo'ype female, labeled "Fla." Para'ypes: 3 labeled "Fla." 3 En'erprise, November 19 and December 12. Other specimens, Enterprise, November 22.

Myllæna currax, new species

Not s'out, moderately convex, somewhat shining. Color piceous, basal portions of the five basal segments of the abdomen blackish; an'ennæ and legs scarcely paler; pubescence and punctua'ion as in the preceding. Head one-half as wide as the thorax. An'ennæ Q) dis inclus thicker than in the preceding; join's less elonga'e; the tenth very slightly longer than wide; eleventh about as long as the preceding two. Thorax sligh'ly less than one-half wider than long, widest a little behind the middle, sides thence s raighter and ra her s rongly convergent to the apex, slightly convergent to the pos erior angles which are ob use but very dis inct; base as in the preceding. Ely ra parallel, transverse, as wide as the thorax; the su'ure about as long as the thorax; the apical sinuses deep. Abdomen as in the preceding but with the apical angula'ion of the six'h segment broader, nearly twice as wide as long. Length, 2 mm.; wid h, .5 mm. Q. One specimen.

Type, Enterprise, December 12.

Myllæna infuscata Kraatz.

One specimen labeled ''Fla."

Oligota parva Kraatz.

Enterprise, September 22, October 5 and 19.

Group SILUSÆ

Dr. Fenyes places ten genera in this group (Gen. Ins., Fasc. 173A, p. 7). The following synopsis of these genera is constructed from the descriptions. Several of them do not mention certain characters of importance. The synopsis is therefore conjectural in certain points. Kiesenwetter does not state the proportions of the ligula in relation to the first joint of the labial palpi in *Halmæusa*. Bernhauer does not give the proportions of the tarsal joints in *Parasilusa* nor are they given in the descriptions of *Pectusa*, *Eudiestota* and *Eusipalia*. In *Diestota*, Rey States that the end joint is equal in length to the three preceding. It seems a fair inference to suppose that the proportions are normal in those genera in which they are not given. The genera in the last section cannot be satisfactorily separated with the characters given. In *Parasilusa* the ligula is said to be divided to the middle, but the prosternum is not described. The ligula is not mentioned in the others. Notwithstanding these defects sufficient data is given to show the relationships of the proposed genus.

1.	Mesos' ernum acu'e at apex; middle coxæ narrowly separated2. Mesos ernum broad between the coxæ; truncate or slightly rounded at apex5.
2.	Ligula en ⁺ ire
3.	Ligula less elonga'e, no' surpassing the first joint of the labial palpi4. Ligula very elonga'e, surpassing the first joint of the labial palpi. Linoglossa Kraatz.
4.	Last joint of the maxillary palpi one-half longer than the penul'ima'e. Halmæusa Kiesenwetter.
	Last joint of the maxillary palpi equal in length to the penultimate. Silusa Erichson.
5.	Terminal joint of the intermediate tarsi longer than the three preceding uni'ed
6.	Pros ernum simple; mesos ernum ex ending to the middle of the coxæ7. Pros ernum carinate; mesos ernal process ex ending to two-thirds the length of the coxæ; infralateral carinæ dis inct
7.	 Abdominal segmen's s'rongly impressed; fourth and fifth of equal leng h; infra- la'eral carinæ very indis inc¹
8.	Pros'ernum simple
9.	Me'as'ernum not foveola'e10. Me'as'ernum between the intermediate coxæ foveolateEusipalia Sharp.
10.	Ligula divided to the middle

¹Col. Casey supplies the following concerning the genera Apheloglossa and Pectusa: "In Apheloglossa the prosternum is not carinate. In Pectusa the last joint of the middle tarsi is longer than the first three combined by about a third. The prosternum is not carinate and the ligula is apparently entire and rather pointed."

SCHISTACME, new genus

Maxillæ elongate, not very narrow; the inner lobe about three times as long as wide, widest at two-thirds its length, very slightly narrowed to base, strongly narrowed to apex which bears a narrow acute tooth projecting inward; the apical third of the inner edge carries about ten, long, bristle-like teeth; the outer lobe is slightly longer than the inner but no thicker, the apex is bluntly rounded and ciliate for about one-quarter of its length; the lobe is slightly bent at apical third.

Maxillary palpi four jointed; the second and third joints are subequal in length, not very incrassate; the third is about twice as wide as long, a little wider than the second, and strongly narrowed in less than basal third; the very narrow subulate fourth joint is about one-half the length of the third.

Mandibles broad at base, apex rather long, narrow and strongly bent, the inner edge obtusely angulate near the base and finely serrate from a little before the angulation to the apical tooth; the teeth become gradually less distinct toward the apex. (There is a deep fissure in the inner edge of the left mandible at the base of the apical tooth giving it the appearance of an appendiculate tarsal claw. The fissure is apparently lacking in the right mandible.)

Ligula moderately elongate, narrow, bifid at apex; paraglossæ not apparent.

Labial palpi two jointed; joints of equal length, elongate, first joint surpassing the ligula.

Mentum broad, truncate at apex, slightly narrowed in front.

Infralateral carinæ strong, entire.

Labrum short, twice as wide as long, truncate, with a small rather shallow median notch.

Prosternum broadly angulate posteriorly with a small acute point at middle and a strong median carina.

Mesosternum simple; intermediate coxæ narrowly separated, projection long and acute, more than two-thirds the length of the coxæ, fitting over the metasternal projection which is also acute.

····· Coxal cavities rather small, marginal bead entire.

Last joint of the intermediate tarsi not quite as long as the three preceding; basal joints of the posterior tarsi elongate, decreasing gradually in length; first shorter than the next two.

Tibiæ setose.

Antennæ short, strongly incrassate.

Schistacme obtusa, new species

Plate XXXIX, Figure 1

Form moderately stout, slightly convex. Color pale rufo-testaceous. Rather shining. Punctuation and pubescence coarse, not at all close; punctures on the head umbilicate, elsewhere asperate, less numerous on the fifth segment, surface alutaceous throughout. Head rather large, transverse, a little more than one-half the width of the thorax, slightly wider than the thorax at apex; eyes moderate, not projecting, distant from the base a little less than their own diameters. Antennæ not as long as the head and thorax; first joint stout, oval, one-third longer than wide; second and third elongate, twice as long as wide, obconic, third a little shorter and more slender than the second; fourth globular; fifth one-half wider; sixth two-thirds wider, tenth twice as wide as long. Terminal joint conical, apex obtusely rounded, nearly as long as the preceding three. Antennæ not conspicuously setose. Thorax three-fifths wider than long, just perceptibly wider than the elytra, rather convex, without impressions, narrowed anteriorly, sides evenly and rather strongly arcuate, base broadly arcuate and feebly sinuate laterally; posterior angles obtuse, broadly rounded. Elytra parallel, transverse, conjointly one-half wider than long; the suture slightly shorter than the thorax, apex very feebly emarginate, apical sinuses moderately deep. Abdomen very slightly narrower than the elytra, moderately narrowed posteriorly, fifth segment three-fourths the width of the base; three basal segments with feeble transverse impressions. Length, 1.5 mm.; width, .45 mm. Eleven specimens. σ^3 , φ .

Male.—Sixth dorsal segment of the abdomen broadly biemarginate, tricusped; sixth ventral with a strong median triangular projection one-third the width of the segment, at base a little broader than long, apex rounded with a few closely placed hairs.

Female.—Sixth dorsal segment of the abdomen with a very broad median emargination, four times as broad as deep.

Type male, labeled "Fla."; allotype female, Enterprise, November 15. Nine paratypes: 6 Enterprise, November, 15, "bark"; 3 labeled "Fla."

Enterprise, November 15, "bark',

Thecturota fracta Casey.

Enterprise, September 14, October 15; November 15, December 12, "rubbish."

Thecturota nevadica Casey.

Enterprise, November 22.

It is surprising to find specimens of the above two species of *Thec*turota described from Arizona and Nevada respectively, in Florida material, but the descriptions fit so perfectly that identification seems certain.

Group BOLITOCHARÆ

1.	Infralateral carinæ of the head lacking or very incomplete
2.	Size larger; mesosternum carinateBolitochara Mannerheim. Size very small; mesosternum not carinateCaloderina Ganglbauer.
3.	Mesosternum not or incompletely carinate4. Mesosternum carinate; carina entireDitropalia Casey.
4.	Head feebly narrowed posteriorly
5.	Mesosternal projection broad anteriorly, rapidly narrowed, its apex narrowly rounded or subacute, free and separated from the metasternal projection by a considerable longitudinal discontinuity; basal joint of the hind tarsi scarcely as long as the next two combined
	the find tarsi funy as along as the fiext two combinedSuusiaa Casey.

SILUSIDA Casey

Silusida tenuicornis, new species

Plate XXXIX, Figure 10

Form very moderately stout, scarcely convex. Color pale rufo-test aceous; outer join's of the an'ennæ infusca e; ely ra and four h abdominal segment black sh; elvtral humeri and basal segmen's of the abdomen paler, tes accous. Punc'ua ion modera ely fine, dis inct, ra her close; abdomen more shining, punc'ua'ion scarcely discernible. Pubescence fine, not conspicuous. Head transverse, nearly one-half wider than long, about four-fif hs the wid h of the thorax; eyes rather large but not prominent; genæ two-'hirds the length of the eye, moderately convergent, neck very broad; infrala eral carinæ s rong, en ire. Ligula elonga e, deeply bifid at apex. Labial palpi three-join ed, second joint shor er. An ennæ ra her long and slender, gradually very modera ely incrassa e dis ally; second and third join's of equal leng h; second twice as long as wide, th rd sligh ly more slender; four h, fif h and seventh as long as wide; six h slightly elonga e; eigh h to 'en'h just visibly transverse, s'rongly obconic. Terminal joint long oval, as long as the three preceding. Thorax 'wo- hirds wider than long, sligh'ly narrower than the elytra, wides' a midd e. sides feebly convergent and arcua e in front, straight and slightly less convergent to the posterior angles which are very ob use but dis inct; base broadly rounded; hypomera visible from the side. Ely'ra sligh'ly divergen⁺, sligh'ly more transverse than the horax; su'ure sligh'ly longer than the thorax. First and second abdominal segmen's strongly transversely impressed; third less so. In'ermedia'e coxæ ra her broadly separa ed; mesos ernal projec ion short, not reaching the middle of the coxe. broadly rounded at apex, separa ed from the me as ernal projection which is narrower and more acu e. Four basal join's of the pos erior tarsi elonga e, equal in leng h. Terminal joint as long as the preceding three. Leng h, 2 mm.; width, .7 mm. Two specimens. J, Q.

Male.—Six h dorsal abdominal segment deeply emargina'e ei'her side, the median projection be'ween the emargina ions one- hird wider than long, rec'angular, broadly and feebly emargina'e a' apex wi h a small too h at the cen'er of the emargination; apical angles of the projection rounded and strongly thickened. Outer angles of the lateral emarginations produced inwards as strong tee'h which par ially enclose 'he emarginations. Side margins of the segments with a small terminal too h. Ventral segments unmodified.

Female.—Without modifications.

Type male, labeled "Fla." Allotype, female, Enterprise, September 14.

This species is very distinct by reason of the structure of the antennæ, hind tarsi, and the peculiar male abdominal modifications. These differences do not seem quite sufficient, however, to demand the erection of a new genus.

ELACHISTARTHRONINI, new tribe

This new tribe is erected to contain the two new genera *Elachistar*thron and Orthodiatelus here described. It is characterized by the tarsal formula 4-4-5, eleven-jointed antennæ, fcur-jcinted maxillary palpi, and one-jointed labial palpi. The two genera may be separated as follows.

- ed at anex: the meta, distinctly narrower than
- 2. Intermesocoxal projections wider, subequal in wid h, their apices contiguous on a straight transverse suture; terminal joint of the intermediate tarsi very distinctly longer than the three preceding.....Orthodiatelus, new genus

ELACHISTARTHBON, new genus

Maxillæ modera'ely elonga'e, lobes rather less than three times as long as wide of equal leng h, ou er lobe entirely membranous, inner lobe obliquely trunca'e in apical two-fifths; digi us short and inconspicuous; a longer and more prominent too h at basal end of the truncature; edge of the trunca'ure wi h very short bris.lelike tee h, a few long bris le-like se æ below the trunca'ure, bo h lobes s raight.

Maxillary palpi four-join ed, second and third join's s'rongly incrassa e, subequal in leng h, the third sligh ly thicker, suboval, twice as long as wide. Terminal joint subula e but unusually long and thick, slightly more than one-half the length of the third.

Ligula small slender, briefly divided at apex.

Labial palpi one-join ed, long, slender, parallel; apex rounded.

Mandibles much broadened at base, apex s rongly curved, acuminate, inner edge with a minute tooth about two-fif hs from the apex.

Mentum large, trapezoidal, about one-third wider than long, apex three-fifths the width of the base, feebly emargina'e, angles rounded, bila'erally impressed.

Eyes large, moderately prominent; tempora short, inconspi uous, one-half the diame er of the eyes. Infralateral carinæ strong, entire; gular sutures widely separated, diverging o the base.

An ennæ short, gradually moderately incrassate; third joint shorter than the second.

Pros'ernum very short; projection broadly triangular. Intermediate coxæ rather widely separated, mesos ernal projection about two-fifths the leng h of the coxæ, broadly rounded at apex, almost con iguous with the metasternal projection which is longer and somewhat narrower, also rounded at the apex.

Thoracic hypomera visible from the side. Me'epis'erna narrow, parallel.

Legs modera ely long, basal tarsal join's subequal. Terminal joint equal in length to the preceding three.

Elachistarthron ambiguum, new species

Pla'e XXXIX, Figures 2 and 7

Form modera'e'y elongate, subparallel, subdepressed. Color brown'sh tes'aceous; thorax and abdomen sligh 'ly paler, tinged wi h rufous. Modera'ely shining, surface finely re'icula'e, punc'ures on head, thorax and ely'ra modera ely coarse and rather dense; abdomen much more shining, sur'ace wi h fine, sparse and indis inct punc'ures; pubescence ra'her long, decumben' and conspicuous throughout. Head modera'ely transverse, nearly one- hird wider than long, as wide as or sligh'ly wider than the thorax; tempora sligh 'ly convergent; front convex. Antennæ as long as the head and 'horax; firs' joint, oval, twice as long as wide, slightly thicker but no longer than the second which is more obconic; third one-fourth shorter than the second; fourth as long as wide; fifth to tenth gradually more transverse; tenth more than twice as wide as long. Terminal joint as long as the three preceding, oval, apex very broadly rounded. Thorax four-fifths the width of the elytra, three-fifths wider than long, widest at apical third, very feebly arcuate anteriorly and straight posteriorly to the posterior angles which are very obtuse but distinct; base feebly and somewhat angularly arcuate, a narrow and rather feeble transverse impression before the scutellum. Elytra conjointly about one-fourth wider than long, suture nearly one-half longer than the thorax, sides parallel, apex not emarginate, sinuses not evident. Abdomen narrower than the elytra at base, sides very broadly and evenly arcuate, fifth segment distinctly longer than the others, three basal segments with strong transverse impressions, that on the fourth feeble. No sexual differences noted. Length, 1.4–1.6 mm.; width, .4 mm. Eight specimens.

Type and paratypes, labeled "Fla.," except one paratype labeled Enterprise, December 12.

ORTHODIATELUS, new genus

Maxillæ with the lobes rather long and slender, well separated; outer lobe membranous, slightly longer than the inner, ciliate at apex; inner lobe about four times as long as wide, evenly, arcuately narrower from base to apex, digitus very small, inner edge with short teeth on apical third, a few long cilia below.

Maxillary palpi four-jointed, second and third joints rather short, moderately incrassate, third thicker, subulate fourth joint two-thirds as long as the third. Labial palpi very long, slender, linear, one-join ed.

Ligula bifid at apex, moderately long, slender, linear.

Mentum trapezoidal, about one-third wider than long; apex two-thirds the width of the base, feebly circularly emarginate, strongly rugose at base.

Eyes large, convex; tempora short convergent; infralateral carinæ strong, entire; gular sutures rather widely separated, very slightly divergent to the base, sinuate.

Antennæ rather short, rather gradually and strongly incrassate distally; third joint scarcely shorter but more slender than the second, outer joints transverse.

Prosternum very short, simple. Intermediate coxæ widely separated; intermesocoxal processes equal in width, contiguous in a straight transverse suture at about the middle of the coxæ.

Thoracic hypomera visible from the side throughout their length. Metepisterna parallel.

Tarsi with the basal joints of subequal length; terminal joint of the intermediate tarsi very distinctly longer than the preceding three.

Orthodiatelus innotabilis, new species

Plate XXXIX, Figures 3, 9, and 11

Form slender, parallel, subdepressed. Color piceous brown, apical abdominal segments gradually blackish; basal antennal joints and legs paler. Integuments rather closely and distinctly micro-reticulate. Head, thorax, and elytra distinctly and rather densely punctate; head slightly less densely; punctures on the abdomen very sparse; pubescence moderate in length and coarseness; abdomen with longer and more bristle-like hairs; lustre rather dull throughout. Head about one-third wider than long, slightly narrower than the base of the thorax; eyes large moderately convex, tempora convergent, about one-half the diameter of the eyes Antennæ as long as the head and thorax; first joint slightly thicker, elongate; fourth joint very slightly transverse; outer joints gradually more transverse; tenth joint twice as wide as long; terminal joint wider, conical, apex rather blunt, longer than the preceding two. Thorax four-fifths the width of the elytra, two-thirds wider than long, widest at the middle, apex distinctly narrower than the base; sides anteriorly feebly arcuate, posteriorly nearly straight and subparallel, base rounded, indistinctly sinuate laterally; posterior angles obtuse but distinct, disk convex, very faintly impressed before the scutellum. Elytra conjointly nearly one-third wider than long, suture about one-fourth longer than the thorax, sides parallel, apex not emarginate, sinuses very feeble. Abdomen slightly narrower than the elytra at base, subparallel to the apex of the fourth segment; fifth segment with the sides slightly converging; three basal segments with strong transverse impressions, that on the fourth less distinct. Length, 1.8-2 mm.; width, .5 mm. σ^3 . Two specimens.

Male.—Sixth dorsal abdominal segment with six large parallel-sided, roundended teeth on the middle of the apical margin, separated by a longer interval from a longer and more acute lateral tooth.

Female.—Unknown.

Type, Enterprise, October 12. Paratype, labeled "Fla."

The two genera Elachistarthron and Orthodiatelus are closely related to each other and probably to the genera Amenusa Casey, Pectusa Casey, and Diestota Rey. Casey states that the head is exserted in Diestota mayeti Rey, the type species of that genus, and that the species is intermediate in its characters between the Gyrophænæ and the Bolitocharæ (Trans. Acad. Sci. St. Louis, 1906, p. 279). The form of the intermesocoxal parts in Elachistarthron separates it from the other genera named. Pectusa Casey differs from Orthodiatelus in the fine and feeble impressions of the basal abdominal segments, these impressions being confined to the first three only. This is also a characteristic of Amenusa. In Pectusa the fifth abdominal segment is much shorter than the fourth, but in Amenusa and Orthodiatelus these two segments are of equal length. In Pectusa and Amenusa the infralateral carinæ are very fine or even obsolescent; in Orthodiatelus they are rather coarse and entire.

Sharp has described a number of species from Mexico and Central America which he assigns to the genus *Diestota*. Casey, in the passage cited above, expresses doubt as to Sharp's correctness in so assigning them. Of these species one has the same rather striking male modifications of the sixth abdominal segment found in *Orthodiatelus*. This species, *D. laticornis* (Biol. Cen. Amer., I, part 2, p. 248), which seems to differ somewhat distinctly from the others, may prove to be congeneric with *Orthodiatelus innotabilis*. It is described as a short species of fine and feeble punctuation and pubescence, probably strongly shining, since it is said to resemble *Atheta testaceipes* Heer. It is black in color with pale elytra. The third joint of the antennæ is said to be short.

[Vol. XLII

Elachistarthron ambiguum and Orthodiatelus innotabilis resemble each other very closely in form. They have a strong athetid facies and would be taken for members of that genus, They resemble A. coriaria Kraatz but are quite distinctly more slender and parallel.

The ligula in these two species is apparently like that of the Bolitocharæ being bifid at apex. The labial palpi have been examined under quite favorable circumstances and it seems to the author that it would be hyperinferential to call them other than one-jointed.

Eumicrota corruscula (Erichson).

Enterprise, October 23.

Eumicrota anomala, new species

Plate XXXIX, Figure 8

Form very short and broad. Color very dark piceous; antennæ, mouth-parts and legs pale testaceous; abdomen black. In eguments moderately shining, microre iculate. Head and thorax moderately closely but very indis incly punctate; ely ral punc'ures dis inct but not more dense. Head one-half wider than long; eyes modera ely large; tempora not apparent. Maxillæ moderate in leng h, ou er lobe membranous, elonga'e, not wider at base, about three times as long as wide, inner lobe ra her broadly oval, inner edge arcua'e from base to apex, digitus not distinct, thickly se' wi h minu'e spines from basal third to apex. Maxillary palpi four-join'ed, second and third join's subequal, third s'rongly incrassa'e, second feebly incrassa'e; subula e 'erminal joint long and ra'her thick, about two-thirds the leng h of the third. Ligula short and broad, shorter than the first joint of the labial palpi, rounded at apex. Labial palpi two-join ed, join's elonga'e, second joint two-thirds the leng h of the first and dis inc'ly more slender; join's even in thickness. Men'um large, sligh ly transverse, narrowed in front, apex broadly bilobed. Antennæ as long as the head and (horax; first joint elonga'e, sligh ly incrassa'e; second two-thirds the leng h of the first and slightly more slender; third two-thirds the length of the second and about one-half as wide; four h globular, sligh ly wider; fifth to tenth very gradually wider, fif h just percep bly transverse, tenth about one-third wider than long. Terminal joint conical, modera ely acu'e at apex, as long as the preceding two. Thorax sligh ly wider than the head, twice as wide as long, slightly narrowed in front, base broadly arcua'e and la erally sinua'e. Ely ra slightly wider than the thorax. one-half wider than long, sligh ly divergent pos eriorly, suture as long as the thorax. Abdomen slightly narrower than the elytra at base, moderately narrowed posteriorly. In ermedia e coxæ widely separa ed, meso- and me as ernum solidly united be ween them, the su ure s raight and transverse, a little beh nd the middle. Basal joint of the in ermed a e tarsi s'igh ly longer than the following, terminal as long as the three preceding; four basal join's of the posterior tarsi subequal in leng'h, terminal joint equal to the two preceding. No sexual difference is observable in the specimens at hand and they are probably all females. Length, 1 mm.; width, .4 mm. Sixteen specimens.

Type and nine para⁺ypes, Monticello, eas⁻ern arm of Lake Micesoukee, October 8, in fungus; (Mu⁻chler).

O.her specimens from the type locality and one from Enterprise, November 12.

718

Eumicrota insolita, new species

Resembles the preceding, may be distinguished by i's slightly less transverse thorax, less narrowed an eriorly, an ennæ s'ou'er, four h joint slightly transverse, feebler and sparser punctua'ion; abdomen less narrowed posteriorly and generally paler coloration. Leng h, 9-1.4 mm.; width, 3-.4 mm. Thir een specimens.

Type, labeled "Fla." Five para'ypes: 3, labeled "Fla."; 2, Mon'icello, eastern arm of Lake Micesoukee, October 8, in fungus; (Mutchler). One, Enterprise, September 12. Other specimens Enterprise, September 20, November 20.

These two species on account of their antennal structure would not be included in *Eumicrota* as defined by Col. Casey. They do not seem distinct enough in other respects to require more than a section of the genus.

Gyrophæna floridana (Casey).

Enterprise, September 11 and 24, October 16. Pensacola, October 13 and 14, in fungus, Monticello, October 5, on horse skeleton; (Mutchler).

Gyrophæna lætula Casey.

Monticello, October 5, on horse skeleton; (Mutchler).

Tribe Hoplandriini

In volume I of his Memoirs, p. 174, Col. Casey makes the following statement: (Hoplandria) "pulchra Kr., does not seem to be strictly congeneric with ochracea, if the sexual characters are correctly described; I have not seen it." Specimens of a species evidently closely allied to pulchra Kraatz are in the material at hand. Since no structural differences other than those of sexual modifications and of form are discernible between this species and specimens believed to be *H. lateralis* Melsheimer (Pl. XXXIX, fig. 5) collected at Windsor, N. Y., an examination of the maxillæ was resorted to. These parts of the mouth have been considered of great importance in generic distinctions in the Aleocharinæ by Kraatz and other students. Considerable differences in the form of the inner lobe were found, which are set forth in the following descriptions, and have led the author to introduce a new genus as suggested by Col. Casey.

1.	Intermediate coxæ not contiguous
2.	Basal joints of the posterior tarsi of unequal length
3.	Mesos ernum not carinate. (Male with conspicuous processes or carinæ on the elytra and abdomen.)

4.	Basal joint of the posterior tarsi almost twice as long as the second; inner lobe of the maxillæ simply ciliate with a free slender extremity having a minute supplementary joint
5.	Mesosternum not carinate
6.	Eyes moderate in size, tempora distinct; ligula bifid. (Clypeus in the male without a longitudinal carina.)
7.	Free corneous extremity of the inner lobe of the maxillæ short, straight, apex rounded without digitus. (Male with a carina at the inner apical angles of the elytra.)

inwards from its base, apex acuminate. (Male with a strong, acute, curved process near the outer apical angles of the elytra.). *Genosema*, new genus.

GENOSEMA, new genus

Maxillæ with the lobes unequal in length, the inner two-thirds the length of the outer which is entirely membranous, thick, about as long as broad, straight, ciliate on apical half; inner lobe with a broad membranous appendage attached to the basal half; free apical corneous part moderately slender, strongly bent inward at its base, moderately arcuate, the extreme apex more attenuate and arcuate.

Maxillary palpi five-jointed; second and third joints very moderately and nearly equally incrassate, subequal in length. Labial palpi four-jointed, first longer and thicker than the second which is much shorter, third more slender, longer, but shorter than the first.

Ligula very long and slender, as long as or slightly longer than the first joint of the labial palpi, deeply divided at apex.

Mentum trapezoidal, apex about one-half the width of the base, very feebly triangularly emarginate, strongly transverse, bilaterally impressed.

Eyes moderate in size; tempora convergent, not conspicuous, two-thirds the diameter of the eyes; infralateral carinæ strong entire; gular sutures widely separated, diverging and slightly arcuate to the base.

Antennæ moderately long and gradually moderately increase i, first joint thickened; second and third equal in length; third slightly more slender.

Prosternum very short. Intermediate coxæ widely separated; mesosternal projection reaching the middle of the coxæ, contiguous with but not united to the metasternal projection.

Basal tarsal joints of the posterior tarsi equal in length.

Males with a strong, acute process near the outer apical angles of the elytra and a longitudinal carina on the fifth dorsal segment.

Genosema sexualis, new species

Plate XXXIX, Figure 4

Form (σ) moderately broad, (φ) more slender, slightly fusoid, moderately convex. Color testaceo-rufous, thorax and legs more testaceous; head, antennæ except the extreme tip, elytra except the humeri, the fifth abdominal segment and the metepisterna blackish. Integuments very strongly shining. Head very sparsely and indistinctly punctured; thorax and elytra moderately coarsely, subasperately, but not densely punctured; abdomen nearly impunctate except for rows of rather coarse punctures close to the bases of the basal segments. Head about one-fourth wider than long, a l ttle more than one-half the width of the thorax (σ) , two-thirds the width of the thorax (φ) ; eyes moderate in size, tempora two-thirds their length, slightly convergent, not at all prominent. Antennæ longer then the head and thorax; fourth joint very slightly elongate; fifth and sixth as long as wide; seven to ten transverse; ten one-half wider than long (σ) , less transverse (φ) . Terminal joint ovalconic, acute, longer than the two preceding. Thorax three-fifths wider than long in male (σ) , one-third in female (φ) , as wide as the elytra at their base but narrower than their apex; apex of the thorax slightly narrower than the base, sides and base strongly rounded, posterior angles nearly obsolete; disk rather strongly convex with a large median impression slightly before the base in the male. Elytra conjointly a little more than one-fourth wider than long in the male (σ) , nearly one-half wider than long in female (Q), suture slightly longer than the thorax (σ), as long as the thorax (9); outer apical angles more strongly produced in the male than in the female. Abdomen slightly narrower than the elytra at base, sides broadly arcuate and narrowed; fifth segment about half as wide as the base (σ), wider (φ). Length, 2.5-3 mm.; width, .7-.8 mm. 3, 9. Four specimens.

Male.—Elytra with a strong, acute process near the outer apical angles; the inner sutural angles strongly swollen. First and second abdominal segments with lateral spines, those on the second about one-half as long as those on the first; fifth dorsal segment with a large, acute, median, carinate tooth.

Female.—Unmodified.

Type male, allotype female, and two paratypes, Monticello, eastern arm of Lake Micesoukee, October 8, in cheese traps; (Mutchler).

H. debilis Sharp (Guatemala, Biol. Cen. Amer., I, part 2, p. 224) and H. pulchra Kraatz (Louisiana, Georgia, Linn. Ent. Zeits., XI, p. 6) probably belong with the above described species. H. debilis is a black species; the third antennal joint is said to be rather shorter than the second and the elytral processes recurved. H. pulchra is described as having the thorax more than twice as wide as long, the sides and base slightly rounded; surface densely and finely punctured; elytra one-half longer than the thorax with dense, strong, rugulose punctures; the male with a short lateral spine on the second abdominal segment only.

LOPHOMUCTER, new genus

Maxillæ with the lobes more or less fused and indistinguishable; outer lobe short, membranous, ciliate; inner lobe shorter than the outer, narrowed to a more or less acute apex, straight, inner edge straight with an angulation near the middle, ciliate above the angulation.

Maxillary palpi five-jointed; second joint rather strongly pedunculate and sligh'ly arcuate; third straight, subequal in leng'h to the second, very slightly thicker and evenly, not very s'rongly incrassate; four h joint subulate, about two-thirds the leng h of the third. Labial palpi four-jointed; first joint elongate and thicker; second short; third long but shorter and more slender than the first.

Ligula elongate, linear, about as long as the first joint of the labial palpi; apex blunt, entire.

Mentum trapezoidal, about one-third wider than long; apex two-thirds the width of the base, feebly circularly emarg nate, bilaterally impressed.

Mandibles obtusely curved and acuminate at apex; inner edge with an obtuse angulation at middle.

Eyes large, strongly convex; tempora very short, scarcely apparent; infralateral carinæ very s rong, entire; gular sutures moderately separated at apex, straight and rather s rongly divergent to the base.

Antennæ moderate in leng h, rather strongly incrassate; first joint long and stout, as long as the next three; second and third of equal leng h.

Prosternum short. Intermediate coxæ widely separated; meso- and metasternal projections solidly united, suture transverse, slightly before the middle of the coxæ.

Tarsi 4-5-5 jointed; four basal joints of the posterior tarsi of equal leng h.

Males with the elytra carinate at the humeri and with short processes at the apical, sutural angles.

Lophomucter lævicollis, new species

Plate XXXIX, Figure 6

Form rather broad, moderately convex. Color rufo-testaceous; head and the elytral suture narrowly, blackish; outer antennal join's slightly infuscate. Integumen's strongly shining, finely, very sparsely and indis incidy puncta'e throughout. Thorax with four distinct discal punctures. Head nearly one-third wider than long, nearly two-thirds the width of the thorax. Antennæ as long as the head and thorax; second and third joints modera'ely elongate; fourth joint as long as wide, somewhat rounded; fifth joint nearly one-half wider than long, dis incly wider than the four h; outer joints slightly wider and more transverse, forming a rather parallelsided, elongate club; terminal joint short, conical, as long as the preceding two. Thorax one-half wider than long, as wide as the elytra at base, narrower than the ely'ral apex, strongly rounded on sides and base; apex slightly narrower than the base; hypomera visible from the side. Elytra conjointly one-half wider than long, sides arcuate and divergent, suture four-fifths the length of the thorax; apex not emargina⁴e. Abdomen much narrower than the elytra at base, as wide as or sligh ly wider at he apical margin of the second segmant; fifth segment about two-thirds the wid h of the base; side margins very broad and flattened above. Length, 3.5 mm.; width, 2.25 mm. σ . One specimen.

1920]

Male.—Clypeus with a s'rong longitudinal carina. Elytra wi'h a short humera carina and a rather small, blunt poin ed, carina'e too'h at the sutural angle. Abdomen wi h a modera'e-sized, rounded tuberosi'y at the middle of the second segment and a low, carinate tooth on the fif.h dorsal segment. (It is possible that some of these modifica'ions may occur in both sexes.)

Female.-Unknown.

Type, Fort Myers, April 26, from a hog's head; (Grossbeck).

This species is one of considerable systematic interest. Although evidently a close ally of *Hoplandria*, the form of the head, the intermesocoxal parts and the smooth, quadripunctate thorax indicate a distinct relationship to the bolitocharid genus Gyrophana and its allies.

TINOTUS Sharp

Tinotus amplus, new species

Form rather stout, fusiform, moderately convex. Color dark rufo-piceous, elytra slightly paler, head and abdomen darker, nearly black, the latter with the apical margins of the segments rather broadly paler, rufo-piceous; six h segment en irely pale. Surface s'rongly micro-reticula'e; lus're dull; abdomen more shining; punctures on the head rather fine and indis inct and somewhat sparse; those on the thorax and ely'ra s'rong, dense and aspera'e, those on the ely ra a little more coarse; punctures of the abdomen rather fine and sparse, not s'rigose nor imbrica' e except feebly so on the basal segments but wi h very faint elonga e impressions behind each puncture. Pubescence thick, pale reddish. Head less than a third wider than long, onehalf the wid h of the (horax, evenly convex; eyes modera'e in size, not prominent; tempora one-half their diame er. An ennæ as long as the head and thorax, slender; third joint slightly longer than ei her the first or the second; first cylindrical, thicker; second and third obconic; fourth joint as wide as long; ou'er join's very sligh ly incrassate; tenth joint about one-third wider than long; terminal joint ob usely poin'ed, as long as the preceding two. Infrala'eral carinæ s'rong, en'ire. Thorax two-thirds as wide as long, strongly convex, sides subparallel in basal half, strongly rounded and converging in apical half; base very modera ely rounded, pos erior angles very obtuse but dis inct. Elytra very slightly wider than the thorax, sides parallel, conjointly three-fif hs wider than long; su ure equal in leng h to the thorax, outer apical angles slightly re'rac'ed wi'h feeble sinuses. Abdomen as wide as the elytra at base, sides almost s raight and feebly convergent to the apex of the fif h segment which is three-fourths the width of the base. Length, 2 mm.; width, 1.25 mm. J. One specimen.

Male.—Thorax with a large round impression occupying more than the median third of the disk. Fourth dorsal abdominal segment with the apex broadly, arcuately emarginate, the emargination the width of the segment. One specimen.

Female.—Unknown.

Type, Enterprise, October 30, Cassias.

This species differs in antennal structure and the punctuation of the **ab**domen from those described hitherto.

Tinotus brunnipes, new species

Form slightly robust, subparallel, moderately convex. Color dark brownishpiceous; bases of the abdominal segments more or less blackish, base of the antenna and the legs paler. Lustre dull; surface micro-reticulate. Punctures of the head fine and indistinct; of the thorax and elytra distinct, rather close and asperate, those on the disk of the thorax distinctly finer. Basal segments of the abdomen imbricate; imbrication obsolete on the fourth and fifth dorsal segments. Head very slightly wider than long, nearly two-thirds the width of the thorax, widest behind the eyes, narrowed anteriorly; eyes moderate in size, very much flattened, slightly longer than the tempora. Antennæ short, as long as the head and thorax; second and third joints elongate, of equal length; fourth and fifth as long as wide; outer joints gradually wider, strongly transverse, nearly twice as wide as long; terminal joint obtusely pointed, as long as the two preceding. Thorax strongly convex, one-half wider than long, sides evenly, arcuately narrowed from base to apex; base rounded, feebly sinuate laterally, posterior angles not distinct. A faint basal impression either side at the scutellum. Elytra (9) very slightly wider than the thorax; the suture as long as the latter, sides feebly arcuate; apical sinuses feeble. Abdomen as wide as the elytra at base; sides arcuate and slightly narrowed to the apex of the fifth segment which is three-fourths the width of the base. Basal joint of the posterior tarsi equal Q. Two in length to the next two. Length, 2.5–2.75 mm.; width, .6–.75 mm. specimens.

Type and paratype, labeled "Fla."

This species is distinguishable from the preceding by its narrower thorax, larger head, antennæ with much more transverse outer joints. Both seem to be distinguishable by the feebler abdominal sculpture and the head distinctly wider posteriorly as well as by other characters from those described by Col. Casey.

Tinotus planulus, new species

Form not stout, subparallel, slightly convex. Color dark piceous, nearly uniform; apical margins of the dorsal abdominal segments slightly paler; basal joints of the antennæ not paler; legs pale with a reddish tinge. Lustre very dull; head very indistinctly punctured, more shining; thorax and elytra micro-reticulate, punctures close and asperate, not medially finer on the disk of the thorax. Abdomen strongly imbricate throughout but not at all micro-reticulate. Head sub-orbicular, two-thirds the width of the thorax, about one-fourth wider than long, widest behind the eyes which are moderately large but flat; tempora very little more than one-half the diameter of the eyes. Antennæ as long as the head and thorax; third joint slightly shorter and more slender than the second; fourth as long as wide; fifth dis' inctly transverse; outer joints gradually strongly incrassate; the ninth and tenth slightly more than twice as wide as long; terminal joint very short, slightly longer than wide, as long as the two preceding. Thorax one-third wider than long, widest a little before the base, sides rather feebly arcuate and narrowed anteriorly; base broadly rounded and feebly sinuate laterally; posterior angles very obtuse, slightly distinct; disk moderately convex, without basal impressions. Elytra at apex very slightly wider than the thorax, conjointly one-half wider than long, suture distinctly shorter than the thorax; sides subparallel, very feebly arcuate. Abdomen very nearly as wide as the elytra at base, fif h segment nearly four-fifths the width of the base. Basal joint of the posterior tarsi as long as the next two. Length, 1.25–1.5 mm.; width, .4 mm. Twenty-two specimens.

Type and six paratypes, Gainesville, October 1, under cow dung; (Mutchler). Three paratypes labeled "Fla." and one Enterprise, October 12. Other specimens: eight from the type locality; two, Enterprise; two, labelled "Fla."

The specimens at hand are apparently all females. The sixth dorsal segment is just perceptibly emarginate medially.

The species is distinguished by its narrow slightly flatter thorax. It is evidently related to T. parvicornis Casey. In that species the thorax is described as three-fourths wider than long.

Trichiusa ursina, new species

Form short and stout, rather parallel. Pubescence long, abundant and conspicuous throughout. Color pale rufo-test accous (immature). Head behind the antennæ one-third wider than long, three-fourths the wid h of the thorax; eyes ra her large and convex, distant about their diameters from the base; tempora straight and slightly convergent; front s rongly impressed; infralateral carinæ lacking. Antennæ reaching the basal third of the elytra, gradually rather strongly increase te; second joint s'ou'er and slightly longer than the third, both feebly elongate; fourth as long as wide; the outer joints becoming rapidly more transverse; tenth twice as wide as long; terminal joint as long as the two preceding. Thorax narrower than the elytra at hase, widest at middle where it is three-fifths wider than long, sides arcuate and convergent anteriorly, nearly straight and very slightly convergent posteriorly to the obtuse and scarcely distinct posterior angles; disk very convex, with a broad impression before the scu'ellum. Head and thorax s'rongly shining, punctuation very fine and indis inct. Elytra conjointly three-fif hs wider than long; suture as long as the thorax, sides slightly divergent, humeri well exposed, punctuation consisting of rather fine se æ-bearing punctures only; lustre duller than that of the thorax. Abdomen rather more distinctly but less densely punctate. Length, 1.6 mm.; width, .65 mm. One specimen.

Type, Pun^{*}a Gorda. November 12, sifting débris on beach of Charlotte Harbor, at high-!ide mark; (Leng).

This species is distinguished by its antennal structure, thoracic form and short elytra with simple punctuation. It is probably near to T. convergens Casey and T. monticola Casey.

Atheta Thomson

Atheta macrops, new species

Form moderately slender, parallel, slightly convex. Color piceo-testaceous. Thorax and basal segmen's of the abdomen with a reddish tinge; head and segments three and four of the abdomen blackish; outer antennal joints infuscate. Surface micro-re iculate; head and abdomen rather strongly shining; thorax and elytra feebly shining. Head nearly impunctate, punctures very fine, sparse and indistinct.

[Vol. XLII

Thorax and elytra rather finely but distinctly and somewhat densely punctate. Basal segments of the abdomen rather densely punctate; fifth segment nearly impunctate. Pubescence on the thorax and elytra rather long. Head one-third wider than long, five-sixths the width of the thorax; eyes very large and prominent; tempora little more than half their diame ers, rather strongly convergent, not at all parallel; infralateral carinæ strong and entire. Antennæ longer than the head and thorax, feebly incrassate; second and third joints elongate, subequal in length; fourth as wide as long; tenth about one-fourth wider than long; terminal joint oval, conic, slightly longer than the preceding two. Thorax one-half wider than long, slightly wider than the elytra; sides subparallel to the apical fourth thence rounded to the apical angles, base broadly rounded, posterior angles very obtuse but somewhat distinct; a rather indistinct median impression and basal fovea. Elytra conjointly one-fourth wider than long, suture scarcely perceptibly longer than the thorax. Abdomen narrower than the elytra at base, sides broadly and evenly arcuate. Basal joints of the posterior tarsi elongate, subequal. Intermediate coxæ separated by about one-fifth the width of one of the coxæ; the meso- and metasternal projections contiguous at slightly behind the middle of the coxæ; apex of the mesos ernal projection rounded. Length, 2-2.5 mm.; width, .5-.6 mm. 7, 9. Eight specimens.

Male.—Apex of the sixth dorsal abdominal segment with an emargination either side; the rather broad median projection feebly emarginate with its angles broadly rounded; the outer edge of the lateral emarginations prolonged in a short tooth; the lateral emarginations trapezoidal.

Female.—Sixth ventral strongly rounded with its apical margin finely fimbriate. Type male, labeled "Fla.," allotype, female, Enterprise, November 15. Four paratypes: three, labeled "Fla." one, Monticello, eastern arm of Lake Micesoukee, October 8, in cheese trap; (Mutchler).

This species resembles A. coriaria Kraatz quite closely in color and form. It is more slender and parallel, the thorax less transverse, the head more transverse, the eyes much larger and the outer antennal joints less transverse. The male abdominal modifications are like those of A. crenuliventris Bernhauer.

Atheta aspericauda Bernhauer.

Enterprise, October 12. Pensacola, October 14, in fungus; (Mutchler).

Atheta (Hilara) fulviceps, new species

Form slender parallel, scarcely convex, moderately shining. Color pale rufotestaceous, fourth and fifth segments of the abdomen only slightly infuscate. Punctures of the thorax and elytra rather coarse and dense, separated by about their diameters. Pubescence rather coarse but not dense. Head as long as wide; eyes rather large, but feebly convex, distant from the base of the head by slightly less than their diameters; tempora evenly, arcuately and feebly convergent; infralateral carinæ strong and entire. Antennæ as long as the head and thorax, gradually rather strongly incrassate; first joint more than twice as long as long as wide; second about two-thirds the length of the first, third about two-thirds the length of the second, strongly obconic, fourth distinctly transverse, fifth to tenth twice as wide as long, gradually larger but not perceptibly more transverse. Terminal joint conical, apex rounded, equal in length to the two preceding. Head, thorax and elytra subequal in width. Thorax one-third wider than long, widest in front of the middle, sides evenly but not strongly arcuate, base broadly rounded, posterior angles indistinct. Elytra conjointly as wide as long, suture scarcely longer than the thorax. Abdomen narrower than the elytra at base, slightly wider to the apex of the fifth segment which is slightly longer than the fourth. Three basal dorsal segments strongly transversely impressed. Mesosternal projection long and slender, nearly two-thirds the length of the coxal cavity, apex narrowly rounded and contiguous with the metasternal projection which is narrower and more parallel. The mesosternal projection is margined throughout, but the margin of the metasternal projection stops at about half its length, the remaining apical portion though narrow is in the same plane as the mesosternal projection. Length, 1 mm.; width, 3 mm. One specimen.

Type, labeled "Fla."

Ganglbauer (Kaf. v. Mitteleu., II, part 1, p. 149) separates the subgenera *Microdota* and *Hilara* by the punctuation of the thorax. The punctures on the thorax of a specimen of (*Microdota*) amicula, microscopically viewed, are distinctly finer and separated by about twice their diameters. The punctures on the thorax of (*Hilara*) palleola are about as coarse as those of (*H.*) fulviceps but are separated by about three times their diameters. The species bears some resemblance to the small Leptusze but the intermediate tarsi are certainly five-jointed as proved by a dissection in balsam.

Acrotona Thomson

Dr. Fenyes (Gen. Ins., Fasc. 173A, pp. 20, 21) gives the type species of this genus as *A. aterrima* Gravenhorst and for *Colpodota*, *C. pygmea* Erichson. Ganglbauer, however, places both these species in *Colpodota* (Kaf. v. Mitteleu., II, part 1, p. 146). The work of Mulsant and Rey, the original authority on the two genera, is not available. Ganglbauer separates *Acrotona* and *Colpodota* as follows:

1. Abdomen equally and more or less densely pubescent.

Colpodota Mulsant and Rey. Abdomen much less densely pubescent on the fourth and fifth dorsal segments. Acrotona Mulsant and Rey.

Synopsis of the Species

(Acrotona)

1.	Punctures on the thorax and elytra more or less dense; lustre dull2.
	Punctures very remote and sparse; integuments very highly polished. (Neada
	Casey)lubricans Casey.
2.	Outer antennal joints strongly transverse, one-half wider than long3.
	Outer antennal joints not or very slightly transverse 5

1920]

3. Thorax one-half wider than long4. Thorax one-third wider than long; elytra as long as the thorax.	: 3.
bakeri Bernhauer.	
 Head extremely finely and sparsely punctate; elytra slightly longer than the thorax; size larger, 2-2.3 mm pasadenæ Bernhauer Head coarsely and rather closely punctate; elytra very slightly shorter than the thorax; size smaller, 1.6 mm	4.
5. Elytra distinctly longer than the thorax; suture one-third longer	5.
6. Head not strongly transverse	6.
7. Thorax narrower than the elytra	7.
8. Fifth and sixth segments of the abdomen polished and coarsely punctured. <i>modesta</i> Melsheimer.	8.
Fifth and sixth segments of the abdomen very sparsely, feebly, and subasperately puncturedfusiformis Casey.	
9. Elytra distinctly shorter than the thorax; suture not more than four-fifths its leng'h	9.
 Thorax wider than any part of the elytra; the latter four-fifths the length of the thorax	10.
11. Thorax wider than any part of the elytra	11.
12. Head distinctly inflated or swollen at base	12.
13. Antennæ more distinctly incrassate, tenth joint distinctly transverse; thorax less rounded at base; elytral suture as long as the thorax; form stout.	13.
Antennæ less incrassate, tenth joint not transverse; thorax broadly rounded at base, basal impression small and obsolescent; elytral suture not quite as long as the thorax; form more slenderardelio Casey.	•
14. Head transverse: color dark: abdomen not as wide as the elvtra.	14.
digesta Casey. Head suborbicular, less transverse; color pale; abdomen as wide as the elytra. malaca Casey.	
15. Fourth antennal joint normal, slightly smaller than the fif th 16. Fourth antennal joint very small, one-half as long as the fifth and much nar- rower	15.

728

- Color darker; thorax broader, nearly one-half wider than long; size larger. 2-2.3 mm.....subpygmæa Bernhauer. Color paler; thorax narrower, less than one-third wider than long; size smaller. 1.6 mm.....picescens, new species.

Homalota modesta Melsheimer seems to be rather doubtfully an Acrotona and its position in the above table is more or less conjectural.

Acrotona picescens, new species

Form rather slender, distinctly fusoid, feebly convex, moderately shining. Color rather pale piceous, posterior abdominal segments slightly blackish; legs and antennæ not noticeably paler. Micro-reticulation coarse but very indistinct; punctures on head and thorax large, shallow, umbilicate, separated by about their diameters; those on the elytra subasperate, surface slightly rugulose; punctuation of the abdomen fine, sparse and indistinct. Head, thorax and abdomen more shining. Head very moderately transverse, less than one-third wider than long; tempora about twothirds the length of the eyes, parallel for half their length. Antennæ nearly attaining the middle of the elytra; first joint longer than the second or the third which are of equal length, about twice as long as wide; fourth and fifth joints as wide as long; outer joints gradually slightly wider; tenth joint slightly transverse; terminal joint oval, conic, slightly longer than the two preceding. Infralateral caringe strong, entire. Thorax less than one-third wider than long, moderately, evenly and arcuately narrowed from base to apex; base broadly rounded, not perceptibly sinuate laterally, posterior angles not distinct. Elytra as wide as the thorax at base, slightly wider at apex; suture very slightly shorter. Abdomen narrower than the ely'ra at base, sides evenly and arcuately narrowed. Mesosternal projection long, narrow, reaching the posterior third of the coxe, narrowly rounded at apex, almost contiguous with the metasternal projection. Coxæ narrowly separated. Basal joints of the posterior tarsi subequal, first joint very slightly longer. No sexual differences observable. Leng'h, 1.5-1.6 mm.; width, .35-.45 mm. Nine specimens.

Type, Enterprise, December 15. Eight paratypes: 4, Enterprise, October 17, November 1 and 22, December, 12; 2 labeled, "Fla."; 1 Punta Gorda, November 11, sifting débris on shore at mouth of Peace River; (Leng).

16.

Acrotona hebeticornis, new species

Form slightly stout, slightly convex, fusoid. Color piceous brown; elytra paler more test aceous; abdomen black, basal segments more or less brownish; basal joints of the an ennæ and the legs rather pale test aceous. Micro-reticulation and punctuation as in the preceding. Head as in the preceding. Antennæ shorter and slightly more slender, as long as the head and thorax; fourth joint as wide as long; fifth joint very slightly transverse; outer joints very gradually larger and more transverse; tenth joint one-half wider than long; terminal joint very slightly longer than the two preceding, very obtusely rounded at apex, feebly conic. Infralateral carinæ strong, entire. Thorax nearly one-half wider than long, apex narrower than the base, sides evenly and rather feebly arcuate, base broadly rounded, slightly flattened laterally, posterior angles scarcely evident; disk without impressions. Elytra as wide as the thorax at base, slightly wider at apex, very slightly shorter than the thorax onathe suture. Abdomen narrower than the elytra at base. Basal joint of the hind thrsi elongate, a little longer than the second. Intermesocoxal parts as in the preceding. No sexual differences observable. Leng'h, 1.75 mm.; wid h, 4 mm. Three specimens.

Type, En'erprise, December 15. Two paratypes: 1 Enterprise, November 19; 1 Punta Gorda, November 11, sifting débris on shore at mouth of Peace River; (Leng).

This species resembles the preceding very closely. It may be distinguished by the antennal structure and distinctly more transverse thorax.

Gnypeta floridana Casey.

Enterprise, December 12.

Aleodorus partitus (LeConte).

Enterprise, October 12. Titusville.

Group FALAGRIÆ

Synopsis of the Genera

1.	Dorsal segments of the abdomen transversely impressed
2.	Posterior thoracic angles not dentiform3. Posterior thoracic angles produced, dentiform; form broad, fusoid. Dorylonilla Wasmann.
3.	Prosternum not carinate
4.	Intermediate coxæ not contiguous
5.	Mesosternum not carinate
6.	Metasternum not elevated nor subcarinate7. Metasternum elevated anteriorly, subcarinate
7.	Thoracic hypomera delimited from the flanks of the pronotum by a carinate edge or by a difference in the sculpture8.

1920]

	Thoracic hypomera not delimited from the flanks of the pronotum. Cardiola Mulsant and Rey.
8.	Mesosternum on the same plane with the metasternum9. Mesosternum elevated, on a different plane from the metasternum. <i>Chitalia</i> Sharp.
9.	Flanks of the pronotum separable from the hypomera by differences of sculpture only
10.	Head with the posterior angles more rounded, sides less distinct; front not impressed. Form convex
11.	 Mesosternal projection long, reaching the middle of the coxæ and separated from the metasternal projection. Thorax less strongly narrowed pos eriorly and less strongly sulcate. Head not transverseLissagria Casey. Mesosternal projection short, extending to anterior third of the coxæ, fitting over the metasternal projection. Thorax more strongly narrowed posteriorly, deeply sulcate. Head strongly transverse and truncate at base.
12.	Antecoxal part of the prosternum moderate in size
13.	Mesosternal projection reaching the middle of the coxæ
14.	Head not broader behind, more or less rounded; thorax convex, moderately to strongly narrowed posteriorly
15.	Corneous plates under the anterior coxæ united on the median line16. Corneous plates under the anterior coxæ very small and rudimentary, not united
16.	Thoracic hypomera shorter and broader
17.	Scutellum carinate

Omoschema, new genus

Labial palpi elongate, slender, three-jointed, joints scarcely differing in length or thickness. Maxillary palpi rather long and slender, third joint a little longer than the second and thicker but not strongly inflated; terminal joint very slender, about half as long as the preceding.

Mentum trapezoidal, strongly transverse. Gular sutures well separated, very slightly divergent posteriorly.

Head truncate at base, strongly transverse; eyes large, distant from the base; antennæ long, distinctly incrassate, second joint longer than the third. Neck very narrow.

Thorax moderately convergent posteriorly, disk strongly sulcate, marginal carinæ wanting.

Prosternum very short before the coxæ, broadly dilated behind and under them, completely filling the post-coxal opening.

Intermediate coxæ well separated. The mesosternal projection extending only to the anterior third of the coxal length; apex parallel, rounded, fitting over the end of the long metasternal projection; coxal cavities without a beaded edge posteriorly.

Abdomen ventricose, wider than any other part of the body.

Posterior tarsi elongate, slender, the first joint as long as the next three.

Scutellum coarsely, variolately punctate.

Omoschema laticeps, new species

Form elongate, ventricose, rather convex. Color dark brownish-testaceous; legs somewhat paler, terminal joint of the antennæ very pale, basal joint slightly so. Head and thorax finely and somewhat densely punctured; abdomen more densely punctate on the sides of the segments, nearly smooth medially. Pubescence throughout fine, rather long, dark and inconspicuous. Head behind the antennæ nearly twice as wide as long; eyes rather large, distant from the base their own diameters, base truncate, sides parallel, nearly straight, posterior angles moderately rounded, neck about one-fourth the width of the head. Antennæ long, rather stout distally, reaching the middle of the elytra; second and third joints strongly elongate; four to seven distinctly elongate; nine and ten as long as wide; terminal joint large, ovalconic, slightly longer than the preceding two. Thorax scarcely perceptibly narrower than the head, about three-fourths the width of the elytra, widest at apical fourth where it is very nearly as wide as long, sides s'rongly rounded and convergent anteriorly, very moderately convergent and broadly sinuate posteriorly, posterior angles very obtuse but distinct. Thoracic disk very convex with a strong, deeply impressed median sulcus reaching the apex and broadening to a deep fovea at the base. Abdomen widest at the apex of the fourth segment.

Length, 2.5 mm.; width, .5 mm. One specimen.

Type, Titusville, November 8, sifting leaves in forest; (Lutz).

The elytra are unfortunately lacking in the single specimen at hand but the structural features are sufficient to distinguish the species.

Baryodma nitidicollis Casey.

Enterprise, November 20.

PLATE XXXIX

- Fig. 1. Schistacme obtusa (labium, maxilla).
- Fig. 2. Elachistarthron ambiguum (labium, maxilla).
- Fig. 3. Orthodiatelus innotabilis (labium, maxilla).
- Fig. 4. Genosema sexualis (maxilla).
- Fig. 5. Hoplandria lateralis Melsheimer (maxilla).
- Fig. 6. Lophomucter lævicollis (labium, maxilla).
- Fig. 7. Elachistarthron ambiguum (intermesocoxal parts, intermediate tarsus).
- Fig. 8. Eumicrota anomala (maxilla).
- Fig. 9. Orthodiatelus innotabilis (sixth dorsal abdominal segment, σ^{3}).
- Fig. 10. Silusida tenuicornis (sixth dorsal abdominal segment, σ^{3}).
- Fig. 11. Orthodiatelus innotabilis (intermesocoxal parts, intermediate tarsus).



INDEX TO VOLUME XLII

New taxonomic names are printed in **heavy-faced type**, also the main reference in a series o references.

Авгосома, 475. Acanthopus, 595. Acanthostoma, 223, 225. Acraspis compressa, 353. compressum, 353. compressus. 353. quercus-erinacei, 355. Acromyrmex jamaicensis maritima, 428. Acrotona, 727. adjuvanus, 728. ardelio, 728. aterrima, 727. bakeri, 728. clientula, 729. digesta, 728. fungi. 729. fuscipes, 728. fusiformis, 728. hebeticornis, 728, 730. lividula, 728. lubricans, 727. malaca, 728. modesta, 728. orbata, 729. pasadenæ, 728. picescens, 729. prudens, 728. renoica, 728. severa, 728. shastanica, 728. Actinodon. 225. Actobius cinerascens, 705. parcus, 705. Acylophorus pronus, 706. Adapidæ, 201. Adapinæ, 201. Adapis, 109, 201-209. Adinotherium, 178. Æluropus, 151. Ælurus, 148–151, 153, 213. Æthalion reticulatum, 465. Ačtosauridæ, 126. Aëtosaurus, 128. Agathidium, 80.

Agenia, 576. Alcis havdenata, 489. Alectis, 286. alexandrinus, 291, 292. ciliaris, 286, 287, 290-292. crinitus, 286. fasciatus, 286. gallus, 286. hopkinsi, 292. indicus, 286, 288, 290-292. Aleochara dubia, 707. Aleodorus partitus, 730. Alligator, 107, 124, 125, 228. Alligatorium, 125. Alouatta, 210, 211. Alterodon, 474. See Halterodon. major, 474, 475. Amaurodera, 730. Amblotherium, 236. Amblyrhiza, 471. inundata, 470. Amblystoma, 117. Amblystomidæ, 117. Amegilla, 569, 570, 572, 575, 576, 580, 581. Amenusa, 717. Ameristus, 394. Amia, 112, 219, 220. Amiidæ, 112. Ammonites biplex, 672. canaliculatus, 681-683, 689. plicatilis, 670-673. solaris, 673. virgulatus, 689. Amphibamidæ, 226. Amphibamus, 226. Amphibolips, 358, 361, 368, 369, 397, 400. citriformis, 365. coelebs, 365. confluens, 325, 356, 382. ilicifoliæ, 365. Amphiproviverra, 107, 139, 141, 145, 215. Amphitherium, 236, 239. Amvnodon, 279.

intermedius, 280. Amynodontidæ, 197. Anaptomorphus, 204, 206. Anaulacaspis, 731. Ancæna, 14, 17, 28, 51, 71, 81-83, 86. infuscata, 7, 58, 71, 74, 86. limbata, 7, 71, 74, 86. Ancodon, 190, 191. Ancyloscelis, 569, 592. Andrena, 580. Andricus, 294, 320, 360, 361, 370, 371, 400. callidoma callidoma, 381. callidoma cirratus, 380. cellularius, 371. championi, 305. cicatricula, 302. cicatriculus, 302, 303. collaris collaris, 379. collaris curvator, 379. concolorans, 302. corticis corticis, 380. corticis gemmatus, 380. dasydactyli, 371. davisi, 295. dugesi, 306. durangensis, 306. fœcundatrix gemmæ, 380. fœcundatrix pilosus, 380. fulvicollis, 353. fulvicollis bicolens, 354, 381. fulvicollis erinacei, 355, 356, 381. furnaceus, 304, 306. futilis, 341. futilis futilis, 341-343, 379. futilis radicicola, 343, 379. incomptus, 306. inflator globuli, 380. inflator inflator, 380. malpighii malpighii, 381. malpighii nudus, 381. marmoreus, 307. mexicanus, 308. montezumus, 306. noduli radicis, 378. notha, 349, 351. operatola, 347. operator, 345, 347, 372. operator operatola, 347-349, 380.

operator operator, 345, 380. osten-sackeni, 365. palustris, 348, 349, 351. palustris compressus, 353, 381. palustris palustris. 349, 350-353, 381. papillata, 341. papillatus, 341, 342. pellucidus, 309, 310, 384. peredurus, 305, 310. pomiformis, 383. punctatus, 295. pusulatoides, 350, 351. quercifoliæ, 350. radicicola, 343. radicis, 343. radicis trilineatus, 378. ramuli autumnalis, 378. ramuli ramuli, 378. seminationis, 369. singularis, 365. tecturnarum. 312, 384. testaceipes sieboldi, 380. testaceipes testaceipes, 380. Anthedon, 593, 600. Anthemoëssa, 569, 570. Anthony, H. E., New Mammals from Jamaica, 469-475. Anthophora, 553, 554, 561, 565, 569, 570-583, 588-593, 615, 624. Anthophoridæ, 549. Anthophorinæ, 569. Anthophoroides, 581, 582. Anthophorula, 549, 564-567, 582. Anthracotheriidæ, 190, 191. Antillæmyrmex, 407, 408, 423, 424. Antistrophus, 387. Apateonidæ, 114, 226. Apathus, 502-505, 509, 514, 517, 539-543. Aphænogaster relicta, 407. relicta epinotalis, 407. Apheloglossa, 711. Apidæ, 492. Apis, 492, 493, 495, 502-504, 520-523, 539, 544-547, 554, 570, 615. Apterodon, 148, 151. Aræoscelidæ, 130. Aræoscelis, 107, 129, 130, 227.

734

Archæohippus, 273. ultimus, 270, 271. Archæolemur, 109, 203, 205. Archæolemurinæ, 203. Archæopteryx, 103. Archegosauridæ, 116, 223, 225. Archegosaurus, 116, 225. Arctocyonidæ, 238. Arctomys, 172, 173, 242. Arsinoitheriidæ, 182. Arsinoitherium, 182, 184, 244. Asclepiadiphila, 387. Astenus binotatus, 703. fusciceps, 704. spectrum, 704. Astrapotherium, 177, 278, 279. Ataxioceras, 670, 689. virgulatus, 689, 690. Atelerix, 162. Atelopus festæ, 446. Atheta, 725. aspericauda, 726. coriaria, 718, 726. fulviceps. 726. macrops, 725. testaceipes, 717. Atililemur, 206. Atta floricola, 406. geminata, 427. insularis, 428, 429. maritima, 428. Aulacidea, 293, 357c, 358, 361, 367-369, 371, 375, 382, 383-385, 388-396, 400, 401. abdita, 296, 386, 388. annulata, 298, 371, 384, 386. bicolor, 297, 371, 386, 388. hieracii, 385, 387. nabali, 371, 386. podagræ, 297, 371, 386. tumida, 298, 362, 371, 385, 386. Aulax, 287. glechomæ, 326. glechomatis, 326. similis, 326, 327. Avahis, 205. Aylax, 357c, 358, 361, 368, 369, 385-387, 390-400, 401.

gillettei, 297. glechomæ 326-328, 388, 389. hieracii, 363. kernei, 388, 389. latreillei, 388, 389. papaveris, 389. pisum, 362, 385, 388, 389. rhœadis, 389. rufus, 297, 388. salviæ, 388. stephanotidis, 388. taraxaci, 328. BALÆNA, 160. Balænoptera. 159, 160. Balænopteridæ, 159. Baryodma nitidicollis, 732. Basilarchia archippus lanthanis, 449. floridensis halli, 449. Bassariscus, 150, 151. Belonuchus formosus, 706. Beluga, 160. Berosus, 10, 14, 42, 47, 79-81, 83, 85, 87. æriceps, 47, 51. peregrinus, 7, 47, 48, 51, 81. signaticollis, 7, 47. spinosus, 7, 47, 49. striatus, 7, 47, 51. Bettongia, 145. Biorhiza, 294. aptera, 373. forticornis, 374, 382. fulvicollis, 355. terminalis, 373, 378. Bledius agonus, 695. amatus, 695. analis, 697. arizonensis, 695. assimilis, 697. basalis, 698. canaliculatus, 697, 698. consimilis, 695. cordatus, 698. cuspidatus, 696. deceptivus, 697. dimidiatus, 698. episcopalis, 696. eximius, 696. ·

fenvesi, 695. flavipennis, 695. foraminosus, 697. fumatus, 697. furtivus, 695. gradatus, 696. gravidus, 697. ineptus, 695. lectus, 696. monstratus, 695. nigriceps, 695, 696. nitidiceps, 697. nitidicollis, 697. opacifrons, 697. philadelphicus, 697. piceus, 697. politus, 696. punctatissimus, 698. regularis, 697. relictus, 697. rotundicollis, 697. rubiginosus, 697. semiferrugineus, 697. specularis, 697. strenuus, 695. tallaci, 697. tenius, 696. turgidus, 696. Blepharis indicus, 285. major, 285, 288. sutor, 285. Boa, 107, 130, 228. Boidæ, 130. Boletobius pygmæus, 707. Bolitochara, 713. Bolosaurus, 230. Bombias, 502, 508, 512, 517-519, 525, 526, 529-532, 538, 539. Bombidæ, 502. Bombomelecta, 574. Bombus, 492, 502-543. Borboropora, 731. Borhyæna, 107, 141. Borhvænidæ, 139, 141. Bothriceps, 115, 225. Brachyceratops, 127. Brachymyrmex heeri obscurior. 431. Brachyopidæ, 115, 223, 225.

Bradypodidæ, 167. Bradypus, 167. Branchiosauridæ, 114, 226. Branchiosaurus, 222, 223, 226. amblystoma, 114. Bremus, **502**, 504, 507, 511, 520, 529, 539, 545, 547. Broiliellus, 115, 225. Brontotheriidæ, 197. Bryoporus rufescens, 706. Bufo coniferus, 446. ornatus, 118. **rostratus**, 445.

Сасајао, 210. Cænolestes, 144. Cænopus, 195, 196. Cafius bistriatus, 705. Calamoichthys, 101. Callirhytis, 294, 320, 343, 400. cicatricula, 302. clavula, 344, 345. furnessæ, 382. futilis, 341. notha, 349. operatola, 325, 347. operator, 325, 345, 347. palustris, 349. papillata, 342. papillatus, 341. pusulatoides, 350. quercus-notha, 350. quercus-operator, 346. quercus-palustris, 350. quercus-papillata, 342. radicis, 343. Callizzia certiorata, 490. Caloderina, 713. Calyptapis, 539. Camelidæ, 187, 193. Camelus, 193. Camponotinæ, 431. Camponotus culmicola haweisi, 439. gilviventris, 435. gundlachi, 438. maculatus lucayanus, 435. planatus, 435. santosi, 435.

sphæralis, 403. sphæricus, 403, 436. sphæricus cardini, 438. sphæricus sphæralis, 438. Camptosauridæ, 126. Camptosaurus, 107, 125-127. Canidæ, 103, 149, 151. Canis, 153. Capitosaurus, 225. Capromys, 472. Captorhinidæ, 102, 121, 227. Captorhinus, 227, 228. Caranginæ, 291. Carangoides, 291. Caranx alexandrinus, 289, 291. declivis, 480. gallus, 288, 292. semispinosus, 479. symmetricus, 480. trachurus japonicus, 479. trachurus mediterranea, 479. Cardiocondyla emervi, 406. Cardiola, 731. Casea, 230. Caseidæ, 102. Castor, 172, 173, 242. Castoridæ, 173. Casuarius, 107, 130. Catarrhinæ, 210-212. Catopyrha, 487. Caviidæ, 173. Cebidæ, 210. Cemolobus, 593, 625. Centetes, 164, 165, 208. Centetidæ, 164, 165. Centrinæ, 549. Centris, 504, 544–548, **549**–563, 568–571. 574, 581, 624, 625. Centrolene, 441-445. geckoideum, 441. Centrolenella, 441-445. antioquiensis, 441-444, 445. buckleyi, 442, 445. Cephalopus maxwelli, 270. pygmæa, 270. Ceratopsidæ, 126. Ceratotherium, 279. simum, 194, 281.

Cercoleptes, 151. Cercyon, 15, 77, 81-83, 87, 88. ocellatus, 24. Ceroptres, 302, 358. cicatriculus, 303. Cervidæ, 187. Cervulus, 187, 275. Cetotherium, 160. Chætarthria, 14, 42, 51, 81, 83. atra, 7, 51. Chalcididæ, 357b. Chalepogenus, 562, 568, 569. Chalicotheriidæ, 195. Champsosaurus, 129, 233. Chasmogenus, 65. Chelone, 107, 122, 230. Chelonidæ, 122. Chelvdosaurus, 222, 223, 225. Chilaspis nitida löwi, 378. nitida nitida, 378. Chinchilla, 471. Chiroleptes, 443. Chiromyidæ, 203. Chiromys, 110, 203, 205. Chironectes, 139. Chironomidæ, 69. Chitalia, 731. Chloraspilates bicoloraria arizonaria, 486. Chlorochlamys masonaria, 484. Choleva, 80. Chriacus, 238. Chrysothrix, 210. Citula, 291. Clænodon, 238. Cleora, 488, 489. obliquaria, 488. Clidomys, 469, 471-474. osborni, 469-474. parvus, 471, 472, 474. Clisodon, 574, 576, 580, 582, 583. Cnemidium, 545. Cochleosaurus, 225. Cockerell, T. D. A., Some Neotropical Meliponid Bees, 459-468. See also Lutz and Cockerell. Coelostoma, 77, 81, 87. Cœnocalpe aurata, 486. Cœnocharis macdunnoughi, 488.

ochrofuscaria, 488. Colobopsis, 403, 436-439. Colonoceros agrestis, 195. Colpodota pygmæa, 727. Comstock, W. P., see Watson and Comstock. Conoryctidæ, 166, 167. Conosoma basalis, 706. ornatum, 706. scriptus, 706. Conotelus, 465. Corythosaurus, 127, 128. Crematogaster sanguinea, 425. sanguinea atavista, 425. sanguinea sotolongoi, 425. sanguinea torrei, 425. victima cubaensis, 425. victima steinheili, 426. Creniphilus, 71. Creophilus maxillosus villosus, 706. Creotarsus, 243. Cricetidæ, 173. Cricotus, 101. Crocodylidæ, 228. Cræsomyrmex, 408, 421, 422. Crossarchus, 152, 153. Cryniphilus, 71, 74. Cryptobranchus, 224. Cryptocerus, 430. hæmorrhoidalis, 430. varians, 430. Cryptoprocta, 153, 156. Cryptorhopalum, 465. Cyanocentris, 550-562. Cyclopes, 169-171. Cyclotosaurus, 116, 225. Cyclura, 107, 130. Cyloma, 81, 82. Cymatophora minuta, 487. Cymbiodyta, 14, 22, 42, 56, 76, 80-83, 86, 88. blanchardi, 8, 56-58, 61. fimbriata, 8, 10, 56, 57–59, 61, 65. lacustris, 56. rotunda, 56. Cynipidæ, 293-317, 319-357, 357a-c, 358-402. Cynips, 294, 320, 358, 368, 397, 400.

batatus, 333. cicatricula, 302. concolorans, 302. divisa divisa, 379. divisa verrucosus, 379. erinacei, 354. folii folii, 379. folii taschenbergi, 379. fulvicollis, 355. futiilis, 341. futilis, 341. glechomæ, 326. guatemalensis, 308. longiventris longiventris, 379. longiventris similis, 379. megaptera megaptera, 381. megaptera renum, 381. noxiosa, 336. operator, 325, 345. pallida, 373, 374. pallida aptera, 378. pallida pallida, 378. papillata, 341. quercus-aquaticæ, 350. quercus-batatus, 333. quercus-erinacei, 355. quercus-futilis, 341. quercus-notha, 349. quercus-operatola 325, 347. quercus-operator, 324, 345. quercus-palustris, 349. quercus-papillata, 341. quercus-podagræ, 295. quercus-punctata, 295. rosæ, 328. scutellaris, 379. sulcatus, 398. tuberculosa, 294. Cynodictis. 151. Cynognathus, 133, 134, 228, 232. Cynosuchus, 134, 232. Cystophora, 158. DACTYLIOCERAS, 670.

Danaus berenice, 449. Dapedius, 220. Daphænus, 149, 151. Dascyllidæ, 58.

Dasiapis, 583, 609. Dasyceps, 223, 225. Dasycosymbia gracilata, 484. Dasypodidæ, 108, 167. Dasypus, 167. Dasyuridæ, 108, 142, 143. Dasyurinæ, 142. Dasyurus, 142, 143, 168. Daubentonia, 203. Dawsonia, 223, 226. Deinopsis myllænoides, 707. Delphinidæ, 160. Deltatherium, 146, 148, 208, 215. Demera, 730. Dendrepeton, 225. Dendroctonus, 12. Dendrohyrax, 109, 184, 185. Desmotetrapedia, 562. Diadasia, 569, 583, 584-587, 592, 595-602, 608, 613, 614. Diadasiella, 562, 564, 587. Diadectes 121, 227, 228, 230. Diadectidæ, 101, 121, 227. Diademodon, 232. Diadiaphorus, 109, 175, 176. Diastrophus, 293, 358-363, 368-371, 375, 383, 390, 391, 399-401. cuscutæformis, 390. fragariæ, 300, 389. fusiformans, 300. glechomæ, 326. kincaidi, 371. nebulosus, 370, 371. rubi, 389, 391. similis, 326. siminis, 327. tumefactus, 299. Diceratosaurus, 226. Dichobune, 108, 187. Dichobunidæ, 186, 187, 243. Dichorda phœnix, 484. Dicotyles, 267. pecari, 191. Dicotylidæ, 193. Dicynodon, 131, 132. Dicynodontidæ, 132. Didelphis, 108, 139, 130, 145. Didelphyidæ, 140.

Didymictis, 239. Diestota, 711, 717. laticornis, 717. mayeti, 717. Dimetrodon, 123, 230. Dinoceras, 181. Diochus schaumi, 704. Dipedia, 587, 592. Diplocaulidæ, 155, 226. Diplocaulus, 115, 226. Diplocynodon, 125. Diplolepis bedeguaris, 328. bedeguaris fungosæ, 328. glechomæ, 326. rosæ, 328. Discosaurus, 225. Disholcaspis, 293, 308, 310, 357c, 358, 361, 368-371, 383, 397-401. arizonica, 398. brevipennata, 398. centricola, 398. cinerea, 365. cinerosa, 316, 317. douglasi, 398. fungiformis, 312, 397. globulus, 399. hevnei. 316 maculipennis, 398. plumbella, 314. pruniformis, 315. truckeensis, 398. unicolor, 316, 365. weldi, 398. Dissorhophidæ, 115, 223, 225. Ditropalia, 713. Dolichoderinæ, 431. Dolichosoma, 226. Dolichostrophus, 394. Dorcatherium, 187. Dorylonilla, 730. Dorymyrmex pyramicus, 431. pyramicus niger, 431. Drepanopora, 730. Dromæidæ, 130. Dromocyon, 148. Dryophanta, 294, 307, 315, 398. aquaticæ, 351. bella, 310.

centricola, 310, 398. disticha, 369. douglasi, 398. dugesi, 310. erinacei, 354. laurifoliæ, 351. liberæcellulæ, 350, 351. notha, 349. nubila, 310. palustris, 349. papula, 342. rubræ, 310. Dysstroma, 484. Dytiscidæ, 10, 58. Eccoptoglossa, 731. Echidna, 139. Echidnidæ, 139. Echinops, 164. Ecitonilla, 730. Ectocion. 245. Ectoconus, 180, 244. Edaphoşauridæ, 102, 122, 227. Edaphosaurus, 230. Eidolon, 200. Elachistarthron, 714, 715, 717. ambiguum, 715, 718. Elachistarthronini, 714. Elasmodontomys, 471. obliquus, 470. Elephantidæ, 183. Elephantulus, 198. Elephas, 109, 183, 244. Eleutherodactylus martinicensis, 441. Ellipsoglossa, 119. Elopidæ, 112. Elops, 220. Elotheriidæ, 190. Emeryella, 407. Emphor. 587, 588, 599, 608. Emphoropsis, 571-576, 588-593. Enochrus, 65. Entechnia, 574, 580, 591-593, 605, 613. Entelodon, 190. Entelodontidæ, 190, 193. Eodelphis, 139. Eohippus, 195, 248. Eomoropus, 195.

Eoserpeton, 226. Eosiren, 184. Epanorthidæ, 140. Epeicharis, 562, 568, 569. Epicharis, 550, 553, 557, 561, 562-564. Epicharoides, 557, 563, 564. Epimelissodes, 593, 595, 598. Epimetopus, 14, 42, 51, 81, 83. Epiplatymetra lentifluata, 490. Epiplemidæ, 483, 490. Epistylus, 11. Epitritus emmæ, 341. Equidæ, 109, 195, 265, 266, 282. Equus, 269, 272, 274-276. Erchomus lævis, 706. ventriculus, 706. Erignathus, 158. Erinaceidæ, 109, 162, 240. Erinaceus, 162, 163, 208, 216. Erpetosaurus, 226. Eryopidæ, 116. Eryops, 101, 116, 225. Erythrosuchidæ, 102. Eschatocerus, 357b. Esthonyx, 103. Eubothrus, 387. Eucera, 583-587, 591-594, 597, 604, 612, 615, 623, 624. Eucerinæ, 549, 593. Eucharis, 563, 564. Euchlæna lutzi, 483, 489. Eudiestota, 711. Eufriesia, 544. Euglossa, 544-549. Euglossidæ, 544. Eugnathus, 221. Eulæma, 544-549. Eulema, 544-548. Eumetopias, 109, 157. Eumicrota anomala, 718. corruscula, 718. insolita, 719. Eumorpha, 544, 545, 549. Euparkeria, 107, 123-128, 228. Eupithecia flavigutta, 486. subcolorata, 486. Euponera stigma, 404. Euprotogonia, 245.

Eurhinodelphis, 160.
Eurytomidæ, 301.
Eusipalia, 711.
Eusthenopteron, 219.
Eusynhalonia, 594, 615.
Euthyglossa, 594.
Exaleochara, 720.
Exomalopsis, 549, 562, 564–568, 574, 587, 611, 612, 627.
FALAGRIA, 731.
Falagriæ, 730.

Falagriota, 731.
Felidæ, 103, 156.
Fernaldia fimetaria, 486.
partitaria, 486.
Fiber, 172.
Figitidæ, 357b, 358, 359.
Fiorentinia, 568.
Fioriella marianii marianii, 378.
marianii meunieri, 378.
Florilegus, 594, 600, 603, 605, 609, 620.
Formica simillima, 406.

GALAGINÆ, 204, 205. Galago, 109, 204, 205. Galeopithecidæ, 198. Galeopithecus, 198, 200, 215. Galesauridæ, 133. Gallichthys, 286. ægyptiacus, 285, 289, 291. chevola, 285. ciliaris, 285. crinitus, 285. * gallus, 285. major, 285, 288. Gallus alexandrinus, 289, 291. Gastrolobium bicolor, 701. Gastrophæna, 713. Genetta, 153, 156. Genosema, 720. sexualis, 721. Geometridæ, 483, 484. Gillettia, 388. Glaucina, 488. erroraria, 487. escaria, 487. eupetheciaria, 487.

macdunnoughi, 488. pygmeolaria, 487. Glossura, 544, 546, 548, 549. Glyptopomus, 219. Gnypeta floridana, 730. Gomphognathus, 134, 135. Gonapsis, 369, 390, 391, 400, 401. cuscutæformis, 391. potentillæ, 391. Gonodontis distycharia, 490. Gorgonopsidæ, 133. Græfia smithi, 489. Gregory, W. K., Studies in Comparative Myology and Osteology, No. IV. -A Review of the Evolution of the Lacrymal Bone of Vertebrates, with Special Reference to that of Mammals, 95-263; No. V.-On the Anatomy of the Preorbital Fossæ of Equidæ and other Ungulates, 265-284. Grossouvria, 670. Gryposaurus, 107, 126, 127. Gundlachia, 550, 552. Gymnarthridæ, 102. Gymnura, 162-164. Gyrinophilus, 119. Gyrohypnus luteiventris, 704. temporalis, 704. Gyrophæna, 723. floridana, 719. lætula, 719. HABROPODA, 577, 588-591, 593. Halmæusa, 710, 711. Halmaturus, 143, 145.

Halmaturus, 143, 145. **Halterodon**, see errata. Hapalemur, 204. Hapalops, 167, 168, 240. Haploceras fialar, 644. Haploconus, 180, 181. Harpagolestes, 148. Hatteria, 130. Hegetotheriidæ, 179. Hegetotherium, 108, 178, 179. Heleioporus, 443. Heleophryne, 443. Heleophryne, 443.

lividus, 8, 62. maculicollis, 8, 61, 62, 65. normatus, 65. Helocombus, 56, 62, 80, 81. bifidus, 8, 56. Helophorinæ, 17, 22, 80. Helophorus, 5, 11-17, 27, 28, 80-84, 87. aquaticus, 5, 18, 20. granularis, 5, 17, 18. lacustris, 5, 17, 18. linearis, 17. lineatus, 17. micans, 5. rufipes, 5. rugosus, 17. schmidti, 5. viridicollis, 5, 17. Hemesia, 544, 549-561, 568. Hemicentetes, 164. Hemigalago, 205. Heodes hypophlæas hypophlæas banksi, 454. hypophlæas fasciata, hypophlæas 454, 455. hypophlæas hypophlæas fulliolus, 454. hypophlæas hypophlæas obliterata, 454. xanthoides luctuosa, 453. Heptacodon, 191. Hesperobium cinctum, 701. Heterocentris, 550, 553, 555, 568. Hilara, 726. fulviceps, 727. palleola, 727. Hipparion, 266, 268. Hippopotamidæ, 190, 191. Hippopotamus, 190. Hippotherium, 270, 271. Hister, 80. Holcaspis, 397, 398. globulus, 295. Holoptychius, 219. Homacodon, 186, 217. Homalodontotherium, 177. Homo, 109. Hoplandria, 720, 723. debilis, 721.

lateralis, 719. ochracea, 719. pulchra, 719, 721. Hornia, 570, 576. Hyænidæ, 103, 156. Hyænodon, 147, 151, 218, 239. Hyænodontidæ, 147, 148, 208, 243. Hydræna, 15, 24, 28, 78, 81, 82, 84. pennsylvanica, 6, 24. Hydræninæ, 21, 80. Hydriomena clarki, 483-485. furcata, 485. neomexicana, 486. speciosata, 485. Hydrobiinæ, 15, 22, 42, 60, 80. Hydrobiini, 80, 82. Hydrobius, 12, 14, 51, 66, 80-86. fuscipes, 4, 7, 12, 51, 52, 55, 56. globosus, 7, 12, 51, 52, 55, 58. scabrosus, 55. tesselatus, 55. Hydrocharis obtusatus, 4. Hydrochærinæ, 173. Hydrochærus, 109, 173, 174. Hydrochoinæ, 27, 80. Hydrochoini, 80. Hydrochous, 15, 27, 28, 81–85. excavatus, 27. scabratus, 27, 28. squamifer, 6, 24, 27, 29. Hydrophilidæ, 1-94. Hydrophilinæ, 31, 35, 80. Hydrophilus, 3, 10, 14, 16, 31, 35, 38, 39, 81, 83, 85, 86, 88. caraboides, 6, 31. glacus, 33. obtusatus, 6, 15, 31, 46, 86. Hydroscapha, 14, 15, 82, 84. natans, 4, 6. Hydroscaphidæ, 80. Hydroscaphinæ, 27, 80. Hydrous, 3, 9-11, 14, 31, 32, 35, 39, 81, 83, 85, 86, 88. aterrimus, 6, 39. piceus, 6, 39. triangularis, 4, 6, 15, 39, 40, 41, 88. Hyla, 441. prosoblepon, 442.

742

Hylella, 441, 445. buckleyi, 442. ocellata, 442, 444. parambæ, 442, 444. tenera, 442. Hylidæ, 443. Hylodes anomalus, 441. Hylonomidæ, 226. Hyloplesion, 226. Hyloscirtus, 443. Hynnis alexandrinus, 285, 286, 290, cubensis, 285-289, 290, 292. goreensis, 285, 286, 288-291. hopkinsi, 285, 286, 290, 292. Hyopsodontidæ, 175, 245, 246. Hyopsodus, 175, 176, 215, 244. Hyperodapedon, 129. Hypocryptocerus, 430. Hypohippus, 269, 270, 273, 278. Hyptioma, 704. Hyrachyus, 194, 195. Hyracidæ, 185. Hyracinæ, 185. Hyracodon, 195, 196. Hyracodontidæ, 195, 196. Hyracodontinæ, 196. **IBALIA**, 360. Ichneumia, 152, 153. Ictidopsis, 133, 134, 228, 232. Ictops, 162, 240. Idoceras, 643, 644, 669, 670. Iguana, 228. Iguanidæ, 130. Iguanodon, 125. Incisalia polios davisi, 453. Indris, 205. Indrisidæ, 203, 205, 209. Indrisinæ, 203. Interatheriidæ, 179. Interatherium, 109, 179. Ischyromyidæ, 173, 241, 242. Ischyromys, 174. Isectolophus, 195. Isocolus, 387. Itame octolineata, 487.

Keraterpeton, 226. Kinsey, Alfred C., New Species and Synonymy of American Cynipidæ, 293-317; Life Histories of American Cynipidæ, 319-357; Phylogeny of Cynipid Genera and Biological Characteristics, 357a-c, 358 - 402.Kogia breviceps, 161. Kritosaurus, 126, 127. LABIDOSAURUS, 121, 227, 230. Laccobius, 14, 42, 43, 44, 71, 73, 79, 81, 83, 85, 87. agilis, 7, 43. minutus, 43, 46. Lacerta, 98, 99, 107, 131. Lagostomus, 471. Lasius, 555, 561. Latax, 109, 155, 156. Lathrobiella ventralis, 702. Lechriodus, 443. Lemur, 109, 110, 200-205, 209, 215. Lemuridæ, 201, 204, 206, 209. Lemurinæ, 201. Leonidia, 571. Lepidosteidæ, 112. Lepidosteus, 112, 220, 221. Lepidotus, 220, 221. Lepilemur, 203. Leptadapis, 201, 202. Leptergatis, 569, 587, 592, 593. Leptictidæ, 109, 162, 163, 166, 240. Leptodactylidæ, 441, 443. Leptodactylus lineatus, 441. melanonotus, 441. mystaceus, 441. Leptogenius brevicornis, 704. Leptogenys puncticeps, 404. Lepus, 174. Licaphrium, 176. Lichanotus, 205. Limnebiinæ, 20, 22, 80. Limnebiini, 80. Limnebius, 14, 15, 21, 23, 78, 81, 82, 84. discolor, 5, 21. truncatellus, 5, 21. Limnocyon, 146, 151.

Limnoscelidæ, 102, 121, 227. Limnoscelis, 121, 227-229. Linoglossa, 711. Linolathra dimidiata, 702. Liodes, 80. Liposthenes glechomatis, 326. Lispinus tenellus, 693. tenuis, 693. Lisposthenes, 387. Lissagria, 731. Lithocharis ochracea, 702. Lithocharodes nigripennis, 704. Lophagria, 730. Lophiomys, 173. Lophomucter, 720, 722. lævicollis, 722. Lorinota, 731. Loris, 205, 207. Lorisidæ, 204, 205, 216. Lorisinæ, 204. Loxomma, 116, 118, 225. Loxommatidæ, 116, 225. Lutra, 109, 148, 155, 156. Lutz, Frank E., and Cockerell, T. D. A., Notes on the Distribution and Bibliography of North American Bees of the Families Apidæ, Meliponidæ, Bombidæ, Euglossidæ, and Anthophoridæ, 491-641. Lycosuchus, 134. Lydekkerina, 225. Lystrosaurus, 234. Lytorhodites, 391, 392, 400. MACARIA pictipennata, 486. simulata, 486. s-signata, 486. Macrauchenia, 177. Macrocera, 594, 597-599, 608, 610, 611, 615, 625. Macroglossa, 594, 622, 623. Macroglossapis, 594, 622, 623. Macromischa, 407-423. affinis, 407-410, 417. albispina, 408, 409, 424. albispina pallipes, 424. allardycei, 407-409, 414, 415. androsana, 407-409, 416.

cressonia, 408. flavidula, 408, 424. flavitarsis, 408, 410, 420. fuscata, 408, 410, 420. gundlachi, 408. iris, 408, 410, 422. isabellæ, 408, 409. lævissima, 408, 409. lucavensis, 408. lugens, 408, 410, 419. pastinifera, 407-409, 414. pastinifera opacipes, 407, 409. poevi, 408. porphyritis, 408, 410, 413. pulchella, 408, 409, 424. punicans, 408, 418. purpurata, 408, 410, 411, 417. sallei, 407-409. sallei havtiana, 407, 409. salvini, 408, 410, 421. salvini obscurior, 410, 421. scabripes, 408, 409, 416, 417. schwarzi, 408, 415. splendens, 407, 408, 410, 417. squamifera, 408, 410, 417. squamifera atrinodis, 410, 412, 413. subdetiva, 408, 409. terricola, 408, 409, 423, 424. versicolor, 408, 421. wheeleri, 408, 410, 417, 422, 423. Macropodidæ, 144. Macropus, 108, 144, 267. Macroscelides, 198, 199. Macroscelididæ, 198, 199. Manatidæ, 182. Manatus, 182, 184, 216. Manderstjernia, 394. Manidæ, 170. Manis, 107, 170, 171, 213. Mann, Wm. M., Additions to the Ant Fauna of the West Indies and Central America, 403-439. Manteoceras, 197. Manteoceratinæ, 197. Marmosa, 139. Martinella, 594, 605. Mastodon, 109, 180, 183. Mastodonsauridæ, 116, 225.

744

Mastodonsaurus, 101, 225. Megaladapinæ, 201. Megaladapis, 201-203. Megalichthys, 219. Megalohyrax, 109, 184, 185, 216, 218. Megalonychidæ, 167. Megalonyx, 166. Megamys, 471. Megilla, 554, 555, 561, 565, 580. Melanerpeton, 114, 226. Melanocentris, 550-561, 568. Melecta, 576. Meles, 154, 156. Meliphila, 591. Melipona, 493–501. fasciata barticensis, 459, 460. fasciata costaricensis, 459. fasciata cramptoni, 459, 460. fasciata panamica, 459. favosa, 460. intermixta, 460. interrupta oblitescens, 460, 463. lateralis, 460. lateralis lateralis, 461. lateralis intermixta, 461. lateralis kangarumensis, 461. oblitescens, 467. pseudocentris, 461. quadrifasciata, 460. quadrifasciata callura, 461. Meliponidæ, 492. Melissoda, 595. Melissodes, 539, 566, 567, 583-587, 591-594, **595**-627. Melitoma, 591-593. Meliturgopsis, 588, 593. Melosaurus, 225. Meniscotheriidæ, 175, 245, 246. Meniscotherium, 108, 175, 176, 245, 246. Merychippus, 266, 269. Mesohippus, 193. Mesoleuca interrupta, 486. Mesonychidæ, 103, 148, 208, 239. Mesoplodon, 159, 161. Mesopropithecus, 205. Mesothea viridipennata, 484. Metachiromys, 168. Metamynodon, 197, 279, 280.

Metopias, 225. Metrocampa perlata, 489. Miacidæ, 103, 148, 149, 238. Miacis, 239. Micranthophora, 570-573, 575, 577, 581, 593. Microbrachidæ, 226. Microbrachis, 226. Microdota amicula, 727. Microgale, 164. Micropholidæ, 115, 225. Micropholis, 113–115, 223, 225. Midas, 211. Mioclænidæ, 245, 246. Mioclænus, 215. Miohippus, 269, 270. Mioxicebus, 204. Mixtotherium, 186. Mœritheriidæ, 182, 245. Mœritherium, 180,182, 244, 245. Mongos, 152, 156. Monoclonius, 127. Monomorium carbonarium ebeninum, 406. floricola, 406. stolli floridanus lucayanus, 406. Moropus, 195. Moschops, 132, 133. Mus, 172. Mustela, 153, 155, 156. Mustelidæ, 103, 154-156, 213. Mycetes, 210, 211. Mycocepurus smithi borinquenensis, 430. Mycterosaurus, 107, 122, 123, 227, 230. Myllæna, 707. abdita, 709. arcana, 708. audax, 709. brevicollis, 709. brevivestis, 709. cuneata, 708, 710. currax, 708, 710. decreta, 709. dissimulans, 708. dubia, 708. esuriens, 708. fenyesi, 709. frivola, 709.

fuscipennis, 708. immunda, 709. impellens, 709. infuscata, 709, 710. insipiens, 707. insomnis, 708. intermedia, 708. ludificans, 709. minuta, 707, 708. molesta, 708. obscurata, 709. procidua, 708. scobinella, 709. umbra, 708. vegeta, 709. vulpina, 707, 708. Mylodontidæ, 168, 169. Myonycteris, 200. Myrmecobiinæ, 142. Myrmecobius, 142, 143, 171, 186, 207-209, 215, 217, 236. Myrmecophaga, 168, 169, 216, 218. Myrmecophagidæ, 108, 169. Myrmelachista ambigua ramulorum, 435. rogeri, 434. rogeri rubriceps, 434. Myrmeurynota, 435. Myrmicinæ, 405. Myrmobrachys, 435. Myrmoturba, 435. Mystriosuchus, 107, 125, 228. NAOSAURUS, 107, 122, 123, 227, 230. Nasua, 151. Necrolemur, 109, 204, 206. Necrolemuridæ, 204. Neobisnius umbripennis, 705. Neomoria festaria, 484. junctolinearia, 484. pistaciaria, 484. Nesodon, 177, 178. Nesomyrmex, 407. Nesophontes, 103, 163, 166, 208, 240. Nesopithecus, 207. Neuroterus, 342, 356, 358, 361, 368, 369, 372, 375, 376, 394-396, 400, 401. albipes albipes, 377. albipes lævisculus, 377.

aprilinus, 396. aprilinus aprilinus, 378. aprilinus schlechtendali, 378. baccarum baccarum, 377. baccarum lenticularis, 377. batatus, 333, 334, 365, 373. batatus batatus, 335, 377. batatus bisexualis, 334, 377. catesbæi, 395. fumipennis fumipennis, 377. fumipennis tricolor, 377. notha, 350. noxiosus, 336, 365, 373. noxiosus noxiosus, 338, 377. noxiosus vernalis, 337, 377. numismalis numismalis, 377. numismalis vesicatrix, 377. pacificus, 334. quercus-batatus, 334. rileyi, 301. tectus, 338. tectus abundans, 339. tectus tectus, 339. thompsoni, 301. virgens, 395. Nichols, John Treadwell, Hynnis and Alectis in The American Museum of Natural History, 285-292; A Key to the Species of Trachurus, 477-481. Noble, G. K., Two New Batrachians from Colombia, 441-444. Notharctinæ, 201. Notharctus, 100, 109, 200-202, 205, 207, 209, 212. Nothodectes, 215. Notman, Howard, Staphylinidæ from Florida in the Collection of The American Museum of Natural History, with Descriptions of New Genera and Species, 693-732. Nycticebidæ, 204, 209. Nycticebus, 205, 207.

Nyctosaurus, 128.

- Nylanderia, 431, 432.
- Nyrania, 225.

OCHETOCERAS, 681.

canaliculatum, 681-683, 686, 689. canaliculatum burckhardti, 681-686. mexicanum, **686**–689. Ochthebius, 14, 15, 21, 24, 25, 28, 81, 82, 84. foveicollis, 22. holmbergi, 21. impressus, 5, 21, 22. lejolisi, 21. punctatus, 5, 21. quadricollis, 5, 21. steinbuehleri, 5. steinbuhleri, 21. subinteger lejolisi, 5. tuberculatus, 5, 21, 22, 24. O'Connell, Marjorie, The Jurassic Ammonite Fauna of Cuba, 643-692. Octodon, 475. Odobænidæ, 157. Odobænus, 157. Odontomachus hæmatoda notata, 404. hæmatoda insularis pallens, 405. hæmatoda insularis ruginodis, 404. hæmatoda insularis wheeleri, 405. Oligota parva, 710. Omalium humerosum, 693. Omoschema, 731. laticeps, 732. Onohippidium, 266, 268, 275-278, 280, 282. Onychodectes, 166, 167, 215, 421. Ophiacodontidæ, 102. Ophioömma, 704. rufa, 705. Opolemur, 206. Oreodon, 193, 270. Ornithorhynchidæ, 139. Ornithorhynchus, 137, 139, 234. Ornithosuchus, 128. Orthodiatelus, 714-716, 717. innotabilis, 716-718. Orycteropodidæ, 170. Orycteropus, 108, 170, 171, 216, 218. Osorius, 698. brevicornis, 698. latipes, 699. politus, 698.

Osteolæmus, 125. Osteolepidæ, 101. Osteolepis, 111, 219. Osteophorus, 225. Otariidæ, 156, 158. Oxyænidæ, 146. Oxyclænidæ, 103, 146, 238. Oxytrigona, 495. PACHYRUKHOS, 108, 174, 178, 179. Pæderus floridanus, 701. littoreus, 701. obliteratus, 701. Palæanodon, 168, 215. Palæohatteria, 129, 233. Palæomastodon, 180, 245. Palæoniscidæ, 220. Palæopropithecus, 205. Palæoryctes, 163, 240. Palæothentes, 108, 140, 145. Palæothentidæ, 140. Palæotherium, 282. Palaminus contortus, 701. testaceus, 701. Paloplotherium, 282. Pan, 201. Pantolambda, 180, 243, 244 Pantolestes, 165. Pantylidæ, 102, 120, 121, 227. Pantylus, 102, 121, 227-230. Paracymus, 14, 17, 28, 42, 51, 74, 81-88. æneus, 7. subcupreus, 7, 24, 58, 71, 74. Parahippus, 269. Paramys, 172-174, 242. Parasilusa, 711. Pariasauridæ, 101, 120, 121, 227. Pariasaurus, 120, 121, 227, 228, 230. Pariotichidæ, 102. Patriocetus, 160. Patriofelis, 239. Pectusa, 711, 717. Pedetes, 173, 174. Pedetidæ, 173. Pediaspis aceris aceris, 379. aceris sorbi, 379. Pelosaurus, 223-226. Peltoceras bimmamatum, 689.

transversarium, 673, 675, 686. Pelycodus, 202. Peponapis, 614, 623-626. Perameles, 140, 143. Peramelidæ, 108, 140. Perchœrus, 108, 191, 193. Periclistus, 358. Periptychidæ, 181, 243, 246. Perisphinctes, 644, 646, 647, 669, 670. alterniplicatus, 680. cubanensis, 646. **648**-663, 667, 668, 677, 778. cubanensis a, 660-663. cubanensis β , 662–663. delatorii, 663-670. durangensis, 660. healeyi, 671-674. orbignyi, 670-674-679. plicatilis, 670-680. plicatiloides, 646, 670-680. Perisphinctinæ, 644, 645, 658. Perodicticus, 109, 204. Phacochærinæ, 192. Phacochœrus, 192, 193, 216, 218. Phænonotum, 77, 81, 83, 87. Phæoura mexicanaria, 489. Phalangista, 108, 145. Phanacis, 358, 369, 400, 401. centaureæ, 297, 388. Phascolarctos, 108. Phascolomyidæ, 144. Phascolomys, 108, 144, 145, 216. Phasiane tenebrosata, 487. Pheidole androsana, 426. androsana bakeri, 426. cubaensis grayi, 426 fallax, 426. flavens, 427. flavens asperithorax, 427. flavens asperithorax semipolita, 427. punctatissima, 427. punctatissima annectens, 427. Phenacodontidæ, 175, 245, 246. Phenacodus, 108, 175, 176, 245, 246. Philonix, 294, 320. compressa, 352, 353. erinacei, 355. fulvicollis, 355, 356.

hirta, 365. pezomachoides, 365. Philonthus alumnus, 706. flavolimbatus, 706. fulvipes, 706. gopheri, 706. hepaticus, 705. lomatus, 706. Philotes enoptes mojave, 455. sonorensis sonoralba, 456. Philydrus, 14, 56, 58, 62, 63, 65, 76, 80-83, 86, 88. cinctus, 8, 56, 65, 70. consors, 65. hamiltoni, 8, 65, 70. nebulosus, 8, 65, 66, 69, 70. ochraceus, 8, 65, 70. perplexus, 8, 65-67, 69, 70. testaceus, 8, 65, Phlaocyon, 150, 151. Phoca, 158. Phocidæ, 107, 158, 213. Phymatura, 713. Physeteridæ, 161. Physeterinæ, 160. Pigia multilineata, 484. Pinophilus latipes, 701. Placochelys, 99. Plagiaulacidæ, 138. Plagiomene, 248. Platæomys, 475. Platandria, 720. Platanistidæ, 160. Platonica, 720. Platyrrhinæ, 110, 210-212. Platysomidæ, 220. Platythyrea punctata, 404. Plebeius acmon labecula, 457. Plesiadapidæ, 199, 248. Pleuraspidotheriidæ, 245. Pleurosaurus, 129, 233. Pliohippus, 268, 269. Podalirius, 555, 561, 570-582, 588-592. Podophyra, 11. Pœcilocentris, 550, 553, 557, 568. Poliosauridæ, 102, 122, 227. Polymastodon, 107, 137, 138. Polypteridæ, 112.

Polypterus, 101, 112, 113, 219, 220. Ponera opaciceps, 404. Ponerinæ, 404. Potamochœrus, 192, 266, 267, 270. Potamogale, 107, 164-166. Potamogalidæ, 165. Prenolepis anthracina, 433, 434, 431, 432. gibberosa, 403, 433. gibberosa rogeri, 434. guatemalensis antillana, 431. myops, 432. pyramica, 431. steinheili, 431. vividula antillana, 431. Procamelus, 187, 193. Procavia, 186. Procolophon, 107, 119, 121, 217, 227-230. Procolophonidæ, 102, 121, 227. Procyon, 150, 151. Procyonidæ, 103, 149, 150, 151. Prodasypus, 168. Proechimys, 472. Propithecus, 109, 203, 205. Prosimiæ, 206, 207. Protapirus, 195. Proterix, 162, 163. Proterotheriidæ, 175. Protocetus, 158, 243. Protohippus, 269. Protriton, 226. Protylopus, 193. Protypotherium, 109, 179. Prozeuglodon, 159, 160. Pseudaulax, 385. Pseudolathra analis, 702. Pseudomyrma elongata, 405. elongata cubaensis, 405. flavidula, 405. flavidula pazosi, 406. pazosi, 406. Psiloceras planorbe plicatum, 667. Psithyrus, 502, 505, 507, 510, 516, 517, 521, 522, 533, 539-544. Psittacotherium, 166, 215. Psylliodes, 17. Ptilocercus, 199. Ptilodus, 234, 235.

Ptilothrix, 587. Ptilotopus, 550-561, 568. Pyramica gundlachi, 430. Python, 107. RANA, 118. Ranidæ, 118. Ranodon, 119. Rhinoceros, 196, 272, 276, 279, 281. Rhinocerotidæ, 194, 196. Rhinochærus, 276. Rhizodopsis, 219. Rhodites, 357c, 358, 359, 461, 368-371, 375, 376, 385 390, 391, 400, 401. arefactus, 391. bicolor, 371, 393. carolina, 331. carolinus, 331. dichlocerus, 366, 371. eglanteriæ, 393, 394. fulgens, 391. fusiformans, 393. globuloides, 331. ignota, 331. ignotus, 331-333, 371, 394. mayri, 328. multispinosus, 391. nebulosa, 393. nebulosus, 391, 393. neglectus, 391. nodulosus, 294, 392. ostensackeni, 391. rosæ, 328-332, 371, 382, 392-394. semipiceus, 391. spinossissimæ, 394. verna, 294. vernus, 294, 392, 393. Rhodocentris, 550-560, 568. Rhoophilus loewi, 365. Richmond, E. Avery, Studies on the Biology of the Aquatic Hydrophilidæ, 1-94. Rhynchocyon, 109, 198-200, 217, 266-268, 282. Rhynchosaurus, 233. Rhytina, 184.

SACCOLAIMUS, 200.

Saghatheriinæ, 185. Salamandridæ, 117, 213. Salamandrina, 117, 223. Salpa, 323. Santhota, 731. Sarcophilus, 142, 143, 145. Saropoda, 589. Sauranodon, 129, 233. Sauravidæ, 101. Scaphognathus, 128. Scelidotherium, 168, 169, 240. Schistacme obtusa, 711, 712. Sciagraphica colorata, 486. Scincosaurus, 226. Sciocharella, 703. Sciocharis quadriceps, 703. Sciuridæ, 173. Sclerocephalus, 225. Scomber trachurus, 479. Scopæopsis opaca, 703. Scopæus carolinæ, 703. macilentus, 703. Scylacops, 107, 133, 227. Scyris alexandrina, 285, 289. indica, 285, 286, 292. Selene, 291. vomer, 286. Seironota, 117. Seriola picturata, 480. Seymouria, 120, 121, 227, 228. Seymouriidæ, 101, 120, 121, 227. Silphidæ, 80. Silusa, 711. Silusæ, 710. Silusida, 713, 714. tenuicornis, 714. Simiidæ, 210. Simocephalus, 11. Simosaurus, 99. Solenodon, 163-165, 208. Solenodontidæ, 165. Solenopsis corticalis **binotata**, 428. corticalis virgula, 428. geminata, 427. globularia desecheoensis, 428. leviceps, 427. Solenozopheria vaccinii, 365. Sorex, 165, 166, 208.

Spaniopone, 407. Spathegaster, 394. quercus-laurifoliæ, 350. Speoxenus cundalli, 473, 474. Spercheus, 14, 79, 81–84. Sperchinæ, 80. Sphæridiinæ, 77, 80, 82. Sphæridium 15, 77, 81, 83, 87, 88. Sphenacodon, 107, 122, 227, 230. Sphenacodontidæ, 102, 122, 227. Sphenodon, 99, 107, 130, 228-230, 233. Sphenodontidæ, 130. Sphercheinæ, 30, 80. Sphyræna, 112. Sphyrænidæ, 112. Spilogale, 109, 155. Spirodontomys jamaicensis, 473, 474. Squalodontidæ, 161. Stamnoderus pallidus, 703. Staphylinidæ, 78, 80, 693-732. Stegochelys 119, 230. Stegopidæ, 115, 225. Stegops, 115, 223. Stegosaurus, 127. Stegotherium, 167, 168, 171. Stenagria, 731. Stenaspilates albomacularia, 490. flavisaria, 490. levisaria, 490. Stenometopon, 129, 233. Stenus, 699. callosus, 700. lutzi, 700. meridionalis, 700. sectilifer, 700. teter, 699. Stephanoceras, 670. Stephanoceratidæ, 670. Stephanosaurus, 127, 128. Stergamatæa dolliata, 489. Stilicus angularis, 703. Strumigenys alberti, 340. eggersi cubaensis, 430... eggersi vicentensis, 430. margaritæ, 430. rogeri, 430. Strymon acadica acadica muskoka, 450. acadica coolinensis, 451.

750

acadica montanensis, 451. acadica souhegan, 449. acadica souhegan swetti, 450. chalcis, 453. sæpium, 452. sæpium chlorophora, 452, 453. sæpium fulvescens, 453. sæpium provo, 452. Subhyracodon, 196. Suidæ, 192, 193, 266, 268, 282. Suinæ, 192. Sus, 100, 193, 272. Synalonia, 614, 615. Synchlora liquoraria, 484. Synergus, 358. lignicola, 295. Synglochis perumbraria, 488. Synhalonia, 580, 608, 614-622, 626, 627. Systemodon, 195, 248. TACHYPORUS macropterus, 706. Talpa, 165, 166, 208. Tamandua, 169, 170. Tanygnathus bicolor, 706. Tapinocephalidæ, 132. Tapinoma litorale, 431. litorale cubaensis, 431. Tapiridæ, 194, 195. Tapirulus, 186. Tapirus, 194, 272, 275, 276, 280. Tarpon, 112. Tarsiidæ, 204, 216. Tarsius, 109, 204, 206, 209, 212. Tatusia 168. Taxidea, 154, 156. Tayassu, 191. Teleosaurus, 125. Tatartopeus nigriceps, 702. Tetonius, 204, 206. Tetrachodon, 245. Tetragona, 463, 493, 495. Tetrallus, 719. Tetralonia, 580, 594, 595, 598-608, 612, 614-624, 627. Tetraloniella, 622, 626. Tetramorium guineense, 407, 413. lucayanum, 406. simillimum, 406.

Tetrapedia, 562, 568, 569. Tetrastylus, 471. Tharsalea virginiensis, 452. Thecla, 449. Thecturota fracta, 713. nevadica, 713. Theosodon, 176. Thinocyon, 146, 151. Thoatherium; 176. Thoracophorus costalis, 693. Thygaster, 594, 597, 607, 611, 616. Thylacinus, 134, 142, 145, 218. Thryptacodon, 238. Tillotherium, 103, 171. Timaspis, 358, 361, 369, 387, 400, 401. Tinotus, 719, 723. amplus, 723. brunnipes, 724. parvicornis, 725. planulus, 724. Tolypeutes, 167. Tomistoma, 125. Tomoxelia, 711. Tornos erectarius, 487. scolopacinarius, 487. Toxodon, 178. Toxodontidæ, 177. Trachina, 549, 555-560, 569. Trachodon, 127. Trachodontidæ, 126. Trachurus capensis, 479, 480. cuvieri, 478. declivis, 477-480, 481. japonicus, 477-479, 480, 481. lathami, 478, 479. linnæi, 478. mccullochi, 478, 479–481. mediterraneus, 477-479, 480. murphyi, 478, 479–481. novæ-zelandiæ, 477, 478, 480. picturatus, 478-480, 481. semispinosus, 478, 479, 480. symmetricus, 477-480, 481. trachurus, 478, 479, 481. Trachymesopus, 404. Trachymyrmex, 428. Tragulidæ, 187. Tragulus, 187.

752

INDEX

Trematosaurus, 99, 118, 225. Triassochelys, 107, 119, 230. Triceratops, 107, 126, 127. Trichechus, 184. Trichiusa ursina, 725. Triepeolus, 592, 624. -Trigona, 493-494, 495-502. amalthea, 465. bipunctata wheeleri, 462. clavipes, 462, 466, 467. cupira, 464. dallatorreana, 463. droryana, 466, 467. duckei, 467. emerina, 466, 467. frontalis, 462. frontalis flavocincta, 462. fulviventris, 461. fuscipennis, 465. goeldiana, 467. goettei, 463. heideri, 463. jaty, 461, 462. kohli, 463, 464. leucogastra, 466. manni, 463. mexicana, 462. mocsaryi, 463. mosquito, 466, 467. musarum, 464, 467. occidentalis, 463. pallida, 460, 463, 464. pura. 466 recursa, 460, 464, 465, 467. recurva, 465. rhodoptera, 462. rhumbleri, 463, 464. ruficrus corvina, 465. schrottkyi, 467. stigma, 465. subgrisea, 465, 467. townsendi, 465. varia, 462. williana, 462, 463, 467. Trigonaspis, 349. crustalis, 381. Triisodontidæ, 239. Trimerorhachidæ, 115, 225.

Trimerorhachis, 115, 222, 223, 225. Triplopus, 195. Trirachodon, 137. Tritylodon, 137, 138, 214, 235. Tritvlodontidæ, 138. Troglodytes, 210. Trogophlœus, 693. basicornis, 694. corticinus, 694, 695. fulvipes, 694. gracilis, 695. maculicollis, 693. modestus, 694. nanulus, 694. texanus, 694. Tropisternus, 10, 14, 31, 35, 52, 81-88. glaber, 4, 6, 15, 35, 39. lateralis, 6, 15, 35, 37. mixtus, 35. sublævis, 39. Tubifex, 11, 63, 69. Tupaia, 109, 171, 186, 198, 199, 215. Tupaiidæ, 198. Tutidanidæ, 226. Typotherium, 178. Tyrannosaurus, 107, 123, 124.

UDENODON, 99. Uintatheriidæ, 181. Uintatherium, 180. Urocordylidæ, 226. Ursidæ, 103, 149, 151–155, 213. Ursus, 109, 149, 151, 152.

VARANOPS, 123. Vassacyon, 239. Viverravus, 151. Viverridæ, 103, 152, 153, 156, 213. Vomer, 291. Vulpavus, 149, 151, 239.

WASMANNIA auropunctata, 427, 428.
Watson, Frank E., and Comstock, Wm. P., Notes on American Lepidoptera with Descriptions of New Varieties, 447–457.
Wr ght, Wm. S., Report on the Lepidop-

Vr'ght, Wm. S., Report on the Lepidoptera of the American Museum Expedition to Arizona, 1916, 483-490.

Wynyardia, 107, 143, 144, 236.

Xenoglossa, 558, 574, 593, 597, 599, 602, 611–619, **623**–626.

Xenoglossodes, 565, 597, 610, 617, 620, 622, **626**.

Xenomyrmex, 406.

ZETHUS, 547. Zeuglodon, 158. Zeuglodontidæ, 159. Zeus ciliaris, 292. Ziphiidæ, 159. Ziphiinæ, 160, 161. Ziphius, 161.





PUBLICATIONS

OF

THE AMERICAN MUSEUM OF NATURAL HISTORY

MEMOIRS

Volume I. Zoology and Palæontology. Volumes II–VIII. Anthropology. Volume IX. Zoology and Palæontology. Volumes X–XIV. Anthropology.

Volumes II, IV, V, VII, VIII, X–XIV, and an Ethnographical Album form Volumes I–X of the Memoirs of the Jesup North Pacific Expedition.

MEMOIRS-NEW SERIES

Volumes I and II. Zoology and Palæontology. Volume III, part 1. Entomology. Volume III, parts 1 and 2. Palæontology.

BULLETIN

Volumes I-XXIV, XXV, parts 1 and 2, and XXVI-XLII.

ANTHROPOLOGICAL PAPERS

Volumes I-XI; XII, parts 1-5; XIII; XIV; XV, part 1; XVI, parts 1-5; XVII, parts 1-4; XVIII; XIX, parts 1-4; XX, part, 1; XXI, parts 1-2; XXII, parts 1-4; XXIII, parts 1-3; XXIV, parts 1-3; XXV, part 1; XXVI, part 1.

MONOGRAPHS

A Review of the Primates. By D. G. Elliot. 3 volumes. Hitherto Unpublished Plates of Tertiary Mammals and Permian Vertebrates. By E. D. Cope and W. D. Matthew.

THE AMERICAN MUSEUM JOURNAL

Volumes I–XX. The Journal is a popular record of the progress of The American Museum of Natural History, issued bimonthly.

HANDBOOKS. Numbers 1-8.

GUIDE LEAFLETS. Numbers 1-51.

ANNUAL REPORTS. First (1869) to Fifty-second (1920).

A more detailed list, with prices, of these publications may be had upon application to the Librarian of the Museum.