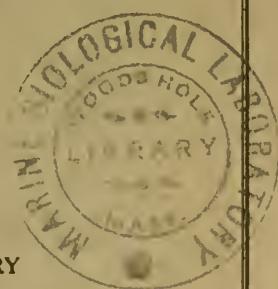


SECOND AND THIRD
SUPPLEMENTS
1925 to 1932 (inclusive)

to

CATALOGUE
of the
COLEOPTERA
of
AMERICA, NORTH OF MEXICO

By
CHARLES W. LENG, B.Sc.
Director
MUSEUM, STATEN ISLAND INSTITUTE OF ARTS AND SCIENCES
Research Associate
AMERICAN MUSEUM OF NATURAL HISTORY
and
ANDREW J. MUTCHLER
Associate Curator
in charge of
Coleoptera
AMERICAN MUSEUM OF NATURAL HISTORY



Mount Vernon, N. Y.
JOHN D. SHERMAN, JR.

December 18

1933

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JOHN D. SHERMAN, JR.
Mount Vernon
New York

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AFFECTIONATELY
DEDICATED TO

S A M U E L H E N S H A W

IN CONTINUED APPRECIATION OF
THE HENSHAW LIST OF COLEOPTERA
PUBLISHED ALMOST HALF A CENTURY AGO.
WE REJOICE IN HIS UNABATED
INTEREST IN BIBLIOGRAPHICAL MATTERS.

C O N T E N T S

	PAGES
INTRODUCTION: ESSAY ON CLASSIFICATION, WITH SPECIAL REFERENCE TO LARVAE	1-8
SECOND SUPPLEMENT, 1925-1930	9-54
BIBLIOGRAPHY, 1925-1930	55-76
THIRD SUPPLEMENT, 1931-1932	77-94
BIBLIOGRAPHY, 1931-1932	95-102
NECROLOGY	102
CATALOGUE OF FOSSIL NORTH AMERICAN COLEOPTERA	
SECOND SUPPLEMENT, 1927-1932	103-105
(By H. F. Wickham)	
INDEX TO ABOVE SUPPLEMENTS	107-112

SIGNS AND ABBREVIATIONS

|| indicates name preoccupied.

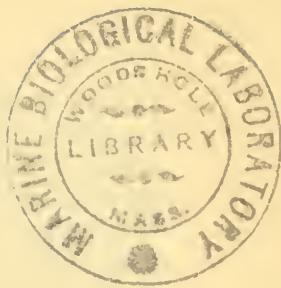
‡ indicates name cited in error.

† indicates introduced species.

¹ A figure one following name means it was based upon a single specimen.

ab.	aberration
auct.	authors
fide	according to
ined.	unpublished
i. litt.	in a letter
n. n.	nomen novum, name substituted for one preoccupied.
nec	not
s. str.	sensu strictu, in a restricted sense.
subg.	subgenus
subsp.	subspecies
syn.	synonym
var.	variety

For other abbreviations (of localities, etc.) see original catalogue.



INTRODUCTION

In the second supplement to the Catalogue of Coleoptera of America, north of Mexico, we record the species, subspecies, and "aberrations," described during the period from January 1, 1925, to December 31, 1930. As in the catalogue and first supplement, the new species are serially numbered, with subspecies and varieties indicated by the addition of a letter to the serial number of the species with which they are allied. An unusual number of names have been proposed for so-called "aberrations;" these have not been numbered, but are not necessarily synonyms. Many are recognizable variations which, however, have been regarded by some author or reviewer as of less than subspecific rank.

By thus numbering the names which have been proposed we do not intend to present our own opinion as to their validity, but to reflect the opinions of the authors quoted. In a few instances, where the opinions conflict, we have, as far as possible, presented both views.

In preparing this supplement we have used as a basis the data assembled in Entomological News, and added thereto those found in the Zoological Record and, in a few instances, others cited in Biological Abstracts. The result was then compared with the original papers, as published in various periodicals, here and abroad, and in many instances, preliminary copy was sent to the authors for correction. Finally comparison was made with the Junk Coleopterorum Catalogus, which disclosed some differences which have been noted, but not always followed.

The original intention was to print the second supplement in 1931. Financial difficulties having caused a postponement, we have taken advantage thereof to carry the bibliography down to December, 1932, and to indicate the new species, etc., proposed in 1931 and 1932, as a third supplement.

In the bibliography we have included all contributions bearing directly or indirectly upon the classification of Coleoptera, as well as a few papers of literary interest. The period covered by this supplement has produced several papers of importance in clarifying the classification. Bradley's Manual of the Genera brings together in one volume, for the first time since 1883, definitions of nearly all the genera. Jeannel's Monograph of Trechinae is an example of able taxonomic work covering the species of the old and new world.

Tillyard's *Insects of Australia and New Zealand* reviews the classification with special reference to the phylogeny, and recent discoveries in fossil insects. Forbes' studies in venation and wing folding patterns afford an independent view of relationships. Finally and most important we have included, though not published until 1931, "An Illustrated Synopsis of the principal Larval Forms of the order Coleoptera" by Böving and Craighead. By the publication in this paper of the results of the studies of many years, it becomes possible to compare the existing classification of adult beetles with one based entirely upon their immature stages.

Happily for the permanence of our classification there is now a more substantial agreement between the two than when MacLeay in "*Horae Entomologicae*" (1819-1821) attempted to make such a comparison. Dr. Böving's statement of this fact is "As a rule the classification of the larvæ agrees with the commonly recognized classification of the imagines, and particularly well with the one followed in Leng's catalogue." The division of the order into sub-orders Adephaga and Polyphaga, and the subdivision of the sub-orders into superfamilies, grouped into series, is found in both systems. The differences consist in the composition of the sub-orders, and of their subdivisions, in which the knowledge of larval relationships affords valuable evidence, heretofore lacking. A brief statement of some of these differences follows.

ARCHOSTEMATA

The families Cupesidæ and Micromalthidæ, the anomalous characters of which have heretofore been recognized, are ranked as a third suborder by Böving. He says "I cannot see how we can escape giving to this group the rank of a suborder, the Archostemata of Kolbe, as it can be joined neither with the Adephaga nor the Polyphaga." Forbes, from studies of wing folding pattern, grouped these families under the same name. Tillyard, though he placed Cupesidæ in Adephaga, described it as "an annexent group between the Adephaga and Polyphaga." There is thus a substantial agreement on the division into three suborders; and in future catalogues the first should be on phylogenetic grounds, the Archostemata.

ADEPHAGA

The family Rhysodidae is transferred by Dr. Böving from Polyphaga to Adephaga. "The larva of *Clinidium*," he says, ".... can without reservation be placed in the suborder Adephaga." The superfamilies Caraboidea and Gyrinoidea are sustained by characters of their larvæ, which also afford important help in arranging in natural sequence the subfamilies and tribes of Carabidæ and Dytiscidæ. On the basis of larval characters Cicindelidæ, Carabidæ, Omophronidæ, Haliplidae, Hygrobiidæ, Noteridæ, Dytiscidæ, and Amphizoidæ, are entitled to rank as

families, with the rank of the Pseudomorphidæ unknown. The subfamilies indicated in the Carabidæ are Lebiinæ; Dromiinæ; Odacanthinæ; Driptinæ, Nebriinæ; Loricerinæ; Carabinæ, Cychrinæ, Chlæniinæ; Licinæ, Bembidiinæ, Sphodrinæ, Broscinæ, Dyschiriinæ, Scaritinae, Elaphrinæ; Patrobinæ, Pterostichinæ, Amarinae, Harpalinæ, Glyptinæ. The semicolons in this enumeration separate the related groups of subfamilies. The Trechini appear to be separable from Bembidiini, on their larval characters, only by differences of tribal rank.

As to the sequence of the suborders Dr. Böving considers that it would "be logical to place the Adephaga third, as the more modern of the three," "but for practical purposes it appears more advisable to rank the suborders in the commonly accepted sequence." The well developed tarsus of adephagous larvæ, carrying one or two distinct and movable claws, may be a primitive character, as regarded by us in 1920; and the great similarity in this respect between the larvæ of the Caraboidea and those of certain neuropterous larvæ is interesting and possibly significant. However there are several polyphagous larvæ, specifically mentioned by Dr. Böving, in which the tarsungulus is "divided by a faint suture into a proximal and distal portion which possibly correspond respectively to tarsus and claw." In Dr. Böving's definition of the suborders by larval characters, the Adephaga are placed second, and the resemblance of their legs and claws to those of the Archostemata seems to us to indicate this as their natural sequence.

POLYPHAGA

The greatest difficulties in the classification have been in this suborder, and in the differences between the opinions expressed by Böving, Forbes, and Tillyard, they are still apparent. The removal of Cupesidæ and Micromalthidæ to Archostemata, and of Rhysodidæ to Adephaga, simplifies the classification of the Polyphaga; and fortunately the isolation of the Scarabæoidea, of the so-called Phytophaga, and of the Hydrophiloidea and Staphylinoidea is not questioned; though, as to the latter two, the composition is somewhat altered. Believing that the larval characters afford the safest guidance, not however to the exclusion of other considerations, we review the superfamilies in the sequence adopted by Dr. Böving.

Staphylinoidea. The component families, based on larval characters, would be Limnebiidæ, Hydroscaphidæ, Leptinidæ, Pteliidæ, Anisotomidæ; Platypyllidæ, Scaphidiidæ; Silphidæ, Staphylinidæ, Pselaphidæ, Seydmænidæ. The families also included, though their larvæ are imperfectly known or entirely unknown, are Clambidæ, Brathinidæ, Sphaeritidæ, Sphaeriidæ, and Micropeplidæ. The differences between this and existing classification is the removal from Hydrophilidæ of the aberrant genera Limnebius, Ochthebius, and Hydræna; and the suppression of Silphoidea as a superfamily.

Forbes reached a similar result from his studies of the wings. "Ochthebius and Hydræna," he says, "do not belong here (in Hydrophilidæ), but with the aberrant "Silphidæ;" and the latter he classifies with his Staphyliniformia.

It should be noted that within the families Anisotomidæ and Staphylinidæ, the larval characters indicate many subfamilies, with Oxyporinæ, Habrocerinæ, and others, quite definitely separated; and that the Histeridæ, on larval characters, are associated with Hydrophiloidea, a view in which apparently Forbes' conclusions are not entirely in accord.

Hydrophiloidea. In this superfamily Dr. Böving groups Histeridæ and Helophoridae, "on account of an unquestionable conformity in the development of the fundamental systematic characters" of their larvæ; Spercheidæ; Hydrochidæ and Hydrophilidæ, the latter divided into subfamilies Berosinæ, Hydrophilinæ, Hydrobiinæ, and Sphæridiinæ. The treatment of Histeridæ, regarded by Forbes as a superfamily, and by Tillyard as "very distinct and isolated," is at first sight rather startling; but it is to be noted that Forbes also found that the venational characters seemed "to link with the Hydrophilidæ on one side and more closely to the Lamellicornia on the other." The views of Tillyard regarding Hydrophiloidea as "perhaps the oldest of existing Coleopterous groups" traceable "back geologically to the upper Permian" are interesting. He further says "the fossil evidence, so far as at present available, would tend to indicate that....the development of longitudinal striae and intervals is an entirely new formation. If this be so, the almost smooth elytra of many Hydrophilidæ probably represent the most primitive type." The same argument would apply to the comparatively smooth elytra of the Histeridæ, and thereby support Dr. Böving's classification of the larvæ. Moreover, while Hololepta and Hydrophilus in the adult stage seem far apart, some of the small Saprinæ are not so dissimilar to the Sphæridiinæ.

Cucujoidea. Dr. Böving finds three types of larvæ in the Polyphaga. The primitive type is found in its most characteristic and original form in such families as the Limnebiidæ, Leptinidæ, and Anisotomidæ. From it are derived the more or less specialized larvæ of the Staphylinoidea and Hydrophiloidea, which have therefore preceded other Polyphaga in his conspectus.

A distinct polyphagous larval type is found in the series Cucujoidea. It shows such close affinities with the staphylinoid-leptinid type as to be placed next thereto in the conspectus. The families included are (semi-colons indicating their grouping) *Eucinetidæ*, *Derodontidæ*, *Monotomidæ*, *Rhizophagidæ*; *Languriidæ*, *Cryptophagidæ*, *Silvanidæ*, *Cucujidæ*, *Prostomidæ*; *Catogenidae*, *Læmophloeidæ*, *Phalacridæ*, *Smicripidæ*, *Corylophidæ*; *Nitidulidæ*, *Cybocephalidæ*; *Sphindidæ*; *Lathridiidæ*, *Murmiidæ*, *Endomy-*

chidæ, Coccinellidæ, Erotylidæ, *Dacnidæ*, Melandryidæ, *Scaptiuidæ*, Anthicidæ, Byturidæ; *Bothrideridæ*, Colydiidæ, Mycetophagidæ; Oedemeridæ, Cephaloidæ; *Zopheridæ*, *Synchroidæ*, Pedilidæ; Eurystethidæ, *Salpingidæ*, Pyrochroidæ, *Boridæ*, Pythidæ, Othniidæ; Alleculidæ, Tenebrionidæ (to be divided into many sub-families), *Nilionidæ*, Lagriidæ. In addition, though the larvæ are imperfectly known, the Monommatidæ and Lymexylidæ are included, and with doubt possibly the Mordellidæ.

These families have been heretofore, with some exceptions named below, the components of the superfamilies Cucujoidea, Tenebrionoidea, and Mordelloidea, which thus become united as one superfamily, but divided into a greater number of families. The families added are indicated by italics. On the other hand, Mycetæidæ, Euglenidæ, and Monoedidæ are reduced on larval characters to subfamily or tribal rank. The exceptions above referred to are Eucinetidæ, formerly classed as a subfamily of Dascillidæ, but agreeing in its larval form, apart from the lack of jointed urogomphi, with the leptinid association of the Staphylinoidea; Corylophidæ, usually placed as an aberrant family in the Silphid association: Sphindidæ, the larvæ of which represent "unquestionably a simple, primitive cucujoid type," and have heretofore been included in Bostrichoidea.

In this treatment of the Cucujoidea it is to be hoped that the clues to actual relationship afforded by the larval characters, so thoroughly studied by Dr. Böving, may be reconcilable with adult characters. But it cannot be denied that Forbes' classification (Journ. N. Y. Ent. Soc., XXXIV, 113-115), based on wing venation and folding pattern, is not in agreement. Of the four series, Haplogastra, Bostryciformia, Diversicornia, and Dryopiformia, into which he divides the Polyphaga, only the first can, by transferring the Scarabæoidea, be compared with Dr. Böving's leptinid-staphylinoid association. We admit that our tendency is to regard the larval characters, based on mouth parts and organs of locomotion, as the surer guide; but we cannot conceal the differences that are apparent in Forbes' views.

Byrrhoidea. The larvae of this series are found to represent another distinct polyphagous type, not linked by any larval type known up to this time with the primitive Staphylinoidea. This type of larva is in fact so distinct that Dr. Böving appears to have considered founding a suborder thereon. However some of the derived families of the byrrhoid type and some of the cucujoid type approach one another. Wherefore Dr. Böving writes "rather isolated as the series Byrrhoidea appears in the polyphagous suborder, it does not seem necessary to rank it and the families and series derived from it as a separate suborder." These families and series include, in Dr. Böving's conspectus, the remainder of the Coleoptera. The

Byrrhoidea includes only the family Byrrhidæ. Two series, Dascilloidea and Cleroidea, are descended directly from the Byrrhoidea; Dryopoidea can be derived through the Ptilodactylidæ; Elateroidea, through the Eurypongoidæ; Cantharoidea and Scarabæoidea from other dascilloid or dryopoid families.

With the Cleroidea may be associated Mordelloidea, Bostrichidea, and the so-called phytophagous assemblage. The series Meloidea may also belong here but Dr. Böving adds that there are some reasons for considering the possibility that it might be related to the Cantharoidea.

The composition of the series thus hypothetically derived from Byrrhoidea differs in some cases from that heretofore assumed and will be discussed below.

Dascilloidea. The Eucinetidæ are removed to Cucujoidea, other families to Dryopoidea, as stated below. The Nosodendridæ and Heteroceridæ are added, making four families, viz: Dascillidæ, Heteroceridæ, Helolidæ, Nosodendridæ.

Dryopoidea. This series includes new families Ptilodactylidæ and Eurypongoidæ, taken from Dascilloidea; Psephenidæ, divided into subfamilies Psepheninæ and Eubrianacinæ of which the latter is taken from Dascilloidea; Chelonariidæ; Dryopidæ, divided into subfamilies Larinæ, Pelonominae and Helminæ.

In the rearrangement of the families of Byrrhoidea, Dascilloidea, and Dryopoidea, discussed in detail by Dr. Böving in his paper of 1929 in the Bulletin of the Brooklyn Entomological Society, the value of larval characters in determining relationships is strikingly exhibited.

Cantharoidea. The Melyridæ, Cleridæ, and Corynetidæ are removed to a new series Cleroidea. The family Brachypsectridæ, following Blair, is considered valid on larval characters, but is included here, rather than in Dascillidæ. The Cantharidæ are divided into subfamilies Malthinæ, Chauliognathinæ, Malthodinæ, and Cantharinæ.

Elateroidea. The differences here from existing classification are slighter than in some preceding series. Plastoceridæ are included in Cebrionidæ, and Drapetes is removed from Throscidæ to the subfamily Oestodinæ of Elateridæ. Sandalidæ is treated as a family, quite distinct on larval characters from Rhipiceridæ.

Scarabæoidea. This superfamily is unchanged, but the larval characters accentuate its subdivisions into families and subfamilies.

Cleroidea. The families included in this new superfamily are Dermestidæ, Melyridæ, Ciidæ, Ostomatidæ, Cleridæ, Catogenidæ (?), and Bothrideridæ (?). The relationship of the last two is regarded as problematical. As to some of the other families, the larval characters suggest the need of many subfamilies.

Meloidea. This new superfamily includes Meloideæ, divided into three subfamilies (after erecting a new family Tetraonycidæ), and Rhipiphoridæ. "Probably the Strepsiptera are to be classified in the Coleoptera and close to the Rhipiphoridæ," is added in a footnote.

Mordelloidea. This series, which was proposed by us with great hesitation, is reduced to the family Mordellidæ, and to its main genera Tomoxia, Mordella, and Mordellistena. Even these in the larval stage are related to several of the melandryid genera.

Cerambycoidea. This series is restricted by its larval characters to the family Cerambycidæ, divided into subfamilies Prioninæ, Cerambycinæ, Aseminæ, Lepturinæ, Lamiinæ and Disteniinæ. The Chrysomelidæ are regarded as a superfamily.

Bostrichoidea. This series, comprising Ptinidæ, Anobiidæ, Bostrichidæ, Psoidæ, and Lyctidæ, differs from the existing classification only by the removal of the families Ciidæ and Sphindidæ.

Chrysomeloidea. Larval studies indicate the necessity of separating the Bruchidæ and Chrysomelidæ, as a superfamily, and of dividing the latter into many families. Some have heretofore been recognized as subfamilies, others are the result of recent studies, and many are again subdivided; it is even stated that "when better studied, the classification of the entire family Galerucidæ will unquestionably be changed." The families indicated by larval studies are Bruchidæ, Sagridæ; Orsodaenidæ, Donaciidæ, Camptosomatidæ, Eumolpidæ, Crioceridæ, Chrysomelidæ, Galerucidæ (divided into Galerucinæ, Diabroticinae, and Halticinæ), Hispidæ, and Cassididæ.

Platystomoidea. In the division of the Rhynchophora by larval characters the family Platystomidæ becomes a superfamily divided into two subfamilies Brachytarsinæ and Choraginae.

Curculionoidea. The remainder of the Rhynchophora are divided into Brentidæ, Proterhinidæ, Attelabidae, Apionidæ, Curculionidæ (with Lissorhoptrinæ as a subfamily), Calendridæ, Platypodidæ, and Scolytidae. In regard to the latter it is stated that "the larvae of the Curculionidæ and Scolytidæ cannot be separated." Belidæ larvae are unknown.

Finally the conspectus by Dr. Böving ends with the superfamily *Lymexyloidea* for Lymexylidæ and Telegeusidæ, the larva of the latter being unknown. As far as known the larva of this superfamily approaches in important characters those of Oedemeridæ and Calopidæ, "but also greatly resembles the larval form of the ancient suborder Archostemata." "The systematic position of this series is uncertain."

As a final summary of this important contribution to the classification of the Coleoptera we note with satisfaction that, in its main

features, the classification reached after nearly two centuries of study of the adults is confirmed. The phylogeny of the order, relieved of the supposition that all its families must be traceable to a common ancestral type, becomes plainer as the morphology of the larvæ displays the wide gaps between the three suborders Archostemata, Adephaga, and Polyphaga. The difficulty of subdividing the Polyphaga on characters drawn from the number of tarsal joints, or the form of the antennæ, becomes lessened by the recognition of three types of larvæ, leptinid-staphylinoid, eucujoid, and byrrhoid, by means of which the true relationship of heretofore baffling forms may be indicated.

We congratulate Dr. Böving and his co-workers, F. C. Craighead, R. A. St. George, and others, in this country and abroad, on the successful outcome of their patient research, aided by the inspiring influence and learning of the late Dr. E. A. Schwarz. Even more, perhaps, are the students of the classification of the Coleoptera to be congratulated on the guidance in their studies afforded by Dr. Böving's work. The task remains of reconciling the differences between the classification of the adults and that of the larvæ. In this supplement we are therefore content to indicate, through this introduction, and by footnotes in the text, the alterations in the classification which are probably needed.

It is a matter of regret that the work of P. de Peyerimhoff on the Larvæ of Coleoptera (*Annales Soc. Ent. France*, 1933) appeared too late for its valuable comments on classification to be noticed in these supplements.

We thank the many students of North American Coleoptera who have so willingly assisted us in our work, and it is a pleasure to acknowledge for the printers, for the publisher, and for ourselves, the assistance of Miss Ethel Olsen, by whom, practically without error, the manuscript was typewritten.

September 1, 1933.

Charles W. Leng
Andrew J. Mutchler

SECOND SUPPLEMENT TO CATALOGUE OF COLEOPTERA OF AMERICA, NORTH OF MEXICO

ADDITIONS AND CORRECTIONS TO DECEMBER 31, 1931

CICINDELIDÆ

Blaisdell 25; Criddle 25; Knaus 25, 29; Horn 26, 28, 30; Dawson 28;
Davis 28, 29; Varas y Arangua 27, 28; Tanner 29.

In Cicindelidæ, and throughout this supplement, the numbering indicates our attitude towards the changes proposed. Numbers at left hand margin of the page indicate changes adopted or unquestioned; numbers indented from margin indicate changes that may not be finally adopted when the group involved is restudied.

Amblycheila

- 2 a = 2, fide Horn 30
3 = race of 2, Horn 30
Omus *
4 a and 4 b = 4, fide Horn 30
5, 7, 9, 16, 17, 19 = races of 12, fide
Horn 30
20 = lesser race of 19, fide Horn 30
21, 22, 24 = races of 12, " " "
24 a = lesser race of 17, " " "
24 b = lesser race of 9, " " "
25 = lesser race of 34, " " "
27, 34 = races of 12, " " "
15 is valid, fide Blaisdell 25
19 a is valid, fide Blaisdell 25

Cicindela **

- 39c. fletcheri Criddle 25-127 Mont.
39d. pigmento-signata W.H. 30-76
Tex.

Cicindela **

- 44d. arida Davis 28-65 (syn. 29-100)
45c. cyanocephala Varas 28-239
N. W. St.
45d. militaris Varas 28-242 N. Y. R. I.
47b. tanneri Knaus 29-47 Ut.
53g. viridula Varas 27-173 Mass. R.I.
59h. chamberlaini Knaus 25-182
Oreg.
63a. frosti Varas 27-174 So. Cal.
69b. kansanus n. n. Knaus
27-24 and 30-79 for
violacea ‡ Kan.
86g. colossea W. H. 26-169 Cal. Is.
52 a = 52, fide Blaisdell 25-79
53 e¹, 59 b¹, 61 c, 61 c¹, 61 c², 65 d
are synonyms, fide Tanner 29

* The names heretofore proposed in *Omus*, except those above referred to, are treated as synonyms by Horn 30. His opinions (based in part upon studies of genitalia) may not be entirely acceptable to American students, more familiar with the living beetles and their environment.

** Horn 30 gives a check list in which the species considered valid are serially numbered, the "larger races" are prefixed by Roman numerals, and the "lesser forms of these races" are designated by letters. The more important reductions in rank are:

43, 44, 45, 46 and 47	are made races of	42
50	is " "	49
54, 55, and 56	are " " "	53
62	is " " "	61
70	" " " "	69
82	" " " "	81
109	" " " "	108

A large number of varieties are also reduced to synonymy. These have resulted, he states, "from too much attention to the minute differences," and he adds, "I am inclined the other way." It is possible that this inclination has, at least in some instances, resulted in errors.

CARABIDÆ

Lapouge 08, 24; Jeannel 20, 27, 28; Sloane 23; Van Dyke 24, 25, 26; Bänninger 25, 28; Notman 25, 29; Blaisdell 25; Hopping 25; Fall 26, 30; Darlington 26, 30; Hatch 26, 29, 30; Csiki 27; Breuning 27, 28; Benedict 27; Liebke 27, 28, 29, 30; Blatchley 28, 30; Barber 28; Tanner 28; Lutshnik 29; Brown 30; Cooper 30; Bradley 30*.

Trachypachus20680. *slevini* Van D. 25-111 Oreg.**Pemphus**

Stenocantharus Gistl. fide Csiki 27, is the older name. According to the same author 130 a, 132 a¹ are good species, and 161b is a variety of 163.

Carabus166f. *atlanticus* Lapouge 24-191 St. Pierre Miquelon175a. *canadensis* Lapouge 08-19 (see below) N. B.166b. = *granulatus* L., fide Lapouge 24-190

According to Col. Cat. pars 91, by Csiki, our species *sylvosus* belongs in the subgenus *Tanaocarabus* Reitt. 170b is treated as a synonym, and the name *lherminieri* Dej. is preferred for the variety heretofore called *finitimus* Hald. By the same authority *serratus* is placed in subgenus *Hemicarabus*; and *limbatus* and *vinctus* in a subgenus *Lichnocarabus*.

173a. *georgiae* n. n. Csiki 27 for *carinatus* Dej.

Csiki also makes several changes under *tedatus* which with *nemoralis* he places in a section *Archicarabus*. These are:

169b. *vancouvericus* n. n. Csiki 27, for *bicolor* Walk.169g. *canadicus* Roeschke with *gladiator* Heyden and *canadensis* Lapouge as synonyms.

Calosoma, fide Breuning 28 [see also Appendix A.]

- 183. in subg. *Syncalosoma*
- 185. etc. in subg. *Carabiosoma*
- 184. in subg. *Callistriga* Mots.
- 186. etc. in subg. *Carnegonia* Lap. i. l.
- 187. = 186 a
- 203. in subg. *Blaptosoma*
- 176. etc. in subg. *Callitropa*
- 188. = 186 a
- 18565. = 186 a
- 194b. = 186 a
- 195. = *lecontei* Csiki n. n. for *lugubre* || Lec.
- 197. in subg. *Paracalosoma*
- 204-207 in subg. *Chrysostriigma* Kby.
- 204a. = 204

Calosoma

- 204d. *stellata* Csy is valid
- 204b. = 204d
- 204c. = 204d
- 206a. = 206
- 206b. = 206
- 18566. = 206
- 207a. = 207 in subg. *Tapisnothenes*
- 207b. = 207
- 18567. = 207
- 18568. = 207
- 18569. = 207

Callisthenes treated as subg. by Breuning
212. = *discors* subsp. *schaefferi* n. n. Breuning 28-80.

215. = *luxatum* ab. *striata* n. n. Breuning 28-86.
Elaphrus

- 231. *horni* Csiki 27-420 n. n. for *viridis* Horn
- 227. synonymy reversed fide Csiki 27 (*Trichelaphrus*) Semen. 26-39 includes 229 and 233 (*Elaphroterus* Semen. 95-308) includes 232 and
- 20681. *parviceps* Van D. 25-112 Alas.

Loricera Latr. 04-273

- (*Lorocera* auct. et Csiki 27)
- 241a. considered valid by Casey is a synonym, fide Csiki 27.
- 241b. *siera* Van D. 25-113 Cal. ? *congesta* Mann. 53-121 is valid, fide Csiki 27. Alas.

Pachytele20682. *beyeri* Notm. 19-255 L. Cal.**Notiophilus**

- 254. *obscuratus* n. n. Fall. 26-125 for *obscurus* ||
- ? *cibrilaterus* Mots. 64-193 fide Csiki 28 N. Am.

Nebria

- 20683. *riversi* Van D. 25-115 Cal.
- 20684. *schwarzi* Van D. 25-116 Alta.
- 20685. *piperi* Van D. 25-117 Wash. B.C.
- 20686. *meanyi* Van D. 25-118 Wash.
- 20687. *spatulata* Van D. 25-119 Cal.
- 20688. *lyelli* Van D. 25-120 Cal.
- 20689. *crassicornis* Van D. 25-121 Wash.
- 20690. *moesta* Lec. 50-209 is valid, fide Fall 26-125

* Jeannel has monographed the Trechini, adding generic subdivisions; Notman has treated Pseudomorphidae as a family; Breuning has subdivided Calosoma. On the other hand, Sloane has consolidated some tribes previously recognized, and Bradley has simplified the divisions of Pterostichini and Harpalinae proposed by Casey. For Dr. Böving's results, based on larval studies, see Introduction.

20691. vandykei Bänninger 28-5 Wash.-Colo.
20692. paradisi Darlington 31-24 Wash.
vandykei || Darlington 30-104
20693. aleuta Van D. 24-5 Alas.
Csiki, Col. Cat. 97 (1928) separates under subg. Nebriola K. Dan. 263, 264, 265, 266, and 293.
He also places bifaria as a good species, and indicates as synonyms 276b = 276a, 18598 = 285, 291 = 278?
282a is placed as a variety of 276, 18597 also as a variety of 276.
Nebria and Leistus (= Leistidius K. Dan.) are both treated as subgenera of Pelophila.
- Metrius**
- 299a. planatus Van D. 25-122 Cal.
- Dyschirius**
20694. criddlei Fall 25-309 Man.
20695. desertus Fall 25-310 Cal.
20696. secretus Fall 26-130 Alas.
18607. belongs in Clivina,
fide Blatch. 30-46.
- Clivina**
20697. californica Van D. 25-124 Cal.
18607. floridæ n.n. Csiki 27 for dissimilis || Blatch.
- Schizogenius**
20698. pygmæus Van D. 25-125 Cal.
- In the tribe Scaritini, divided into subtribes Pasimachina, Ardistomina and Scaritina, Csiki 27 makes many changes, as follows:
305. laterisulcatus Sturm Cat. Kaf. 1826, p. 182 is added as synonym.
313. punctulatus Lec. nec Hald. 48-146 is added as synonym.
? missuricus Gistl. 1820 Neue wirbellose Tiere 1857-27 Mo.
316. added synonyms: spinipes Sulz. and subterreus Bon.
317. added synonyms: distinctus Hald., ephialtes Lec., intermedius Lec.
? Scarites gagates Bon.
Mem. Acad. Turin 1813, p. 475 N. Am.
? Scarites glabratus Bon.
Mem. Acad. Turin 1813, p. 467. Am.
? Clivina brevicollis Putz. 66-155 ? Am.
367. cf. 18606 and contracta Fourcroy Ent. Paris 1885, p. 50.
18605. belongs in Clivina
Some of these, at least, may require further investigation.
- Nomius**
- This genus, also Psydrus and Morion, are placed in the tribe Pterostichini by Bradley, following Sloane 23. The change is doubtfully recorded, though adopted also by Csiki.
- Asaphidion**
20699. flavipes L. 61-750, fide Notman 29-177; and Cooper 30-21 L. I.
- Bembidion**
20700. lachnophoroides Darlington 26-34 Alta.
20701. vandykei Csiki 28-163 coerulescens || Van D. 25-65 Cal.
20702. utahensis Van D. 25-66 Ut.
20703. weesi Hatch, 30-11 Okla.
20704. yukonum Fall 26-131 Yukon
20705. mckinleyi Fall 26-132 Alas.
20706. concurrens Fall 26-134 Alas.
20707. picipes ‡ auct. = plagiatum Zimm., fide Fall 26-133
686, viridicolle has precedence
624 is not a synonym of 641, fide Blais. 25-79
756 = 767 ? Fall 26-133
(*Peryphus*)
20708. mackinacensis Hatch 29-135 Mich.
intermedium ‡ auct. = rapidum Lec., fide Fall 26-133
rupicola Kby. is valid, fide Fall 26-133
lucidum Lec. = rupicola Kby., fide Fall. 26-133
grapi ‡ N. Am. auct. = picipes Kby., fide Fall 26-133
(*Parabrateon* Notman 29-157)
20709. tuberculatum Notman 29-157 Mich.
Csiki 28 introduces new subgenera as follows:
Chrysobracton Net. 14-166 for 408-419.
Eurytrachelus Mots. 50-15 " 438, 439, 18616
Plataphodes Ganglb. 92-52 " 503 and ventricosum Mots. 50-11 Alas.
Trepanedoris politum Mots. 45-29 Cal.
Csiki also records new names as follows:
752. reliquum n. n. Csiki 28 for relictum Csy.
755. roosvelti Pic 02-71 n. n. for perconcinnum Blais.
- Tachys**
- Csiki 28 submerges under this name all the genera into which Casey divided the old genus. The following new names for preoccupied names result in part from this course:
813. unionis n. n. Csiki for laetifica Csy. nec Bates
847. latalatus n. n. Csiki for latipennis Hayw. nec. Sharp

Tachys

852. pallidiusculus n. n. Csiki for pallescens Csy. nec Bates
 881. uniostriolatus n. n. Csiki for unistriatus Csy. nec Putz. nec Reitt.
 887. trechoides n. n. Csiki for trechiformis Hayw. nec Jordan.

Patroboidea Van D. 25-67
 20710. rufa Van D. 25-67 Wash.**Diplous** Mots. Kaf. Russl. 1850, p. 10.
 (Platidius Chaud.) fide Csiki 28**Trechus ***

910. chalybaeus Dej.
 californicus Mots.
 tahoensis Csy.
 910a. utahensis Schffr.
 20711. coloradensis Schffr. 15-48
 ? saxatilis Csy.
 909. apicalis Mots. Kamchatka
 909a. micans Lec.
 fulvus Lec. nec Dej.
 rubens Horn nec Fab.
 borealis Schffr.
 puritanus Csy.
 brumalis Csy.
 rhodensis Csy.
 pallescens Csy.
 909b. canadensis Putz. 71-160 Nfld.-Can.
 911. ovipennis Mots.
 laevigatus Lec.
 20712. conformis Jeannel 27-188 Cal.
 912. pomonae Fall.
 914. arizonae Schffr.
 915. hydropicus Horn
 omit flavipes Kby. = 2171
 913. carolinae Schffr.
 20713. vandykei n. n. Jeannel 28-791 ruficollis || Van D. 26-66
Microtrechus Jeannel 27-585
 20714. vandykei Jeannel 27-587 N. C.
Neaphaenops Jeannel 20-154
 918. tellkampfi Er.

Pseudanophthalmus Jeannel 20-154

920. menetriesi Mots.
 ventricosus Mots.
 angulatus Lec.
 919. striatus Mots.
 interstitialis Hubb.
 923. pubescens Horn
 924. audax Horn
 925. horni Garman
 922. pusio Horn

20715. hubbardi Barber 28-196 Va.

Pseudanophthalmus Jeannel 20-154

20716. engelhardti Barber 28-195 Tenn.
 921. eremita Horn
 tenuis Horn
 20717. barberi Jeannel 28-132 Ky.

Myas

(? = *Trigonognatha* Mots. 57-25,
 fide Bradley 30-26 and Csiki.)

Pterostichus **

945. cf. Van D. 25-69
 20718. nigrocæruleus Van D. 25-70 Wash.-Cal.
 20719. beyeri Van D. 25-71 Mont.
 20720. falli Van D. 25-73 Cal.
 20721. termitiforms Van D. 25-74 Oreg.
 20722. lanei Van D. 25-76 Wash.
 20723. rufofemoralis Van D. 26-113 Alas.
 20724. pacificus Van D. 26-114 Wash.
 937. is placed in subg. Peryphes.
 957. algidus Lec. is valid.
 961. lecontellus n. n. for longulus Lec. nec Reiche.
 991. contractus Lec. is valid, castanipes || Mén. nec Kby.
 1006. rejectus Lec (1005) is a synonym.
 1010. idahoë n. n. for elongatus Schffr. nec Duft. nec Chaud.
 1017. oregonis n. n. for longicollis Lec. nec Duft.
 1018. fugiens n. n. for fugax Csy. nec Moraw.
 1020. fenyesi n. n. for ovicollis Schffr. nec Mots. nec Reitt.
 Under Anaferonia Csiki adds evanescens Csy. 18-343.
 It occurs in Mexico not U. S.
 Fortax Mots. antedates Ferestria Leng.
 1082. dejeanellus n. n. for morio Dej. nec Duft.
 1110. sayanus n. n. for obscura Say nec Dej.
 1114a. aleutorum Lut. 14-427 n.n. for brevicollis Tsch. nec Lec.
 1116. synonymy reversed and var. rugifer Tsch. added.
 1117. globicollis n. n. for rotundicollis Mann. nec Duft.
 1124. frigidus Dej. is valid sp.
 1126. fusco-aeneus Chd. is valid sp. fatuus is syn.
 1143. ochoticus and arcticus Sahlb. are syn.

* The arrangement of the species heretofore placed in Trechus and Anophthalmus follows the work of Jeannel; he has separated them from the Pogonini, and has treated them as a subfamily. Dr. Böving also separates them from Pogonini, but as a tribe of subfamily Bembidiinae.

** The treatment of Pterostichus by Csiki 30 submerges the allied genera of our American catalogues as subgenera or as sections of Pterostichus s. str. A number of specific names are thus brought into conflict. The changes given above are therefore proposed by Csiki; many of them, however, will be unnecessary if our generic divisions are retained.

Pterostichus

According to Csiki:

1149. caseyi n. n. for breviusculus
Csy. nec Sahlb.
In *Cryobius* and elsewhere the species described by Motschulsky and other authors, heretofore unrecognized are treated as valid, except the following:
 texicola n.n.
 for *texanus* Mots. nec Lec.
1152. is syn. of *diplophyrus* Chd.
 76-42
1156. add *atratus* Lec. 63-140 to synonymy.
1157. add *connexus* Chd. 76-44 to synonymy.
1161. add *cupreonitens* Sturm. 43-23 to synonymy.
1163. *coloradensis* n. n. for *bicolor* Lec. nec *Arragona*.
1168. *substrenuus* n.n. for *strenuus* Lec. nec Panz.
1173. is placed in subg.
 Metamelanius
1174. to 1176 are placed in subg.
 Melanarius
1177. *ohionis* n. n. for *purpuratus* Lec. nec Herr.
1181. is in subg. *Pseudargutor* and is called *leconteianum* Lut. which name is elsewhere cited as synonym of *nitidus* Kby.
1182. to 1187 are placed in subg. *Americomaseus* n. n. 1930 for *Micromaseus* Csy.
 nec Desbr. apparently conflicting with *Omaseulus* Lut. published 1929.

Anilloferonia Van D. 26-11520725. *testacea* Van D. 26-116 Wash.**Evarthrus**

20726. *carolinensis* Csiki 30
 montanus || Van D. 26-116
 nec Mots. N. C.
20727. *lodingi* Van D. 26-118 Ala.
1075a. *alabamæ* Van D. 26-118 Ala.

Omaseulus n.n. Lutshnik 29-5(*Micromaseus* || Csy. nec Desbr.)**Bothriopterus**

According to Csiki:

- 20729.
- commixtus*
- Chd. 50-135 Alas.

Platysmatus Lutshnik 29-5(= *Pseudargutor* Csy.
Pseudolagarus Lut.)

1181. *nitidum* Kby., type
 leconteianum Lut. and *erythropodus* Dej. are synonyms of 1181.

Loxandrus

- 1230.
- blatchleyi*
- n. n. Csiki for
-
- brunneus*
- Blatch. nec Sloane

Oxycrepis Reiche 43-78(*Stolonis* Mots. 65-230 fide Csiki)**Curtonotus**

20730. *consueta* Fall. 26-135 Alas.
20731. *imperfectus* Brown 30-232
 Que.

The following new names are proposed by Csiki, who treats *Celia*, *Acrodon*, *Barydatus*, *Curtonotus*, *Triæna*, etc., as subgenera of *Amara*:

1415. *lecontei* n. n. for *polita* Lec.
 nec Chd.
1424. *haywardi* n. n. for *parviceps* Hayw. nec Putz.
1426. *americana* n. n. for *brunnipes* Mots. nec Letzn.
1327. *horni* n. n. for *femoralis* Horn. nec Dej. nec Letzn.
1350. *subaenescens* n. n. for *sublaevis* Lec. nec Sturm nec Steph.
20732. *jucunda* n. n. for *impunctata* Putz.
 67-170 nec Letzn. U. S.
20733. *purpurascens* Mots. 59-152
 Cal.
1335. is syn. of *brunnea* Gyll. and
 belongs in subg. *Acrodon*.
1270. *putzeysiiana* n. n. for
 putzeysi Horn nec Fairm.
18720. *maxwelli* changed to
 maxwellianus
1249. is synonym of 1250
Curtonotus is spelled *Cyrtotonotus*
by Csiki.

A number of heretofore unrecognized names are treated as valid and some changes in synonymy are made; also
alaskana n. n. is proposed
for *angustata* Sahlb.

Zezea Csiki n.n.(*Triæna* || Lec. nec Hubner)**Rembus**

- 20734.
- angusticollis*
- Blatch 28-61
-
- Fla.

Rhadine

- 20735.
- longicollis*
- Benedict 27-44
-
- N. Mex.

Platynus

- 20736.
- prognathus*
- Van D. 26-119
-
- Ga.

(*Anchomenus*)

1523. ab.
- syracensis*
- Hatch 26-247
-
- N. Y.

Colpodes

- 20737.
- rufiventris*
- Van D. 26-120
-
- Ariz.

Anchonoderus

- 1607.
- schaefferi*
- n. n. Liebke 28-128
-
- unicolor || Schffr. nec Chaud.

Colliurus Latr. 17-179 *	Zacotus
(<i>Casnonia</i> Latr. 22-77)	20741. <i>subopacus</i> R. Hopping 25-206 B. C.
(<i>Odacanthella</i> Liebke 30-658, type 1612)	
1612b. <i>suturalis</i> Chaud. is valid, fide Liebke	20742. <i>pacificus</i> Fall 26-136 Alas.
1613 and 1614 also belong here.	20743. <i>washingtoniensis</i> Van D. 26-123 Wash.
Galerita	20744. <i>martini</i> Van D. 26-124 Cal.
1620b. <i>ahasverus</i> n. n. Liebke 29-297	Dicheirus
intermedia Csy. nec Fairm.	20745. <i>blaisdelli</i> Van D. 26-125 Cal.
<i>caseyi</i> Liebke 28-129	
Pseudaptinus	Tachycellus
20738. <i>oviceps</i> Van D. 26-121 Cal.	(<i>Triliarthrus</i> Csy. based upon in- consequential differences, fide Fall 30-251)
Thalpius	20746. <i>frosti</i> Fall 30-251 Mass.
20739. <i>microcephalus</i> Van D. 26-122 Cal.	20747. <i>tibialis</i> Kby. is distinct, fide Fall 30-251 Mass. E. Can.
Axinopalpus	2161 differs little from 2159
20740. <i>utahensis</i> Tanner 28-270 Ut.	2163 differs little from 2164
Cymindis	2166 is a <i>Stenocellus</i> , fide Fall 30-252
19027. <i>tarda</i> n. n. Liebke 27-104	
sinuata Csy. nec Reiche	
19028. <i>caseyi</i> n. n. Liebke 27-104	
alternans Csy. nec Ramb.	

PSEUDOMORPHIDÆ

Newman 40, Horn 67, Notman 25

Pseudomorpha	Pseudomorpha
20748. <i>falli</i> ¹ Notman 25-15 So. Cal.	20754. <i>consanguinea</i> Notman 25-18 So. Cal.
20749. <i>hubbardi</i> Notman 25-15 Ariz.	Ariz.
20750. <i>tenebroides</i> ¹ Notman 25-16 Ariz.	
20751. <i>alutacea</i> ¹ Notman 25-17 N. Mex.	20755. <i>vindicata</i> ¹ Notman 25-19 Ut.
20752. <i>vicina</i> Notman 25-17 So. Cal. Nev.	20756. <i>champlaini</i> Notman 25-20 Ariz. Cal.
20753. <i>vandykei</i> ¹ Notman 25-18 Ariz.	20757. <i>schwarzii</i> ¹ Notman 25-21 Ariz.

OMOPHRONIDÆ

This family is treated by Csiki 27 as a tribe Omophronini with following synonymy: 2284c (= 2284d), 2293 (= *sonore* Csy. 97-304), 2285 (= 2286, 2291, 2292), 2295 (= 2296). The family is recognized by Dr. Böving.

AMPHIZOIDÆ

Amphizoa	20758. <i>striata</i> Van D. 27-197 Wash.
2281. <i>lecontei</i> Matth. planata Van D. 27-98 and 27-197 Alta.	

HALIPLIDÆ

Brychius	Haliplus
20759. <i>albertanus</i> Carr 28-23 Alta.	cf. subg. <i>Paraliaphlus</i> Guignot 30-74 for <i>H. triopsis</i> Aubé.
20760. <i>pacificus</i> Carr 28-24 Cal.	
	Peltodytes

2332. is valid, fide Blatch. 30-38.

* A rearrangement of the genera heretofore included in Anchonoderini, Odacanthini, and Egini is proposed by Sloane 23 and is apparently adopted in Bradley's Manual. Dr. Böving's work on the larvæ may require revision of their results.

NOTERIDÆ

The genera *Noterus*, *Hydrocanthus*, and *Canthydrus*, the larvae of which have fossorial legs, are placed in the family Noteridæ by Dr. Böving.

Canthydrus

20761. *floridanus* is valid, fide Blatch. 20762. *similator* Zimm. 28-165 Cal. Mass. 30-38.

Hydrocanthus

Blatchley 25; Fall 26, 27, 28; Wallis 26; Hatch 28; Gellermann 28; Darlington 28; Zimmermann 28; Brown 30; Carr 30; Bradley 30.*

Bidessus

2390e. *microreticulatus* Hatch 28-219
Mich. Wash.

Coelambus

20763. *borealis* Fall. 26-137 Alas.

20764. *dentiger* Fall 27-136 Alta.

20765. *bruesi* Fall 28-64 Nev.

20766. *columbianus* Brown 30-87
B. C.

20767. *quebecensis* Brown 30-234
Que.

20768. *thermarum* Darlington 28-1
Nev.

2407a. *winnipeg* Wallis 26-90 Man.

2424a. *lineellus* Gellermann 28-64
Wash.

Hydroporus

20769. *yukonensis* Fall 26-138 Yukon

20770. *alaskanus* Fall 26-139 Alas.

20771. *recticollis* Fall 26-140 Alas.

20772. *falli* Blatch. 25-162 Fla.

20773. *uniformis* Blatch. 25-162
Fla.

20774. *brumalis* Brown 30-235 Que.

20775. *brodei* Gellermann 28-63
Wash.

(*Oreodytes*)

20776. *rainieri* Hatch 28-220 Wash.

20777. *kincaidi* Hatch 28-221 Wash.

19201b. *angustior* Hatch 28-221
Wash.

Agabus

20778. *kenaiensis* Fall 26-141 Alas.

20779. *gelidus* Fall 26-142 Alas.

20780. *smithi* Brown 30-88 B. C.

20781. *bryanti* Carr 30-278 Yukon

20782. *pseudoconfertus* Wallis 26-90
Man.

20783. *palustris* Wallis 26-92 Man.
(*Gaurodytes*)

20784. *ilybiiformis* Zimm. 28-176
Cal.

Ilybius

20785. *incarinatus* Zimm. 28-181

Ill.

2592. validity doubtful Fall 27-281

2599. validity doubtful Fall 27-281

2598. = *fenestralis* Say Fall 27-281

Rhantus

20786. *hubbelli* Hatch 28-222 Okla.

2616a. ab. *immaculatus* Hatch 28-223
Alas.

Graphoderes

2661. = *zonatus* Hope 95-33,
fide Hatch 28-229.

2662. = 2661, fide Hatch 28-229

GYRINIDÆ

Wallis 26; Ochs 27, 29; Chamberlin 29; Blatchley 30; Hatch 26, 27, 29.

Dineutus (= *Dineutes*)

2680. = *assimilis* Kby (*americanus* ||),
fide Ochs 27-39

20787. *amazonicus*¹ Hatch 30-16

Ark.

2671 = *ciliatus* Forsberg 21-312
fide Hatch 30-17

Gyrinus

20788. *hatchi* Wallis 26-93 Mich.

Gyrinus

20789. *dubius* Wallis 26-93 Nfld.

20790. *gehringi* Chamberlain 29-247

N. H.

2697. is a good species fide Wallis 26-50,
disputing synonymy stated in first
Suppl.

2698. cf. Zimm. 26-97

* Bradley's Manual, following Zimmermann, makes some changes in classification by which *Vatellinæ* and *Cybistrinæ* are reduced to tribes, *Agabetini* and *Coptotomini* are combined respectively with *Copelatini* and *Colymbetini*, and the tribal name *Celinini* is altered to *Methlini*. The results of Dr. Böving's studies differ.

HELOPHORIDÆ *

Helophorus
20791. *aquaticus* L. 61-461,
fide Darlington 27-174 Me. Mass.

Helophorus
20792. *needhami* D'Orch. 29-79
N. Y.
2746. *linearis* Lec.
pallens Cs., syn. fide D'Orch. 29-89

HYDROCHIDÆ *

Hydrochus
20793. *equicarinatus* Blatch. 28-62
Fla.

Hydrochus
20794. *currani* Brown 29-108 Ont.

HYDROPHILIDÆ *

Fall 26, 30; Winters 26, 27; Darlington 27; Blatchley 28; D'Orchymont
28, 29; Brown 29.

Hydrophilus

In the 1920 catalogue, 2789, 2790, 2791 were placed in *Hydrous*, following Zim-
mermann. The researches of Mr. Mutchler indicate that this was an error. See 3rd
Supplement.

Tropisternus

20795. *mexicanus* Cast. 40-54
fide Hatch 30-22 Okla.
20796. *quadristriatus* Horn is
valid, fide Fall 30-238 Mass.
(Ga.?)

2802. *sublaevis* Lec. Neb.

Hydrobius

2810. synonymy should be reversed,
fide Winters 26.

Sperchopsis

genus valid, fide D'Orch. Cat. In-
dian Ins. 28-93
cf. *Hydrocyclus* Sharp, fide Winters
26

Crenitulus Winters 26-54
2817 type

Anacaena

2814. = *limbata* Fab. 92-82
fide Winters 26.
19269. = *bipustulatus* Marsh., denied by
Fall i. litt.
20797. *globulus* Payk. 98-188
fide Winters 26 Conn.

Enochrus

19274. *sublongus* Fall. n. n. 26-125.
elongatus || Fall 24-85
2839. = *sellæ* Sharp 82-75,
fide Winters 27-24
20798. *nigrellus* Sharp 82-68
fide Winters 27-24 Cal.

Helobata

2856. = *striata* Brulle 38-58, fide Win-
ters 27-25

BRATHINIDÆ

The genus *Brathinus*, following Casey is associated with *Omalinæ* by Bradley 30-64; Forbes 26-67 and 26-113 found resemblance in wing folding to *Scaphidiidæ* and retained the family name. The larva is still unknown.

* According to larval characters, *Helophorus* and *Hydrochus* must be ranked as families of *Hydrophiloidea*. By the larval characters also, *Limnebius*, *Ochthebius* and *Hydræna* are removed from *Hydrophilidæ* to form a family *Limnebiidæ* in *Staphylinoidea*.

SILPHIDÆ *

Portevin 24, 25, 26; Hatch 25, 27, 29; Fall 25-26-27; Van Dyke 28; Brown 28, 30; Bradley 30.

Hatch 27, p. 341 following Portevin, defines subspecific variations as follows:

1. correlated with geographical distribution = subspecies;
2. variations in color pattern = aberration;
3. variation in sculpture and color of pubescence = variety;
4. variation in the general pigmentation of the exoskeleton = accident.

The use of the term "aberration" in this restricted sense, is not in accord with the older dictionaries, but may come to be generally accepted. We have not numbered the names thus designated by their authors.

Nicrophorus (= *Necrophorus*)

(*Necrocharis* Port. 23-68)

2909. *carolinus* L.
ab. *floridæ* Hatch 27-364
N. C. Fla.
ab. *krautwurmi* Hatch 27-364
Fla.
ab. *lunulatus* Hatch 27-364
N. Mex.
ab. *nebraskae* Hatch 27-364
Neb. Kan.
2909a, 2909b, and 2910 are only
aberrations
(*Nicrophorus* s. str.)
2914. *marginatus* Fab.
ab. *sanjuanæ* Hatch 27-362
Colo. Wis.
N. Y.
ab. *engelhardti* Hatch 27-362
So. Cal.
ab. *leachi* Hatch 27-362
Cal.
ab. *cordiger* Port. 24-84 N. Y. Ark.
20799. *hybridus* Hatch and Angell 25-216
Man.-N. J.
var. *minnesotianus*¹ Hatch 27-5
Minn.
2915. *obscurus* Kby.
ab. *discontinuus* Hatch 27-362
Ut.
ab. *ruber* Hatch 27-362 Oreg. Wis.
2916. *guttulus* Mots.
ab. *punctatus* Hatch 27-360
Cal.
ab. *shastæ* Hatch 27-360
Cal.
ab. *hypomerus* Hatch 27-361
Cal.
ab. *sanfranciscae* Hatch 27-361
Cal.
ab. *kuschei* Hatch 27-361
Cal.
ab. *lajollæ* Hatch 27-361
Cal.

Nicrophorus

- 2916b and 2916c reduced to
aberrations
- 2916a. *hecate* Bland
ab. *wallisi* Hatch 27-361
B.C.-N.Mex.
ab. *californiæ* Hatch 27-361
Cal.
ab. *intermedius* Hatch 27-361
(Angell i. litt.) Oreg. Nev.
ab. *disjunctus* Port. 24-85
ab. *woodgatei* Hatch 27-361
N.Mex.Colo.
ab. *phoenix* Hatch 27-361
Ariz.-Colo.
ab. *novamexicæ* Hatch 27-361
N.Mex.-Cal.
ab. *rubripennis* Port. 24-85
N.Mex.-Cal.
ab. *rubrissimus* Hatch 27-362
Colo.
ab. *immaculosus* Hatch 27-362
Cal.
2917. = *germanicus* L. ab. *bipunctatus*
Kr., fide Hatch 27-355
2918. *pustulatus* Hersch.
ab. *coloradensis* Hatch 27-359
Colo.
ab. *noveboracensis* Hatch 27-359
N. Y.
ab. *fasciatus* Port. 24-86
Que.-Fla.
ab. *unicolor* Port. 24-86 La.
- 2918b. *investigator* Zett. subsp. *nigritus*
Mann. var. *ruficornis* Mots.
Bull. Mosc., JLII. 1860-352
Cal.
- 2918c. *investigator* Zett.
subsp. *maritimus* Guér.
Icon. Regne. Anim. 1829, p. 60.
Japan-B.C.
melsheimeri Kby.
ab. *martini* Hatch 27-358
B. C.

* As restricted by Hatch, this family includes only the tribes Lyrosomini, Agyrtini, Pinodytini (name changed to Catopcerini), and Silphini of the 1920 catalogue. The other tribes form a new family Leiodidae, the separation of which is apparently supported by Dr. Forbes' studies of wing venation and folding, and adopted in Bradley's Manual. The composition of these families may suffer changes; they are here treated in accordance with the literature cited.

- Nicrophorus**
- ab. clarencei Hatch 27-358
B. C.
 - ab. sitkenensis Hatch 27-358
Sitka, B. C.
 - ab. massetti Hatch 27-358
B. C.
 - ab. grahami Hatch 27-358
B. C.
 - ab. charlottei Hatch 27-358
B. C.
 - ab. particeps Fisch.
Bull. Mosc. XVII, 1844, p. 139.
Sitka, B. C.
 - var. variolosus Port. 24-149
?
 - ab. intermedius Reitt. 95-327
B.C.-N.Mex.
 - ab. jamezi Hatch 27-358
N. Mex.
Mont.
 - ab. lutescens Port. 24-150
Ariz.N.Mex.
- 2919b. defodiens Mann.
pygmæus Kby. and hebes Kby.
ab. humeralis Hatch 27-7
N. J.-Alb.
- ab. ruber Hatch 27-356 Mich.
ab. nicolayi Hatch 27-356
N. B. Me.
- ab. oregonensis Hatch 27-356
Oreg.
- ab. nunenmacheri Hatch 27-356
B. C. Cal.
- ab. binotatus Port. 26-236
Cal.
- ab. lateralis Port. 03-330
Wash. Cal.
- ab. pacificæ Hatch 27-356
Cal.
- ab. gaigei Hatch 27-356
Wash.Oreg.
- ab. conversator Walk. Cal. Oreg.
- ab. kadjakensis Port. 26-236
Alas.
- ab. mannerheimi Port. 24-293
Cal.
2920. tomentosus Web.
ab. communis Hatch 27-363
L. I.
- ab. elongatus Hatch 27-363
Colo.
- ab. angustefasciatus Port. 25-165-
170
ab. splendens Hatch 27-363
Ariz.
- ab. brevis Hatch. 27-363
Man.
- var. aurigaster Port. 25-165
?
20800. vespillo L. 58-359
fide Hatch 27-363 quoting Portevin
Neb. Penn.
- Silpha ***
- (*Philas* Port. a subgenus, fide Hatch 27-344)
includes 2921
 - (*Necrodes* Leach a subgenus in-
cluding *Protonecrodes* Port.)
includes 2922 and ? ab. bizonatus
Port. from So. Cal.
 - (*Thanatophilus* a subgenus cred-
ited to Samouelle by Hatch 27)
includes 2923, 2924, 2925
 - 2923a. caudata Say, valid fide Hatch
Cal.
 - (*Oiceoptoma* Leach a subgenus
fide Hatch)
includes 2926, 2927
 - 2926a. rugulosa Port. Ga. Fla.
acc. bicolorata Hatch 27-343
N. Y. N. J.
 - (*Blitophaga* Reitt. a subgenus
fide Hatch)
includes 2930, 2931
 - (*Heterosilpha* Port. 26-83)
includes 2929
 - 20801. senescens Csny. valid
fide Hatch 27-344 Cal.
(*Necrophila* Kby. including *Nec-
robora* Port. 26-86)
includes 2928
 - 2928a. affinis Kby.
acc. brunnipennis Hatch 27-344
Md.
 - (*Oxelytrum Gistel*)
? discicollis Br. a single specimen
from So. Cal.
- Apteroloma** Hatch 27-12
type 2936
- Pteroloma ****
20802. tahoeca Fall 27-136 Cal.
20803. arizonica Van D. 28-24
Ariz.

* Two specimens of *S. tyrolensis* Laich. ab. *nigrita* Creutz labeled "Ka." are mentioned by Hatch 27-345.

** This genus, fide Van Dyke 28-19, belongs in the tribe *Lyrosomini*; but is placed by many authors in *Omaliinae*.

LEIODIDÆ **

Hatch 27, 29; Bradley 30.

Hydnobius		
20804. luggeri Hatch	27-18	Alas.
Anogdus		
20805. luggeri Hatch	27-17	Minn.
Leiodes Latr.		
(<i>Anisotoma</i> of 1920 Cat.)		
20806. canadensis Brown	28-141	
		Sask. Man.
20807. oklahomensis ¹ Brown	28-142	
		Okla.
(<i>Ecarinospaerula</i> Hatch 29-2)		
type 3011		

Anisotoma		
(<i>Leiodes</i> of 1920 Cat.)		
(<i>Oreosphaerula</i> Ganglb. 99-209)		
includes 3025, 3010 and		
20808. puritana Fall	25-310	Mass.
20809. fusciclava Fall	25-311	Cal.
Agathidium		
20810. maculosum Brown	28-145	
		B. C.
20811. canadensis Brown	30-89	
		B. C.
Dissochaetus Reitt.	84-39	
2963. oblitus Lec.		
2955 = <i>Sciodrepa fumatus</i> Spence,		
fide Hatch 27-15		

SCYDMÆNIDÆ

Euconnus		
20812. longiceps Fall	26-144	Alas.

Scydmænus		
20813. adjutor Fall	26-144	Alas.

ORTHOPERIDÆ

Corylophodes		
20814. flavo-ocellus Blatch.	27-139	

Orthoperus		
6476 belongs here, fide Leng	26-285	
20815. aeneocollis Blatch.	27-139	

Fla.

STAPHYLINIDÆ

Benick 21, 25, 28; Van Dyke 24; Notman 25; Jacobs 25; Mann 25;
Fall 26, 30; Wendeler 27, 28; Chapin 28; Bernhauer 28; Hellén 28;
Chamberlin and Ferris 29; Hatch and Ortenburger 30.

Holotrochus		
20816. parvulus Chapin	28-66	
		La.
20817. arizonicus Chapin	28-66	
		Ariz.
Thoracophorus		
20818. fletcheri Wendeler	27-5	
		N. Y.
Anthobium		
20819. frosti Bernh.	28-40	Cal.

Geodromicus		
20820. rufipennis ¹ Van D.	24-16	
		Alas.
Trogophloeus		
20821. alaskanus Fall	26-146	Alas.
20822. teres Fall	26-146	Alas.
Bledius		
3623. falli Wendeler	28-298	
		= philadelphicus Fall

** The species following 2942 are here included. They are divided by Hatch into subfamilies Catopinæ (2945-2969), Coloniinæ (2970-2984), Bathyciinæ (2943-2944), and Leiodinæ (= Anisotominæ). The last named is divided into tribes Leiodini (2985-3014), and Agathidiini (3015-3045). Catops replaces Choleva, Leiodes and Anisotoma are interchanged. Further changes are made by Hatch in 1933, too late for inclusion.

PTILIIDÆ

- Osorius**
 20823. parviceps Notman 25-12 Fla.
 20824. brevipennis Notman 25-14 Ariz.
 20825. variolatus Notman 25-17 Ariz.
 20826. difficilis Notman 25-17 Ariz.
- Stenus**
 3731. = difficilis Csy., fide Benick 21-192 tenuis || Csy. nec Rey.
 3744. tricuspidatus Benick 21-192 simplex || Csy. nec Rey
 20827. biguttatus L. 61-851 fide Benick 25-73 Tenn.
 20828. exasperatus Benick 25-73 Mont. B.C.
 20829. torus¹ Benick 25-80 Id.
 20830. gibbicollis Sahlb. 80-80 fide Benick 25-77 Wash.
 20831. limatulus Benick 28-50 Va.
 20832. personatus Benick 28-52 N. C.
 20833. frigidus Fall 26-59 Alas.
 20834. exploratus Fall 26-61 Alas.
 3770a. atomarius Csy., valid fide Benick 25-75
 3782. mammops Csy., valid fide Benick 25-78
 3795. ageus Csy., valid fide Benick 25-78
 3837. reconditus Csy., valid fide Benick 25-80

- Dianous**
 3857. chalybaeus Lec., valid fide Benick
Euaesthetus
 20835. pacificus Fall 26-62 Alas.
 20836. subviridipennis Bernh. 28-38 Mass.
 20837. marionensis Bernh. 28-40 Mass.
 20838. ganglbaueri Bernh. 28-39 Mich.
Lathrobium
 20839. sollicitum Fall 26-147 Alas.
 20840.ewardi Fall 26-148 Alas.
Astenus
 20841. fletcheri Wendeler 27-6 N. Y.
Philonthus
 20842. septentrionis Fall 26-149 Yukon
 20843. fraternus Fall 26-149 Yukon
 20844. ovaliceps Fall 30-253 N. H. Mass. Va.
 20845. bernardensis Fall 30-253 So. Cal.
 20846. oklahomensis¹ Hatch 30-12 Okla.
Diaulota
 (= Amblopusa Csy. fide Chamberlin and Ferris 29-155)
Aerotona
 5534 belongs here, fide Hellén 28-13, with 5626 as synonym
Cordalia n.n. Jacobs 25-82
 (Cardiola || Rey. nec Broderip.)
Acamatoxenus Mann 25-76 (to follow Myllæna ?)
 20847. suavis Mann 25-76 So. Cal.

PSELAPHIDÆ

- Batrisodes**
 6217. author should be Blatch. 10-326
Rybachis
 20848. obliquedens Fall 27-222 Pa.

- Rybaxis**
 20849. geminata Fall 27-225 Pa.
 20850. transversa Fall 27-223 Mass.
 20851. arkansana Fall 27-226 Ark.

GNOSTIDÆ

- Gnostus** Westw. 55-90
 20852. floridanus Blatch. 30-111 Fla.

PTILIIDÆ

- Ptenidium**
 20853. californicus Psota and Ray 29-119 Cal.

- Nephanes**
 20854. rugulodorsus Hatch 27-265 Ia.

SPHÆRIIDÆ

6476 belongs in Orthoperus

HISTERIDÆ

Hatch 26, 29; Brown 28.

Hister		Saprinus
6571a. albertensis Hatch 26-275	Alta.	6831. ab. pseudosejunctoides Hatch 29-78 Cal.
6571b. carri Hatch 26-276	Alta.	ab. pseudosejunctus Hatch 29-78 Wash.
19437 = subsp. of 6571, fide Hatch 29-76		ab. leconteoides Hatch 29-78 Colo.
20855. jaquesi Hatch 29-76	Ia.	6831a and 6831c reduced to aberrations
20856. laevicaudoides Hatch 29-77	Kan.	6829. ab. profusoides Hatch 29-79 Mich.-Ohio
Psiloscelis		6830 reduced to aberration
20857. carri Hatch 26-273	Alta.	6836. ab. semisulcus Hatch 29-79 Mich. O. La.
Hetærius		(<i>Hypocaccus</i> Thoms.)
20858. carri Hatch 26-276	Alta.	20861. eriensis Hatch 29-80 Mich. Ohio
Saprinus		20862. ontarioensis Hatch 29-80 Ont.
20859. cynomysi Brown 28-89 Okla.		20863. ohioensis Hatch 29-80 Mich.
20860. carri Hatch 26-272	Alta.-Colo.	20864. michiganensis Hatch 29-80 Mich.
6827. ab. oregonensis Hatch 29-78	Cal.	20865. jaquesi Hatch 29-81 Iowa
ab. distenguendoides Hatch 29-78	Mich.	20866. propensoides Hatch 29-81 Cal.
ab. sejunctoides Hatch 29-78	Ia.	(<i>Pachylopus</i> Er.)
		6901. palmatus Say ab. dimidiatipennis Lec, fide Hatch

LYCIDÆ

Plateros		Plateros
20867. columbiensis Brown 29-108	B. C.	6944. ab. humeralis Hatch 30-23 Okla.

LAMPYRIDÆ

Photinus		Photinus
20868. ignitus Fall 27-208	Mass. N. Y. Pa.	7004. (7007 is synonym) 7005. (7008 is synonym)
20869. ablucens Fall 27-209	Ill.	Photuris
20870. granulatus Fall 27-209	Kan.	20873. flavicollis Fall 27-210 Tex.
20871. stellaris Fall 27-210	Tex.	
20872. floridanus Fall 27-210	Fla.	

PHENGODIDÆ

Pic in Junk Col. Cat. excludes from this family all the species of Omethini and of Mastinocerini except those in the genera Cenophengus and Mastinocerus.

CANTHARIDÆ

Fall 26, 28, 30; Blatchley; Hopping 29.

Chauliognathus

20874. omissus Fall 30-254 Ariz. N. Mex.
Podabrus
 20875. conspiratus Fall 26-152 and 28-76 Alas.
 20876. tetragonoderus Fall 26-152 Alas.
 20877. fissilis Fall 26-152 B. C. Alas.
 20878. ambiguus Fall 28-73 Cal.
 20879. appendiculatus Fall 28-74 Ct. Mass.
 20880. knobeli Fall 28-75 Ark.
 20881. illex Fall 28-76 Cal.
 20882. limatus Fall 28-78 Cal.
 20883. brevicollis Fall 28-79 N.Y.Pa.R.I.
 20884. longicornis¹ Fall 28-82 N. H.
 20885. confraternus Fall 28-84 Cal.
 20886. sierræ Fall 28-84 Col.
 20887. viduus Fall 28-85 Cal.
 20888. fulvus Fall 28-85 Cal.
 20889. tenuis Fall 28-85 Cal.
 20890. muliebris Fall 28-86 N. Mex.
 20891. occipitalis¹ Fall 28-87 Cal.
 20892. modulatus Fall 28-88 Cal.
 20893. extricatus Fall 28-88 Cal.
 20894. excursus Fall 28-91 B. C. Mont.
 20895. obscurevittatus Fall 28-95 Alta.
 20896. gracilis Fall 28-96 Cal.
 20897. instabilis Fall 28-97 Cal.

Podabrus

20898. mœstus Fall 28-97 Cal.
 20899. altus Fall 28-98 Cal.
 20900. fenestratus Fall 28-99 Cal.
 20901. probus¹ Fall 28-100 N. H.
 20902. citrinus¹ Fall 28-100 Cal.
 20903. heteronychus Fall 28-101 Man. Alas.
 20904. furtivus¹ Fall 28-102 Colo.
 20905. pruinosus Lec., valid
fide Fall 28-77 Cal.
 20905a. diversipes Fall 28-77 Cal.
 20906. flavicollis Lec. (7062a.),
valid fide Fall 28-81
basilaris Lec. = discoideus Lec.
fide Fall 28-81.
 20907. punctulatus Lec. (7058b.) valid
fide Fall 28-80
7076 = 7089
 20908. mexicanus Gorh. 85-284 Ariz.
 20909. falli Hopping 29-252 B.C.
Cantharis
 7100. mandibularis Kby. (= nigritulus
Lec.) fide Fall 26
 20910. degener Blatch. 28-62 Fla.
 19485. = ? livida L. 58-647
Polemius
 20911. suturalis Blatch. 28-63 Fla.

MELYRIDÆ

Blaisdell 25, 26, 27, 28, 29, 30; Hopping 25; Hatch 27; Brown 28;
 Tanner 28; Martin 29; Fall 30.

Collops

20912. oklahomensis Brown 28-145 Okla.

Hoppingiana

20913. kingi Brown 28-147 Alta.

Temnopsophus

7231. ab. quadrimaculatus Hatch 27-366
ab. estelle Hatch 27-366

Malachius

20914. floricola Martin 29-174 Cal.

20915. criddlei Brown 28-146 Man.

Tanaops

20916. basalis Brown 28-147 B. C.

Microlipus

20917. falli R. Hopp. 25-206 B. C.

Pseudebaeus

7279. ab. nigroapicalis Hatch 27-367

Trichochrous

20918. kernensis Blais. 26-9 Cal.
 20919. reticulicollis Blais. 26-10 Cal.
 20920. vicinus Blais. 26-11 Cal.
 20921. muiri Blais. 27-165 Cal.
 20922. albertensis Blais. 27-50 Alta.
 20923. fieldi Blais. 27-51 Cal.
 20924. quadrinotatus Blais. 30-14 Cal.
 20925. conformis Lec., valid
fide Blais. 27-49
 20926. zionicus Tanner 28-272 Ut.
Listrus
 20927. medicatus Blais. 27-52 Alta.
 20928. longicornis Blais. 28-35 Cal.

Listrus

20929. pictipes Blais. 28-37 Cal.
 20930. falli Blais. 28-39 Cal.
 20931. lanei Blais. 28-40 Wash.
 7435 = 7429, fide Blais. 25-79

Dasytes

20932. irregularis Blais. 25-184
 Cal.
 20933. subæneus Blais. 26-12 Cal.

Allonyx

20934. cinerescens Fall 30-254
 So. Cal.
 synonymy of 7496 and 7495
 highly probable, fide Fall 30-255

Vectura

- (*Pseudallonyx* = *Vectura*,
 fide Fall 30-255)
 (*Vecturoides* n. subg. Fall 30-256)
 20935. pseudonycha Fall 30-256
 So.Cal. Ariz.

Mecomycter

20936. liebecki Blais. 29-23 Tex.
 20937. linearis Fall 30-256 Cal.

- Semijulistus* Schilsky 94-89
 ? bicoloripes Pic 28-54 N. Am.

Melyrodes

- Pic, in Col. Cat. pars 103 (1929)
 treats this genus and Eurelymis as
 subfamily Melyrinæ of the family
 Dasytidæ.

CLERIDÆ *

Wolcott 27, 28; Chapin 27.

Cymatodera

20938. mitchelli Chapin 27-144
 Tex.
 20939. rufiventris Wolc. 27-105
 Cal.
 19579 (= 19580).
 fide Chapin 27-143

Lecontella

20940. gnara Wolc. 27-105 Ariz.

Enoclerus

20941. vetus Wolc. 27-107 Tex.

Hydnocera

20942. chapini Wolc. 27-81 Tex.
 20943. mira Wolc. 28-207 Neb.
 20944. puritana Wolc. 28-208 Mass.
 20945. cuneiformis Wolc. 28-208
 Ariz.
 20946. blanchardi Wolc. 28-210
 N.Mex.

Isohydnocera

20947. mima Wolc. 28-211 Ariz.
 20948. liebecki Wolc. 28-211 N. J.
Erolestus Wolc. 27-109
 20949. clerooides Wolc. 27-109 Pa.

CORYNETIDÆ ***Corynetes**

- 7725a. nigricollis Wolc. 27-110
 Cal.

CEPHALOIDÆ**Cephaloon**

- (*Typitium* Csy.)
 20950. pacificum Van D. 28-260
 Wash. Cal.

OEDEMERIDÆ**Oxacis**

20951. falli Blatch. 28-63 Fla.

* The larval characters suggest the consolidation of these families, and subdivision into subfamilies Hydnocerinae, Thanoerocerinae, Priocerinae, Korynetinae, Tillinae, Orthopleurinae, Clerinae, Enopliinae, and Tarsosteninae.

MORDELLIDÆ

According to the larval characters the tribe Anaspidini is to be transferred to Anthicidæ as a subfamily, or possibly to the Languriidæ. The family Mordellidæ by Dr. Böving's studies comprises only the tribes Mordellini and Mordellistenini.

Anthobatula n.n. Strand 29-29
(*Anthobates* || Lec. nec Gistel)

RHIPIPHORIDÆ

Rivnay 29; Brown 30.

Trigonodera Dej. 34-217 (<i>Pelecotooides</i> Cast.)	Rhipiphorus
7947. <i>schaefferi</i> Rivnay 29-18 Tex.	20953. <i>columbianus</i> Brown 30-89 B. C.
<i>nubilus</i> ♀ Schffr. nec Gerst.	20954. <i>calopterus</i> Rivnay 29-45 Me.
Macrosiagon	20955. <i>neomexicanus</i> Rivnay 29-50 N. Mex.
20952. <i>fernaldum</i> Rivnay 29-26 Cal.	20956. <i>nomiae</i> Rivnay 29-51 Ala.
7952c. <i>maritimum</i> Rivnay 29-33 Fla. Ala.	20957. <i>aurantus</i> Rivnay 29-55 Tex.
7954b. <i>horni</i> Rivnay 29-36 Tex. Cal.	20958. <i>mutchleri</i> Rivnay 29-57 Nev.
7956a. <i>pulchrum</i> Rivnay 29-38 N. C.	20959. <i>iridescent</i> Rivnay 29-60 Tex.
	19614 = 7964, fide Rivnay 29

MELOIDEA

The families Meloidæ, Rhipiphoridæ, and Tetraonycidæ (based on *Tetraonyx quadrimaculatus*) constitute, according to the larvæ, a separate series. In it hypermetamorphosis occurs. It is associated by Dr. Böving with the cleroid assemblage of families, particularly Melyridæ, but qualified by the statement that there are some reasons for considering the possibility that it might be related to the Cantharoidea. The family Meloidæ is divided, on larval characters, into four subfamilies, viz.: Lyttinæ (including the tribes Zonabrinæ, Henoinæ, and Lyttinæ), Meloinæ, Horiinæ, and Nemognathinæ (including the tribes Sitarini and Nemognathinæ).

MELOIDÆ

Van Dkye 28, 29, 30; Mickel 28, 29; Chittenden 26.

Macrobasis	Lytta
19616. <i>murina</i> Lec. valid fide Chitt. 26-118 Me.-Man.	20962. <i>nigrocyanea</i> Van D. 29-129 Colo.
Epicauta	20963. <i>maculicollis</i> Van D. 29-130 Cal.
20960. <i>impressifrons</i> Van D. 28-262 Cal.	Tetraonyx
20961. <i>foxi</i> Van D. 29-127 Cal.	20964. <i>albipilosa</i> ¹ Van D. 29-127 Tex.

Calospasta	Meloe
8121b. <i>perpulchra</i> Horn, fide Van D. 29-127	8142b. <i>occidentalis</i> Van D. 28-422 Id. Colo.
8121c. <i>cyanæ</i> Van D. 29-132 Cal.	Alta.
Brachyspasta Van D. 28-451	8149 = <i>americanus</i> Leach nec auct. fide Van D. 30
20965. <i>wickhami</i> Van D. 28-452 Colo.	<i>americanus</i> Van D. 28 et auct. = 8142 fide Van D. 30 <i>impressus</i> Van D. 28 = 8142a fide Van D. 30
Gynaecomeloe	Hornia
20966. <i>parvicollis</i> Van D. 28-450 Cal.	(<i>Leonia</i> and <i>Leonidia</i> are synonyms, fide Mickel 29)
Meloe	8155. 8154 is a synonym, fide Mickel 29
20967. <i>californicus</i> Van D. 28-426 Cal. Wash.	20970. <i>anthophoræ</i> , Mickel 28-38, fide Mickel 29 Colo.
20968. <i>quadricollis</i> ¹ Van D. 28-431 Cal.	
20969. <i>franciscanus</i> Van D. 28-437 Cal. Nev.	
	Zonitis
	20971. <i>arizonica</i> Van D. 29-132 Ariz.
	Tricrania
	belongs in <i>Sitarini</i> , fide Parker and Boving 24.

EURYSTETHIDÆ

Strand 26-74 prefers *Aegialatidæ* as family name, based on *Aegialatis* Gistl. Naturgesch. Tierreichs XI (1848) not *Aegialites* || Mann.

PYTHIDÆ

Blair, Col. Cat. pars 99, (1928)

PYTHINÆ

The subfamily Pythinæ includes *Priognathus*, *Leontia*, *Trimitomerus* with species as given in 1920 Cat. and the genus *Pytho*, below.

Pytho

- 20972. *americanus* Kby.
- 20973. *deplanatus* Mann
- 19618. *fallax* Seidlitz
- 8203. *niger* Kby.
- 20974. *seidlitzi* Blair 25-211
- niger † Seid. 16-408.
- 8205. *strictus* Lec.
- 8204 is not found in N. Am.

SALPINGINÆ

- Sphaeriestes* Steph. 31-218
- includes 8211, 8212, 8213
- Vincenzellus* Reitt. 11-418
- includes 8214

Cariderus Muls. 59-46

includes 8217, with 8215, 8216, and
nitens as synonyms.

CONONOTINÆ**Cononotus**

- includes 8208, 8209, 8210, and
- 20975. *substriatus* Van D. 28-258
- Cal.

LACCONOTINÆ**Lacconotus**

includes 12591 and 12592

Polypria

includes 12597

MYCTERINÆ**Mycterus**

includes 12593, 12594, 12595 (with
flavipennis Horn as a variety), and
12596.

PYROCHROIDÆ

Blair, Col. Cat. pars 90, (1928)

The family is divided by Blair into three subfamilies, *Pyrochroinæ*, *Pedilinæ* (= *Pedilidæ*), and *Ischaliinæ* for *Ischalia* Pascoe and *Eupleurida* Leconte, our species belonging to the latter.

Dendroides

- 20976. *marginata* Van D. 28-259
- Cal.

Dendroides

- 20977. *testacea* Lec. 55-275 is valid fide
Blair 28

PEDILIDÆ *

Pedilus

19620. fide Van Dyke 2S-260 belongs in *Dendroides*, which is denied by Fall 29-14, who admits that it is not a typical *Pedilus*. Blair 14, and 20, includes *Pedilus* in *Pyrochroide*.

Eurygenius

20978. *parvicornis* Fall 29-333 Tex.
20979. *perforatus* Fall 29-334 Cal.
Stereopalpus
20980. *columbianus* R.Hopp. 25-207 B. C.

ANTHICIDÆ

Notoxus

20981. *vandykei* Blais. 29-57 Cal.

CEBRIONIDÆ

Cebrio

20982. *speratus* Fall 28-146 Ark. La.

PLASTOCERIDÆ **

Euthysanius

20983. *horni*¹ Fall 28-139 Cal.
20984. *imparoculatus*¹ Fall 28-141 Ariz.
20985. *blaisdelli* Tanner 26-188 Ut.

Aplastus

20986. *scabripennis*¹ Fall 28-141 Cal.
20987. *piceicollis*¹ Fall 28-142 Cal.
20988. *productus*¹ Fall 28-143 Cal.

Aphricus

20989. *tenuis* Fall 28-144 Ariz.

RHIPICERIDÆ

Zenoa

8543a. *vulnerata* Lec. fide Pic is a variety

BRACHYPSECTRIDÆ ***

Blair 30-49

Brachypsectra

9672. fide Blair 30-49

SANDALIDÆ

On the basis of larval characters, a new family is required for *Sandalus*.

Sandalus

8544a. *brevicollis* Melsh. fide Pic is a variety.

* This family is broken into two parts in Bradley's Manual. *Pedilus*, following Blair, is attached to *Pyrochroide*, the other genera form tribes of *Anthicidae*. We note, however, that Tillyard retains the family. Its union with *Anthicidae* was proposed by Casey in 1895.

** This family is united with *Cebriionidæ* in Dr. Böving's classification, based on larval characters.

*** Associated with *Cantharoidea* by Dr. Böving on the larval characters.

ELATERIDÆ

Blatchley 25, 27, 30; Fall 25, 26, 29; Brown 30; Hatch 30; Méquignon 30; Benedict i. litt. 30; Quirsfeld i. litt. 30.

- | | |
|----------------------------------|--|
| Alaus | Eanus |
| 8571a. <i>oklahomensis</i> Hatch | Lec. 62-171 |
| 30-23 | genus is valid, fide Brown 30-161; |
| Okla. | species are: |
| | 8804. <i>decoratus</i> Mann. Yukon-Que. |
| | <i>vagus</i> Lec. |
| | <i>costalis</i> Cand. nec Payk. |
| | 20995. <i>subarcticus</i> Brown 30-163 |
| | Que. |
| | 8803. <i>estriatus</i> Lec. L. Sup. |
| | 20996. <i>maculipennis</i> Lec. 66-85 |
| | Lab. Que. |
| | <i>pictus</i> Cand. |
| | 20997. <i>albertanus</i> Brown 30-165 |
| | Alta. |
| | Hypnoidus |
| | 20998. <i>extricatus</i> Fall 26-191 Alas. |
| | Drastrerius |
| | 20999. <i>debilis</i> Lec. 84-5, and |
| | Quirsfeld i. litt. Mich. N. H. |
| | N. Y. |
| | Ischiodontus |
| | 21000. <i>granosus</i> Fall 25-180 Fla. |
| | Melanotus |
| | 21001. <i>simulans</i> Blatch. 27-140 Fla. |
| | 21002. <i>obscuratus</i> Blatch. 27-141 |
| | Fla. |
| | 21003. <i>piceatus</i> Blatch. 27-141 Fla. |
| | Cardiophorus |
| | 21004. <i>aptopoides</i> Cand. 65-40 |
| | fide Benedict i. litt. Ariz. |
| | Aptopus |
| | 21005. <i>lateralis spadiceus</i> Cand. 93-176 |
| | fide Benedict i. litt. Ariz. |

MELASIDÆ

Schenckling in Col. Cat., pars. 96, arranges the North American genera belonging in the family Melasidæ in four subfamilies, viz.: *Gastraulacinae* (*Dendrocharis*); 2 *Eucneminae* (*Eucnemis*, *Poecilochrus*, *Phaenocerus*, *Stethon*, *Deltometopus*, *Dromaeolus*, *Fornax*); 3 *Dirhaginæ* (*Arhipis*, *Entomophthalmus*, *Dirhagus* subgen. *Hyphorhagus**), *Rhagomicros*, *Adelothyreus*); 4 *Melasinae* (*Isorhipis*, *Melasis*, *Euryptychus*, *Epiphaniis*, *Palaeoxenis*, *Schizophilus*, *Hylis*, *Xylophilus*, *Hylochares*, *Sarpedon*, *Nematodes*). He does not include *Perothopinae* in the family Melasidæ.

* This subgeneric name is a synonym of *Hyphorhagus* Thoms. 1860 Ann. Soc. Ent. France (3) VIII, p. 25. (In Monommidæ).

Fornax

21006. rugicollis¹ Fall 25-181 Ark.
 21006½. horni Bonv. 70-981
 fide Schenkling 28-43 Can. Ky.

Diphytaxis Horn 90-239

21007. excavata Horn 90-239.
 fide Fall 28-236 Guat. Tex.

Melasis

21008. tsugæ G.R.Hopp. 26-226
 B.C.

Dirhagus Latr. 34-130

- (*Hyporhagus*) (*Microrhagus*)
 21009. texanus Linell 99-184 Tex.

Rhagomicrus Fleut. 02-658

- (*Isorhipis* Boisd. and Lacord.
 35-620)

21010. obscuricornis Bonv. 71-97

N. Y.

In his arrangement of the genera and species of Melasidæ Schenkling makes the following changes:
Fornax horni Bonv. 70-891 given specific rank.

Dirhagus subgen. **Hyporhagus** includes 9154-9158.

and **texanus** Linell 99-184 Texas.
 (Leng Cat. No. 12517 Monommidæ)

Rhagomicrus, 9159 and 9160.

Isorhipis: adds *nubila* Bonv.
 Mon. Euc. 1871, p. 96, 108. N.
 Georgia [According to Dr. Geo.
 Horn only one specimen known,
 collected about 1836.]

Phlegon synonymy reversed.

Xylophilus Mann. 23-14 replaces **Xylobius**.

Hyllis Gozis 86-21 replaces **Hypo-**
cœlus

PEROTHOPIDÆ

Schenkling, Col. Cat. pars 101 (1928).

Perothops

21011. cervina is valid, fide Schenkling.

THROSCIDÆ

Schenkling, Col. Cat. pars 101 (1928).

Drapetes

- 9182a. nitidus Melsh. is raised to specific rank
americanus Gerst. 60-162 is not a synonym.

Pactopus

21012. fuchsi Csy. is listed as valid species.
 alienus Bonv. 60-351 is syn. of 9195.

Throscus

9202. synonymy reversed.

BUPRESTIDÆ

Obenberger 24, 25, 27, 28, 30; Fisher 25, 28, 30; Fall 25, 26, 30;
 Chamberlin 25, 26, 28, 29; Champlain and Knull 25; Knull 27, 28,
 29, 30; Van Dyke 27; Burke 28; Thery 29.

Chrysophana

9207. ab. *cœruleans* Obenb. 24-100
 Cal.

Polycesta

9211. var. of *montezuma*, fide Obenb.

Acmæodera *

21013. *flavinigrapunctata*
 Knull 28-314 Tex.

Acmæodera *

21014. *hulli* Knull 28-315 N. Mex.

21015. *pinalorum* Knull 30-15 Ariz.

- 9219a. *gila*¹ Knull 30-16 Ariz.

21016. *confusa* Fisher 25-41
 cubæcola† Kerr.

9220. *marginenotata* Chev. 67-583
 and Fisher 25-34.
 cubæcola† Fall

* In Obenberger's catalogue several species heretofore regarded as synonyms, e.g., *mixta*, *arizonæ*, *immaculata*, and others of doubtful status, e.g., *obesa*, *pallidula*, are apparently restored. 1963 is added to the doubtful class.

Acmæodera

21017. *purshiae* Fisher 25-114 Nev.
 9232. syn. of 9233, fide Chamberlin;
 valid species fide Obenb.
 9284. syn. of 9233, fide Chamberlin;
 or of 9232, fide Obenb.
 19636. var. of 9240, fide Chamberlin 29-112
 19632. *junki* n.n. Théry 29-115
 for *squamosa* VanD. nec Théry.

Ptosisma

- 9291a. *schaefferi* Chamberlin 26-235
 Tex.

Chalcophora

21018. *pallida* Kerr. 19-48 B. C.
 As in Acmæodera and other genera
 the Obenberger catalog apparently
 restores, without explanation,
 several names to specific rank.

Trachykele

- 9330a. *juniperi* Burke 28-8 Cal.

Dicerea

21019. *tenebrica* Kby. (= *prolongata* Lec.)
 valid fide Fall 26.
 21020. *lugubris* Lec. distinct
 from *tenebrosa* fide Fall 26.
 21021. *americana* Hbst. valid
 Chamberlin 26-180

Poecilonota

21022. *salixi* Chamberlin 25-186
 Cal.

salicis Obenb. Cat.
 and Chamberlin 26

- 9351c. *collaris* Obenb. 28-181 N. Y.
 9351d. *apicilla* Obenb. 28-181 Ont.
 ? *debilis* Lec. 59-204
 (a single specimen) Md.

Hesperolipis Fall 30-74

21023. *albofasciatus*¹ Fall 30-75
 Cal.

Buprestis

Chamberlin's catalogue reduces 9369
 to a variety of 9368, but otherwise
 agrees substantially with our 1920
 list.

Obenberger's catalogue recognizes
 about eleven more valid species, and
 about as many more subspecies,
 varieties and aberrations, which
 may not be entirely approved by
 American students.

Melanophila

21024. *drummondi* Kby. valid
 Chamberlin 26
 ab. *tristicula* Obenb. 28-209
 Cal. B. C.
 9390. ab. *monochroa* Obenb. 28-209
 Cal.
 ab. *isolata* Obenb. 28-209
 Cal.
 ab. *plagifera* Obenb. 28-210
 N. H.
 21025. *atropurpurea* Say valid ?
 Chamberlin 26
 21026. *lecontei* Obenb. 28-210 Cal.
 21027. *occidentalis* Obenb. 28-209
 Cal.
 93876. *abietis* n.n. Obenb. for *abies*

Anthaxia

21028. *pseudotsugæ* Chamberlin 28-95
 Or. Cal. Ariz.
 ? *fisheri* Obenb. 28-255 Kan.
 ? *carolinensis* Obenb. 28-256
 Carolina
 ? *knalli* Obenb. 28-256 Cal.
 ? *nevadensis* Obenb. 28-257
 Nev.
 ? *prasina falsula* Obenb. 28-257
 Cal.
 ? *strigata grossa* Obenb. 28-257
 Cal.
 9394. Obenberger recognizes as valid
 species or varieties all the syno-
 nyms heretofore placed under
aeneogaster adding besides the six
 above cited, and *ærissa*
Crotch. We are unwilling to accept
 such recognition until verified.

Agrialaixa

21029. *borealis* Obenb. 24-107 Pa.
 9399a. *huachuæ* n.n. Obenb. 30-551
 Ariz.
arizonæ || Chamberlin 26-46
 nec Obenb.

Chrysobothris

21030. *fragariæ* Fisher 30-149 Wash. Id.
 21031. *burkei* Chamberlin 29-110
 Cal.
 21032. *socialis* Waterh. 87-39,
 fide Chamberlin Cat. Mex. Ariz.
 9416. synonymy reversed,
 fide Chamberlin Cat.
 9456. synonymy reversed,
 fide Chamberlin Cat.
 9448. 9449 and 9450 synonyms,
 fide Chamberlin Cat.

Actenodes

21033. *arizonica*¹ Knoll 27-115
 Ariz.
 9482. *auronotata* is valid,
 fide Fisher 25-88

Agrilus

- (*Engyaulus*) Waterh. is synonym
 fide Fisher 28-104)
 21034. *arbuti* Fisher 28-50 Oreg.
 21035. *albocomus* Fisher 28-59
 Ariz. Tex.
 21036. *atricornis* Fisher 28-86
 Conn. Ill.
 21037. *benjamini* Fisher 28-107
 Tex. Kan.
 21038. *pilosicollis*¹ Fisher 28-111
 Ark.
 21039. *quercicola* Fisher 28-120
 Colo. Ariz. Ut.
 21040. *olivaceoniger* Fisher 28-124
 Mass. Conn.
 21041. *fulminans* Fisher 28-148
 Cal.
 21042. *populi* Fisher 28-150
 Cal. B. C. Mont.
 21043. *betulæ* Fisher 28-153 Md. Va.
 21044. *costipennis* Fisher 28-182
 Cal.

Agrilus

21045. *baboquivoræ* Fisher 28-184
Ariz.
21046. *lautuellus* Fisher 28-202
Tex.
21047. *pubifrons* Fisher 28-237
Idaho
21048. *mimosæ¹* Fisher 28-241 Tex.
21049. *chiricahuæ* Fisher 28-243
Ariz.
21050. *aeneocephalus* Fisher 28-245
Ariz.
21051. *malvastri* Fisher 28-247
Kan.Tex.Alta.
21052. *falli* Fisher 28-249 Ariz.
21053. *cupreonitens* Fisher 28-265
Tex.
21054. *prosopidis* Fisher 28-275
Tex.
21055. *exiguellus* Fisher 28-277
Tex. Kan.
21056. *acaciæ* Fisher 28-279 Tex.
21057. *barberi* Fisher 28-311 Ariz.
21058. *pubescens* Fisher 28-315
Ariz. Tex.
21059. *eleanoræ* Fisher 28-320 Tex.
21060. *oblongus* Fisher 28-333 Md. Va.
9542a. *pseudocoryli* Fisher 28-218
Conn.-Kan.
9553a. *celticola* Fisher 28-294 Tex. Ariz.
9523c. *corylicola* n.n. Fisher
for *coryli*||Horn nec Ratz.
9550. = *pulchellus* Bland
9533. = *gibbicollis* Fall
21061. *cupreomaculatus* Duges 91-48
fide Fisher 28-46 and Mason 26-84.
Ariz.

Agrilus

- 9523d. = 9523
21062. *geminatus* Say 23-163 is valid
21063. *quadriimpressus* Zieg. 46-267
is valid Ga.
21064. *quadriguttatus* Gory 41-228
is valid Va.-Colo.
9542. *canadensis* Obenb. is synonym
9543. = 9542b.
21065. *transimpressus* Fall 25-181
Ark. N. J.
21066. *illectus* Fall 01-242
is valid Fall 26-125
21067. *olentangyi* Champlain and
Knoll 25-469 Tex. Ohio
21068. *duncani* Knoll 29-270 Ariz.
21069. *fisheriana* n.n. Knoll 30-3
Ariz.
fisheri||Knoll 29-271
21070. *parafloridanus* Knoll 29-272
Fla.
21071. *trichocarpæ* Chamberlin 29-112
Or.B.C.Cal.
21072. *manzanitæ* Chamberlin 29-113
Oreg.
19669. cf. Nylen 29-219

Pachyschelus

- 9565b. *nicolayi* Obenb. 25-103 Ark.
? *biimpressa* Mots. 59-54,
fide Obenb. 25-96 Tenn.
? *oblongus* Mots. 59-54
fide Obenb. 25-96 Tenn.

Taphrocerus

21073. *nicolayi* Obenb. 24-72 Mass. N. Y.

DRYOPOIDEA AND DASCILLOIDEA

The essay "On the Classification of Beetles According to Larval Characters" by Dr. Adam G. Böving indicates changes in the classification of the genera heretofore included.

1. The Dryopoidea will include the following families:
*Laridæ**, formerly *Potamophilini*.
Dryopidæ, including *Dryopini*, *Helmini**, and *Ancyronychini*.
Chelonaridae.
Ptilodactylidæ, including *Ptilodactylinæ*, *Eurypongon**, and *Anchytarsini*.
Psephenidae, including *Psephenus* and *Eubrianax*.
2. The Dascilloidea will include the following families:
Heteroceridae.
Helodidæ.
Dascillidæ, except the tribes transferred to Dryopoidea.
Nosodendridæ.

Eucinetidæ are separated from *Dascillidæ* in Bradley's Manual, but remain in the Dascilloid series, although Dr. Böving says "judging from the larva the genus cannot be placed with either the Dascilloidea or Dryopoidea."

3. Both series were derived from Byrrhoid ancestors, but are now distinguishable.

* The rank of these groups is altered in Dr. Böving's 1931 paper, becoming *Larinæ*, *Helminæ*, and *Eurypongonidæ* respectively.

DRYOPIDÆ

LARINAE

Böving 29, 31.

The studies of Dr. Böving on the larvæ of the beetles heretofore grouped in the series Dryopoidea, Dascilloidea and Byrrhoidea indicate certain changes in classification whereby the subfamilies Larinæ and Helminæ are separated from Dryopidæ.

Lara

21074. gehringi Darl. 29-329 Wash. Cal.
9590a. amplipennis Darl. 29-330
Wash. B. C.

HELMINÆ

Stenelmis

21075. fuscatus Blatch. 25-164 Fla.
Helmis
21076. brunnescens Fall 25-177
Cal.
21077. castanipennis Fall 25-177
Wyom.
21078. immunis Fall 25-178 Ct. N. J.
21079. tardellus Fall 25-179 Mass.
21080. ampliatus Fall 25-179 Mass.-Va.

Helmis

21081. dispar Fall 25-180 Cal.
21082. arizonica¹ Brown 30-90 Ariz.
21083. thermarum Darl. 28-5 Oreg.
21084. koebelei Martin 27-68 Wash.
9628=9619, fide Fall 25-180
Limnus
21085. trivittatus¹ Brown 30-91
Que.
21086. subarcticus Brown 30-241
Que.

PTILODACTYLIDÆ

Ptilodactyla

21087. equilobata Chapin 27-245
Tex.
21088. exotica Chapin 27-246 Ill.

HELODIDÆ

Cyphon

21089. confusus Brown 30-91 Que.

DASCILLIDÆ

Macropogon

21090. dubius Brown 29-273 B.C.
21091. cribricollis Brown 29-274
B.C.
21092. rubricollis Pic 27-34 Cal.

BYTURIDÆ

The genus *Byturus* is found on larval characters to belong nearer to the Anthicidae than the Dermestidae and is separable as a family. The Dermestidae are divided into two subfamilies, Dermestinae and Attageninae. The genus *Thylodrias* is apparently included in the latter.

OSTOMATIDÆ

The spelling of this family name is amended by Dr. Böving, and its tribes are ranked as subfamilles.

DERMESTIDÆ

Perimegatoma

21093. *perversa* Fall 26-194 Yukon
21094. *giffardi* Blais. 27-163 Cal.

Trogoderma

21095. *sinistra* Fall 26-193 Yukon
9774=9770, fide Mutchler 27-25

NITIDULIDÆ

Meligethes

10024. cf. Chitt. 25-149

Brachypterolus

- 19687, reverse synonymy
fide Hatch 28-35

MONOTOMIDÆ

Hetschko, in Col. Cat. pars. 109, 1930, treats this family as a subfamily of Cucujidæ, together with Silvanidæ and Hemipeplidæ, which have been shown by Böving and Arrow respectively to be distinct. We therefore retain the family name.

Monotoma

21096. *avarā* Blatch. 28-65 Fla.
10160 is a synonym of 10159,
fide Hetschko
21097. *copulenta* Mots. 68-200,
fide Hetschko La.
21098. *fulvipennis* Mots. 68-199,
fide Hetschko N. Am.
quadrifoveata Aubé not N. Am.,
fide Hetschko
10178 belongs here (?),
fide Hetschko

Europs

21099. *fervida* Blatch. 28-66 Fla.
21100. *frugivorus* Blatch. 28-66
Fla.

Baetridium

- adustus* Reitt. is valid
but not N. Mex., fide Hetschko
21101. *striolatum* Reitt. is valid,
fide Hetschko

Hypocóprus

10193. This genus is treated by Hetschko
as a tribe in Cucujidæ, and the
name of the species is given as
tenuis Cs.,
formicetorum Mots. being confined
to the Old World.

CUCUJIDÆ

Hetschko's treatment of this family divides it into seven subfamilies, viz.: Cucujinæ, Nartheciinæ, Prostominæ, Silvaninæ, Hemipeplinæ, Scalidiinæ, and Monotominæ, disregarding apparently the work of Böving and Arrow.

The following changes in nomenclature, besides those noted in our first supplement, are to be noted:

Uleiota Latr. replaces Brontes Fab.

10273. *denticulata* Smith 51-14

is added as a synonym

10243. *testaceus* Csy. nec Fab. 84-87

is added as a synonym

21102. *testaceus* Fab. is valid Cosm.

10261. = *minutus* Oliv.

21103. *puberulus* Lec. is valid

21104. *pusillimus* Mann. is valid

Aleut. Alas.

21105. *gilæ* Csy. is valid

but belongs in *Silvanus*

21106. *unidentatus* Fab. 92-232

Cosm.

Uleiota

10194. 10195 and 10196 are only varieties.

21107. *Cathartus quadricollis* Guer.

is valid Cosm.

10201 and 10203 are synonyms of above

Monanus Sharp 79-85 (to follow *Planimus*)

21108. *concinnulus* Walk. 58-207

Cosm.

Læmophloeus

Key to species, Park 29-433.

HEMIPEPLIDÆ

Arrow, 30-225, makes the genus *Hemipeplus* a family in the heteromorous series.

LANGURIIDÆ

Lewis 84; Arrow 25, 29; Schenckling 28.

Languria

10279a. ab. *puncticollis* Say

21109. *interstitialis* Csy. valid

fide Schenckling

10287 transferred to *Acropteroxys*

Hapalips

belongs in *Languriidæ*,

fide Arrow 29-318.

Acropteroxys

21110. *thoracina* Csy., valid

fide Schenckling

10294 a, ab. of 10292,

fide Schenckling

obscura Mots, ab. of 10292,

fide Schenckling

BIPHYLLIDÆ

Arrow 29-306

The type is the genus *Biphyllus*. Our genera *Anchorius* and *Diplocœlus* are presumably included.

CRYPTOPHAGIDÆ

Pharaxonotha

21111. *zamiae* Blake 28-111 Fla.

Glyptophorus Park 29-430

21112. *mycetoecus* Park 29-430

Ia.

Cryptophagus

21113. *maximus* Blake 28-109 Cal.

Ephistemus

21114. *punctatus* Blatch. 25-165

Fla.

MYCETOPHAGIDÆ

Hetschko, Col. Cat. pars 108, (1930).

Hetschko has transferred to this family *Triphyllus* Latr. 29-98, placed by Casey in Melandryidæ; *Berginus* is also transferred from Cisidæ. On the other hand, *Myrmecoxenus* is taken from Mycetophagidæ and added to Colydiidæ. In connection with the first of these changes, it is to be noted that *Pisenus*, the generic name used by Casey for *Triphyllus* ‡ auct. nec Latr., is not mentioned.

Typhæa

10509. *stercorea* L. 58-357.
fumata L. 66-654.

COLYDIIDÆ

Hetschko, Col. Cat. pars 107, (1930).

Namunaria Reitt. 82-114

(Coxelus‡Horn nec Latr.)

Rhagodera21115. *laticeps* Blais. 25-326 San Benito Is.**Bitoma**21116. *paradisea* Blatch. 30-32 Fla.21117. *cremata* Fab. 75-69,
fide Cooper 30-21 occurs on
L. I.**Myrmecoxenus**10521. transferred from Mycetophagidæ
and spelling changed.**Colydium**21118. *bicoloratum* Blatch. 25-165
Fla.**Nematidium**10581. *filiforme* Lec. is correct name for
our species, *mustela* Pascoe being
a synonym of *cylindricum* Fab.
from South America.

MURMIDIINAE

The family Murmidiidæ is treated by Hetschko as a subfamily of Colydiidæ and divided into two tribes Murmidiini and Mychocerini, the latter including the genus *Mychocerus*.

EUXESTINAE

Euxestus Woll. 48-411

(Hypodacne Lec. 170)

10346. This species is removed by
Hetschko from the Erotylidæ
to form this subfamily
in Colydiidæ.

LATHRIDIIDÆ

Lathridius

10629. *cinnamopterus* Mann.
montanus Fall is synonym,
fide Fall 26
10630. *costicollis* Lec.
armatus Fall is synonym,
fide Fall 26
21119. *carinifer* n.n. Fall 26-197
costicollis Fall nec Lec.

Corticaria

10683. *falli* n.n. Hetschko 29-156
cribricollis Fall nec Fairm.
Hetschko in Junk Col.
Cat. makes 10625
a synonym of *angusticollis*
Gyll. 27-136
transfers 10635 to *Lathridius*,
10667 to *Cartodere* with
locality Cuba only,
makes *Eufallia unicostata* valid,
and treats all the heretofore
unrecognized species as valid.

Corticaria

21120. *arctophila* Fall 26-197 Alas.
21121. *cavicauda* Fall 26-198 Alas.

MYCETÆIDÆ

Stethorhanis Blais. 30-376
 21122. *vandykei* Blais. 30-381 Cal.

ENDOMYCHIDÆ

Stenotarsus
 21123. *blatchleyi* Walton 28-217
 Fla.

PHALACRIDÆ

Hetschko, Col. Cat. pars 108 (1930).

Phalacrus		Tinodemus Guill. 94-300
21124. <i>vicinus</i> Guill. 94-292	Mich. Mo.	21127. <i>grouvellei</i> Guill. 94-302 Mich.
21124a. <i>subsulcatus</i> Guill. 94-292	Mich. Mo.	Stilbus
21125. <i>propinquus</i> Guill. 94-293	Kan.	21128. <i>atomarius</i> L. 67-574, fide Leonard N. Y. State List N.Y.
21126. <i>americanus</i> Guill. 94-294	Mich.	Gorginus Guill. 94-283 <i>(Erythrolitus</i> Csy.)
Olibrus		10867. <i>rubens</i> (Lec.)
10778. <i>caseyi</i> n.n. Hetschko 28-142		
<i>egenus</i> Csy. nec Guill.		
<i>piceus</i> Boh. 58-38 (Eugen. Reise)		
	Cal. (?)	

COCCINELLIDÆ*

Hyperaspis		Scymnus
21129. <i>pluto</i> Fall 25-311	Cal.	11115a. <i>caseyanus</i> n.n. for <i>brunnescens</i> Csy. nec Mots. <i>caseyi</i> Weise 29-33 nec Berthes
21130. <i>joyialis</i> Fall 25-311	Cal.	11120. <i>lunaris</i> n.n. Weise 29-33 for <i>stigma</i> Csy. nec Weise
Scymnus		Delphastus
21131. <i>pellio</i> Blatch. 27-142	Fla.	19760. removed to <i>Scymnillodes</i> , Chapin 30-493.
11028. <i>melsheimeri</i> n.n. Weise 29-33		Psyllobora
for <i>collaris</i> Melsh. nec Herbst		11150 b, is a valid species. fide Blatch. 30-38
11047. <i>sancutus</i> n.n. Weise 29-33		Adalia
for <i>decipiens</i> Csy. nec Weise		11193a. <i>schuetti</i> Park 29-4-2 Iowa
11084. <i>nevadensis</i> n.n. Weise 29-33		
for <i>innocuus</i> Csy. nec Boh.		
11085. <i>indianensis</i> n.n. Weise 29-33		
for <i>rusticus</i> Csy. nec Weise		
11092. <i>georgei</i> n.n. Weise 29-33		
for <i>bisignatus</i> Horn nec Boh.		

ALLECULIDÆ

Mycetochara
 11331. *rufipes* Lec. belongs here,
 not under 11267.

* The European *Bulæa lichatschovi* has been found at Paterson, N. J., fide Schott 26-17.

TENEBRIONIDÆ*

- | | | | |
|-----------------------------|------------|-------------|--|
| Telabis | | | |
| 21131. nevadensis Blais. | 25-372 | | |
| | Cal. | | |
| Melanastus | | | |
| 21132. texanus Blais. | 26-22 | Tex. | |
| Usechus | | | |
| 11673a. horni Blais. | 29-6 | Cal. | |
| 11673b. santaclarae Blais. | 29-6 | Cal. | |
| 11673c. trinitatis Blais. | 29-7 | Cal. | |
| Usechimorpha Blais. | 29-9 | | |
| 21133. barberi Blais. | 29-11 | Cal. | |
| Eulabis | | | |
| 11919 = 11916, fide Blais. | 25-79 | | |
| (? i. litt.) | | | |
| 19840 = 11920, fide Blais. | 25-79 | | |
| Eleodes | | | |
| 11930c. lassenica Blais. | 25-373 | Cal. | |
| 21134. parowana Blais. | 25-374 | Ut. | |
| 21134a. mimica Blais. | 25-375 | Ut. | |
| 21135. fuscipilosa Blais. | 25-376 | Ut. | |
| 21136. reducta Blais. | 25-377 | Ut. | |
| 21137. mazatzalensis Blais. | 25-379 | Ariz. | |
| 21138. coloradensis Blais. | 25-380 | Colo. | |
| 21139. concinna Blais. | 25-381 | Nev.Ut.Cal. | |
| 21140. wenzeli Blais. | 25-381 | Tex. | |
| 21141. speculicollis Blais. | 25-382 | Tex. | |
| 11951c. glabriuscula Blais. | 25-383 | Tex. | |
| 11961h. montana Blais. | 25-385 | Cal. | |
| 11961i. tularensis Blais. | 25-386 | Cal. | |
| 11980f. alticola Blais. | 25-387 | Cal. | |
| 11988b. dilaticollis Blais. | 25-388 | Wash. | |
| 11988c. sierra Blais. | 25-78 | Cal. | |
| 11990b. difformis Blais. | 25-389 | Wash. | |
| 11970 is not syn. of 11971, | | | |
| fide Blais. | 25-79 | | |
| Eleodes | | | |
| 11970a. fenyesi Blais. | 25-77 | Cal. | |
| 21142. delicata Blais. | 29-164 | Ariz. | |
| 21143. californica Blais. | 29-165 | Cal. | |
| Neobaphion Blais. | 25-390 | | |
| | type 11998 | | |
| Embaphion | | | |
| 12005a. blaisdelli Benedict | 27-46 | | |
| | | N.Mex. | |
| Cœlosattus Blais. | 27-166 | | |
| 21144. fortineri Blais. | 27-167 | Cal. | |
| Blapstinus | | | |
| 21145. cinerascens Fall | 29-58 | So. Cal. | |
| 21146. falli Blais. | 29-21 | Cal. | |
| Alaudes | | | |
| 21147. alternata Fall | 28-148 | Cal. | |
| 21148. fallax Fall | 28-150 | Cal. | |
| Leichenum | | | |
| 12277. seriehispidum Mars. | 76-101 | | |
| fide Carter 28-270 | | | |
| variegatum Klug | | | |
| squamosa (Endothina) Cart. | | | |
| Diaperis | | | |
| 21149. californica Blais. | 29-60 | | |
| | | Cal. | |
| 12306a. nigronotata Pic | 26-22 | | |
| | | Fla. | |
| 12306b. bicoloriceps Pic | 26-22 | Fla. | |
| Hypophlœus | | | |
| 21150. prætermissus Fall | 26-199 | | |
| | | Mass.-Yu. | |
| ? mexicanus Reit. | 77-191, | | |
| fide Blatch. | 30 | Fla. | |
| Cœlocnemis | | | |
| 21151. barretti Blais. | 28-163 | Cal. | |
| 21152. tanneri Blais. | 28-164 | Ut. | |

MELANDRYIDÆ

- Eustrophinus**
 21153. ornatus VanD. 28-251 Ariz.
Microscapha
 21154. californica Barrett 28-173
 Cal.
Melandrya
 21155. blackmani Hatch 27-364
 N. Y.
 (*Emmessa*)
 21156. testacea VanD. 28-252 Cal.
 (*Neocemmessa* Hatch 27-365)
 21157. noveboracensis Hatch 27-365
 N. Y.

- Hypulus**
 21158. californicus Vand. 28-253
 Cal.
Allopoda
 19912 = 12580, fide Blatch. 28-49
Canifa
 12585a. millikini Hatch 27-366
 Ill.
Osphyia
 21159. essigi Vand. 28-255 Cal.
Lacconotus **
 21160. pallidus Vand. 28-256 Cal.

* For changes in classification of this and related families, as indicated by larval characters, see papers by R. A. St. George and Adam G. Böving.

PTINIDÆ

Ptinus

21161. ocellus Brown 29-109 Vanc.

ANOBIIDÆ

Xarifa

21162. lobata Fall 29-57 Cal.

Ptilinus21163. flavipennis Csy. valid,
fide R.Hopp. 28-8
12866 = 12865, fide R.Hopp. 28-8

BOSTRICHIDÆ

Stephanopachys

(Prost Stephanus)

21164. apax Lesne 30-102 Ariz.

Dinapate12923. See Fenyes, Rovart Lapok VIII, 4;
Garnett, Ent. News, 1918, p. 41.**Polycaon**

(Heterarthron)

21165. parvulum Lesne 25-29 Cal.

PSOIDÆ

This family includes the following genera, usually placed in the Bostrichidæ:

Stephanopachys, Rhizopertha, Dinoderus, as well as the tribe Psioni, according to Böving and Craighead, quoting Saalas and Lesne. It is a part of the series Bostrichoidea. From that series, on larval characters, the families Ciidæ (= Cisidæ) and Sphindidæ are to be removed, the first to the new series Cleroidea, composed of Dermestidæ, Melyridæ, Ostomatidæ, Cleridae; the second to the Cucujidoidea. "The larva of the Sphindidæ," says Dr. Böving, "represents unquestionably a simple, primitive cucujoid type, but its more precise systematic position is rather uncertain." Compare also P. de Peyerimhoff, Etudes sur les larves des coléoptères, Ann. Soc. Ent. France, 1921, pp 109-110

CIIDÆ (CISIDÆ)

Dr. Böving, while finding part of the larval characters suggestive of bostrichoid relationship, states that other characters "speak strongly against a taxonomic position within the Bostrichoidea and for the association with the Cleroidea." Peyerimhoff in 1933, places Ciidæ after Tenebrionidæ in the series Cucujidoidea, with Schwarz and Barber, 1914, p. 177, as authority, but adds in a footnote, "il faut bien leur donner une place."

SCARABAEIDÆ

Brown 25, 27, 28, 29, 30; Glasgow 25; Fall 26, 27, 28, 29, 30; Schott 26; Hatch 26, 30; Darlington 27; Langston 27; Schaeffer 27; Buchanan 27; Blatchley 28, 29, 30; Luederwaldt 28; Barber 28; Hopping 28; Van Dyke 28; Wallis 28; Luginbill 28; Tanner 28; Strand 28; Blaisdell 30. The classification of Scarabaeoidea on larval characters differs mainly in raising the rank of certain groups, thus adding as families, Geotrupidæ, Trogidæ, and Acanthoceridæ, with others as subfamilies.

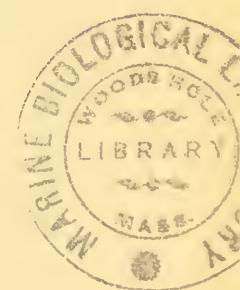
- | | |
|--|--|
| Canthon | Aphodius |
| 21166. 13038a is a valid species,
fide Blatch. 28-68 | 21184. bryanti Brown 29-88 Alta. |
| Pinotus | 21185. carri Brown 29-89 Alta. |
| 21167. spadiceus Leuderwaldt 28-65
Va. | 21186. pyriformis Brown 29-205 Nev. |
| Phanaeus | 21187. corruptor Brown 29-206 Alta.-B. C. |
| 13072. See Barber 28-383 regarding
nomenclature | 21188. anomaliceps Brown 29-207 N. Mex. |
| Onthophagus | 21189. dentigerulus Brown 29-208 Okla. |
| 19946. aciculatus n.n.
Blatch. 28-128 for alutaceus | 21190. snowi Brown 29-209 Ariz.-Colo. |
| 21168. oklahomensis Brown 27-128
Okla. Tex. Fla. N.C. | 13186. = aleutus (Esch.) 22-27
fide Fall 26 |
| 21169. knausi Brown 27-130 Kan. Neb. | 21191. gravis Fall 27-137 Cal. |
| 21170. cynamisi Brown 27-131 Okla. | 21192. davisi Fall 30-73 Cal. |
| 21171. cochisus Brown 27-132
Ariz. | 21193. neodistinctus Brown 28-89 Okla. |
| 13085. floridanus Blatch. 28-128 n.n.
for nigrescens | 13145. = 13146, fide R. Hopp. 28-6 |
| 21172. blatchleyi Brown 29-86 Fla. | 13109b. garmani Brown 29-227 Wyom. |
| 13081. medorensis Brown 29-204
Okla. Tex. | 21194. pingellus Brown 29-228 Colo.-B. C. |
| guatemalensis ‡ Schffr. nec Bates | 21195. omissus Lec. is valid,
fide Brown 29-224 |
| Aegialia | 21195a. torpidus Horn,
fide Brown 29-224 |
| 13105a. insularis Brown 29-87 Q. C. Is. | 21196. hyperboreus Lec. is valid,
fide Brown 29-224 |
| 21173. arenaria (Fab.) 87-11
fide Darlington 27-98 Mass. | angularis Lec. is syn.,
fide Brown 29-224 |
| 21174. lacustris Lec. 50-225,
fide Darlington 27-98 Me. N. H. | 21197. pinguis Hald. is valid,
fide Brown 29-224 |
| Aphodius | 13108 is syn., fide Brown 29-224 |
| 21175. subterraneus (L.) 58-348
fide Schott. 26-17 N. J. | 13109a = 13109, fide Brown 29-224 |
| 13123. = tenellus Say, fide Brown 30,
putridus not in N. Am. | 21198. smithi Brown 30-2 B. C. |
| 13195a. awemeanus Brown 28-306
Man. | 21199. cynamysi Brown 27-166 Okla. |
| 21176. wickhami Brown 28-301
Colo. | 21200. cavidomus Brown 27-167 Okla. |
| 21177. manitobensis Brown 28-302
Man. | 21201. martini VanD. 28-153 Cal. |
| 21178. haywardi Brown 28-303
Colo. | 21202. slevini VanD. 28-155 Cal.
(<i>Platyderides</i>)
includes 13151-13158, 13160,
13167, 13181, 19947 |
| 21179. hirsutus Brown 28-303
Wash. | 21203. russeus Brown 28-14 Okla. Kan. |
| 21180. albertanus Brown 28-304
Alta. | 21204. aquilonarius [†] Brown 28-16 Sask. |
| 21181. fimbripes Brown 28-305
Ut. | 21205. thomomysi Brown 28-17 Man. |
| 21182. errans Brown 30-243 Que. | 21206. insolitus Brown 28-18 Okla. |
| 21183. edmontonus Brown 29-87
Alta. | 21207. criddlei Brown 28-19
Man. Alta. Sask. |
| | 21208. punctissimus Brown 28-35 Okla. |

Aphodius

21209. oklahomensis Brown 28-36
Oklahoma.
21210. talpoidesi Brown 28-37 Man.
21211. socialis Brown 28-38 Man.
21212. leptotarsis Brown 28-15
N.W. Terr. Kan.
19947 is var. of 13154,
fide Brown 28
(*Didactylia* d'Orb.)
includes 13176 and 13174 of which
13171 is syn. fide Brown 29
- Dialytellus** Brown 29-211
includes 13207 and 13208
- Euparixa** Brown 27-288
21213. duncani Brown 27-288 Ariz.
- Atænius**
21214. erratus Fall 30-96 Fla.
21215. brevis Fall 30-98 Fla.
21216. salutator¹ Fall 30-99 Fla.
21217. ludovicianus Fall 30-100
La.
21218. rudellus¹ Fall 30-103 Fla.
21219. consors Fall 30-104 Mass.-N. Mex.
21220. anticus Fall 30-105 Ark. Ga. Fla. La.
21221. solitarius Blatch. 28-69
Fla.
21222. floridanus¹ Brown 30-3 Fla.
21223. oklahomensis Brown 30-4
Oklahoma.
21224. cibratus Vand. 28-156
Ariz.
21225. carolinus Vand. 28-157 N. C.
21226. semipilosus¹ Vand. 28-158
Ariz.
13241 belongs in Atænius,
fide Brown 28-307
- Pseudatænius** Brown 27-290
type 13222
- Dialytes**
21227. criddlei Brown 29-210 Man.
- Rhyssemus**
21228. puncticollis Brown 29-91
Ont.
21229. neglectus Brown 29-92 Okla. Colo.
- Ochodæus**
13272 = 13259, fide Brown 30-4
- Dontæus**
21230. falli Wallis 28-151 Man.
21231. thoracicicornis Wallis 28-153
Ohio
21232. floridensis Wallis 28-155
Fla.
21233. simi Wallis 28-170 N.J.
21234. liebecki Wallis 28-173 Conn.
21235. darlingtoni Wallis 28-175
N.J.
21236. alabamensis Wallis 29-239
Ala.
- Bolbocerosoma**
21237. lepidissimum Brown 28-193
Oklahoma.
21238. confusum Brown 28-194
Oklahoma. Ark. Ia.
21239. hamatum Brown 29-213
Ga.

Geotrupes

- Nylen 29-219 reports a single specimen of *G. sylvaticus* from Rhode Island.
- Acomia**
21240. arizonica Brown 29-212
Ariz. Cal.
21241. robusta VanD. 28-159 Cal.
21242. confusa VanD. 28-160 Cal.
- Glaresis**
21243. knausi Brown 28-73 Kan.
21244. canadensis Brown 28-74
Man.
21245. confusa¹ Brown 28-75 Ut.
21246. clypeata¹ Vand. 28-162 Cal.
- Serica**
21247. errans Blatch. 29-35 Fla.
- Phyllophaga**
21248. austricola Fall 29-110 and 216
Miss.
21249. mariana¹ Fall 29-111 Fla.
21250. iroides Fall 29-112 Ariz.
21251. microdon Fall 29-113 Tex.
21252. paternoi Glasgow 25-293
Va. N.C.
13496a. angulata Glasgow 25-294
N.J. Va.
21253. davisi Langston 27-221 Miss.
21254. deanii Luginbill 28-78 S.C.
21255. iota Luginbill 28-87 S.C.
- Phytalus**
21256. vanalleri Schffr. 27-215
Ala. Tenn.
- Gronocarus** Schffr. 27-213
21257. autumnalis Schffr. 27-213
Ala.
- Polyphylla**
- 13595, 13598, 13605, 13607,
13610, 13612, 13614, 13,615,
13617, 13620, 13622, to 26
are valid, fide Fall 28
oklahomensis Hatch 26-145
= 13598 Okla.
21258. uteana Tanner 28-276 Ut.
21259. rufescens Tanner 28-276
Ut.
- Thyne**
13628. Delete locality N. Mex.
13645. belongs in Thyne
- Dinacoma**
21260. caseyi Blais. 30-174 Cal.
- Dichelonyx**
13664=13665, fide Vand. 28-165
- Hoplia**
13697a is valid species,
fide Blatch. 30-36
- Anomalopides** n.n. Strand 28-2
(*Anomalopus*||Csy. nec Dunn)
- Strigoderma**
21261. knausi Brown 25-200 Kan.
21262. oklahomensis Hatch 30-24
Okla.
- Ochrosidia**
21263. subvittata Brown 30-5 Okla.
21264. nigricollis Burm. 47-50,
fide Buchanan 27-165 Tex. La.
robusta Lec.



Ligyrus
 21265. *laevicollis* Bates 88-316,
 fide Blatch. 28-49 Fla.
Strategus
 13896a. *houstonensis* Knaus 25-182
 Tex.

Cotinis
 13931. *ab. brunnea* Hatch 30-25
 Oklahoma Ind.
Euphoria
 13936 is a var. of 13937,
 fide Brown 30-5

LUCANIDÆ

Van Dyke 28

Platycerus

21266. *aeneus* VanD. 28-109 Oreg.
 14045a. *cribripennis* VanD. 28-107
 Cal.
 14042=14047 a, fide VanD. 28
 14044=14043, fide VanD. 28
 14049=14047 b, fide VanD. 28
 14052=14055, fide VanD. 28

CERAMBYCIDÆ*

Schmidt 24; Champlain and Knull 25, 26; R. Hopping 25, 28; Fall 25, 26, 28, 29; Schott 25; Champlain, Kirk and Knull 25; Knaus 25; Fisher 25, 26; Blatchley 25; Wallis 26; Plavilstshikov 27; Hardy and Preece 27; Knull 27, 28, 30; Van Dyke 27, 28, 29; Swaine and Hopping 28; G. R. Hopping 28; Schaeffer 29; Martin 30; Psota 30; Linsley 30.

Parandra

21267. *marginicollis* Schffr. 29-40
 So.Cal.
 21268. *punctillata* Schffr. 29-40
 Ariz.

Tetropium

21269. *alaskanum* Fall 26-201 Alas.

Dicentrus

(*Paraopsimus* Champlain and
 Knull 26-205 = *Dicentrus*
 fide R. Hopping 28-7)
 21270. *bidentatus* Champlain and
 Knull 26-205 Oreg.

Geme

21271. *hirsuta* VanD. 27-99 Ariz.

Styloxus

21272. *ruficeps*¹ VanD. 27-99 Ariz.

Methia

21273. *brevis*¹ Fall 29-58 So.Cal.

Romaleum

21274. *cylindricum*¹ Knull 27-116
 Ariz.
 21275. *cortiphagus* Craighead 23-69
 (larva) Knull, 27, 116 (Adult)
 Pa.

Anoplium

21276. *duncani*¹ Knull 27-117 Ariz.
 21277. *masoni* Knull 28-11 Ill.

Ibidion

21278. *polingi* Fall 25-182 Ariz.

Eumichthys

14293a. *ater* Hardy and Preece 27-188
 B.C.
 14293b. *ruber* Hardy and Preece 27-188
 B.C.

Centrodera

21279. *pilosa* VanD. 27-101 Cal.
 21280. *blaisdelli* VanD. 27-102 Cal.

Pseudopachyta S. & H. 28-16

14348. *rugipennis* (Newn.)

Pidonia Muls. 63-570 *

(*Haplosalia* Csny. 13-200)
 (*Thesalia* Csny. 13-198)
 according to S. and H. 28-18:
 14305= *ruficollis* Say
 14306= " "
 14308= " "
 14308a= " "
 14310= " "
 14568=14569 (?)

Idiopidonia S. and H. 28-19 *

14534. *pedalis* Lec. (genotype)

Grammoptera Serv. 35-215 *

(*Parallelina* Csny.)
 14455 transferred to *Alosterna*
 14457=14456
 14461=14459

Alosterna Muls. 63-576 *

14455, 14464, 14467, 14468
 belong here.

Pseudostrangalia S. and H. 28-24 *

14484. *cruentata* Hald. (genotype)
 14485=14484

* The classification of this family on larval characters indicates six subfamilies instead of three, the tribes Asemini, Lepturini, and Disteniini being raised to subfamily rank, with the last named especially by its long, slender larva.

¹ Synonymy fide R. Hopping 28 or S. and H. 28.

Leptura *

- 212S1. anthracina Lec. 75-175 is valid
Oreg.
subcostata Fall synonym,
fide S. and H. 28-26 Cal.
144S1, 14475, 14486, 144S2, 14487,
14474, 14471, belong here
144S3 = 144S2.
14478 and 14479 = 14474
144S0, 14470, 14473 and
14472 = 14471
14488 and 14465 belong here

Typocerus *

- 212S2. manitobensis¹ S. and H. 28-35
Man.
14545 = 14544
14542 = ? lunata Fab.
14547 = 14546
20080 = 14551

- 212S3. deceptus Knull 29-144 Pa.

Charisalia *

14464 transferred to Alosterna

Anoplodera Muls. 40-285 *

- (*Judolia* Muls.)
(*Ortholeptura* Csy.)
(*Brachyleptura* Csy.)
(*Strangalepta* Csy.)
(*Xestoleptura* Csy.)
(*Sistrophiona* Csy.)
14517, 14536, 14516, 14527,
14528 and 14431 belong here
14452, 14518, 20072 = 14516
14529 = 14527
- 212S4. knulli S. and H. 28-46 Wyom.
14427, 14437, 14424, 14505,
14507 and 14489 belong here
14428, 20065, 14429,
14430, 14436 = 14427
20066 = 14424
14506 = 14505
14477, 14426, 14432, 20068,
and 20069 belong here
20063 and 20064 = 14426
20070 = 14432
14435, 14508, 14512, 14510,
and 14498 belong here
14509 = 14508
14513 = 14512
14511 = 14510
14500 = 14498
14504, 14494, 14499, 14493,
and 14497 belong here.
14503, 14501, 20074, 20075 = 14504
14496, 14495 = 14494
14318, 14319, 14533, 14532,
and 14450 belong here.
14317 = 14318

- 212S5. obscura¹ S. and H. 28-56
Wash.
20077 = var. ? of 14533
14535 = 14533
14453, 20073 = 14450
14449, 20071, 14454, 14523,
and 14530 belong here.

Anoplodera Muls. 40-285 *

- 14531 = 14530
14525a is valid species and belongs
here.
20061, 14525, 14526, 14447 belong
here.
14524 = 14447
14448 = 14447
14448a and b = 14447
212S6. planata¹ S. and H. 28-62
Iowa
14522, 14520, 14438, 14439,
and 14441 belong here.
14521 = 14520
14519 and 14519a = 14520
14440, 14442, 14443, 14444 = 14441
14445, 14451, 14425, 14466,
and 14469 belong here.
14446 = 14445
14433, 14434 = 14425
nitidipennis Prov. = 14460
14532b = 14449
14402 belongs in Acmaeops.

Stenocorus *

- 14334 and 14335 = 14340
14328 and 14330 = 14324
14329 and 14331 = 14323
20053 = 14322

Gaurotes *

- 14413 = 14412

Acmaeops *

- 14410 = 14407
14402 belongs here.

Leptacmaeops *

- 14374a and 14376 = 14374
14373, 14378, and 14380 = 14383
14385, 14386, 14388, 14389 = 14384
20058, 14393 = 14391

Cyphonotida

- 14492 belongs in Euryptera,
fide S. and H. 28-65

Neobellamira S. and H. 28-15**14565. delicata (Lec.) genotype****Euryptera**

- 14492 belongs here,
fide S. and H. 28-65

212S7. cruenta Martin 30-70 Ariz.

In addition to the changes noted
above the Swaine and Hopping
paper on the Lepturini (of which
part I was published in 1928) unites
the tribes Encyclopini and Leptu-
rini, restores the generic names
Toxotus and Stenocorus to the
sense formerly used, and makes
Strangalia Serv. a synonym of Lep-
tura L., so that Strangalina Auri-
villius will replace the old name
Strangalia. The changes in generic
arrangement of the species, though
numerous, appear to accord with
studies of wing venation and larvæ.
Drawings by Mr. F. C. Hennessey
assist in following the text.

* Synonymy fide R. Hopping 28 or S. and H. 28.

- Molorchus**
 14584c. celti Knull 30-101 Pa.
Plinthocœlum Schmidt 24-382
 includes 14599, 14600, 14602, 14604
 14599b. smaragdinoides Schmidt 24-384 Tex.
Schwarzterion Schmidt 24-387
 includes 14603
- Anacomis**
 14614d. thujæ VanD. 27-103 B. C.
- Callidium**
 21288. vancouverense VanD. 27-104 B. C.
 21289. pallidum VanD. 28-111 Cal.
 21290. hardyi VanD. 28-112 B. C.
- Phymatodes**
 21291. fulgidus G.R.Hopp. 28-246 B. C.
- 14641a. nigrescens Hardy and Preece 27-190 B. C.
 14645a. latifasciatus Hardy and Preece 27-191 Vanc.
- Cyllene**
 14667 = infausta Lec.
 fide R.Hopp. 28-8
 14668a, d, and e = 14668,
 color varieties of decora,
 fide R.Hopp.
- Xylotrechus**
 21292. bowditchi G.R.Hopp. 28-247 Colo.
 21293. schaefferi Schott 25-224 N. J.
 20106. abietis VanD. 29-136, n.n.
 cinereus || VanD.
- Neoclytus**
 21294. baillaris VanD. 29-136 Wash.
 basalis || VanD. 27-106
 21295. angelicus VanD. 27-107 Cal.
 21296. vanduzeei¹ VanD. 27-107 Ariz.
 14711a. zebratus VanD. 27-108 Cal.
- Clytoleptus**
 14732 = 14730, fide Champlain,
 Kirk and Knull 25
- Clytus**
 21297. canadensis G.R.Hopp. 28-246 B. C.
- Batyle**
 21298. rufiventris¹ Knull 28-126 Ariz.
- Moneilema**
 21299. corpulentum Knaus 25-183 Ariz.
 14877c. montanum Psota 30-121 Mont.
 21300. puncticollis Psota 30-121 Colo. N.Mex.
21301. angulatum¹ Psota 30-122 Wash.
 21302. hybrida¹ Psota 30-123 Colo.
 21303. parahybrida Psota 30-124 N. Mex.
- 14880a. scabrum Psota 30-125 N. Mex.
 21304. alpinum Psota 30-126 Tex. N.Mex.
 21305. rinconi Psota 30-126 N. Mex.
 21306. texanum Psota 30-127 Tex.
 14881b. arizonicum¹ Psota 30-128 Ariz.
 21307. duncani Psota 30-128 Ariz.
 21308. isolatum Psota 30-132 N. Mex.
 21309. punctatum Psota 30-133 Tex.
 21310. walsenburgi Psota 30-142 Colo.
 21311. nigritrinitatis Fisher 26-214 Tex.
 All of Casey's names, except corrugans, are synonyms, fide Psota.
- Goes**
 21312. novus Fall 28-236 Tex.
 14917a = 14917, fide Fall 28-237
 14916 = 14915, belongs in Goes fide Fall 28-237
 14915 occurs in Ga. and N. C.
 14920 occurs in N. J., Pa., and R. I.
- Synapheta**
 14926 and 14927 = 14928, fide R.Hopp. 28-8
- Leptostylus**
 21313. pusillus Blatch. 25-167 Fla.
 21314. bahamicus Fisher 25-3, fide Champlain and Knull 26-205 Fla.
 21315. knulli Fisher 25-103 Md.
 21316. scurra v. dorsalis Fisher 26-21 Cuba, Fla.
- Lepturges**
 21317. minutus Champlain and Knull 25-207 La.
 21318. neomexicanus Champlain and Knull 25-470 N. Mex.
- Pogonocherus** (Key to species Linsley 30)
 21319. vandykei Linsley 30-79 So. Tex.
- 15051 = 15049
 15054 = 15053
 15057 = 15055
 15058 = 15056
 15060 = 15049
- Ecyrus** (Key to species Linsley 30)
 21320. cornutus Linsley 30-86 So. Tex.
 15066 is valid Linsley 31-106
- Ataxia**
 21321. brunneus Champlain and Knull 26-206 No. Ill.
- Saperda**
 21322. bipunctata R.Hopp. 25-208 Man.
- Oberea**
 21323. delongi Knull 28-12 Ohio
 21324. brooksi Wallis 26-94 Man.
 15136. caseyi n.n. Plav. 27-64 ferruginea || Csny.

* Synonymy fide R. Hopping 28 or S. and H. 28.

CHRYSOMELOIDEA

The publication of Böving and Craighead's "Synopsis of the principal Larval Forms of Coleoptera" indicates the necessity of dividing the series Cerambycoidea, uniting the families Bruchidae (Mylabridæ) and Chrysomelidae as a series, Chrysomeloidea. Within that series, on larval characters, the subfamilies of Chrysomelidae heretofore recognized would become families, Sagrinae becoming Sagridæ, Donaciinae Donaciidae, etc. In the Orsodacnidae two subfamilies, Orsodacninae and Zeugophorinae are indicated as required. The present subfamilies Chlamydinæ, Clytrinæ, Cryptocephalinæ, and Lamprosominæ, become components of a family Camptosomatidæ. In the family Galerucidae the subfamilies Galerucinæ, Diabroticinæ (formerly the tribe Diabroticini) and Halticinæ are provisionally assembled; but it is stated that "when better studied, the classification of the entire family Galerucidae will unquestionably be changed."

CHRYSOMELIDÆ

Schaeffer 24, 25, 26, 28, 29; Laboissiere 25, 29; Blatchley 25, 27, 28; Chittenden 25, 27; Gentner 25, 26, 28; Heikertinger 25; Van Dyke 25; Fall 26, 27, 28, 29; Brisley 27, 28; Hatch 27, 28, 31; Blake 27, 28, 30; Spaeth 27; Martin 28.

Donacia

The results of the studies of Schaeffer are best shown by the following new catalogue of the species. The original catalogue number is preserved for the species of which the status is unchanged; otherwise it is shown in parenthesis.

21325. <i>militaris</i> Lacord.	Mass.-Fla.
floridae Leng (15197)	
15202. <i>piscatrix</i> Lacord.	
<i>carolina</i> Lacord.	
<i>cuprea</i> Melsh.	
<i>alutacea</i> Lec.	
15202a. <i>congener</i> Lec.	Ga.Tex.
15199. <i>palmata</i> Oliv.	
<i>claudicans</i> Germ.	
21326. <i>texana</i> Cr.	Tex.La.Fla.
21326a. <i>minor</i> Schffr. 25-72	Mich.-Tex.
15201. <i>rufescens</i> Lacord.	
15200. <i>hypoleuca</i> Lacord	
20161. <i>edentata</i> Schffr.	
20160. <i>parvidens</i> Schffr.	
21327. <i>cincticornis</i> Newn. (15198 a)	
<i>lucida</i> Lacord.	
21327a. <i>tryphera</i> Schffr. 25-81	N.J. Mex.
21327b. <i>tenuis</i> Schffr. 25-82	N.C. Fla. Mich.
21327c. <i>rufipennis</i> Lacord.	Can.-Va.
<i>pulchella</i> Lec.	
15198. <i>proxima</i> Kby.	
15198d. <i>californica</i> Lec.	Cal.-B.C.
21328. <i>cerulea</i> Oliv.	N.Y.-Md.
<i>episcopalalis</i> Lacord (15198 c.)	
21329. <i>magnifica</i> Lec. (15198 b.)	Can.-Colo.
15194. <i>hirticollis</i> Kby.	
<i>rudicollis</i> Lacord.	

Donacia

15196. <i>pubescens</i> Lec.	
21330. <i>quadricollis</i> Say	N.Y.-H.B.T.
<i>cuprea</i> Kby.	
<i>curticollis</i> Knab (15204)	
15206. <i>rugosa</i> Lec.	
20162. <i>assimilis</i> Lacord.	N.J. Md.
<i>glabrata</i> Schffr.	
21331. <i>biimpressa</i> Melsh.	Can. Fla.
<i>aurichalcea</i> Melsh.	
<i>torosa</i> Lec. (15212)	
<i>distincta</i> Leng	
21331a. <i>limonia</i> Schffr. 25-100	N.Y.-Mich.
15207. <i>porosicollis</i> Lacord.	
15211. <i>distincta</i> Lec.	
15203. <i>subtilis</i> Kunze	
<i>zenea</i> Ahrens	
<i>confluenta</i> Say	
<i>æqualis</i> Kby.	
<i>ærea</i> Lacord.	
<i>confluens</i> Lec.	
15203a. <i>fulgens</i> Lec.	N.Y.-H.B.T.
20164. <i>tuberculifrons</i> Schffr.	
21332. <i>vicina</i> Lacord.	Ala.
20163. <i>liebecki</i> Schffr.	
<i>pallipes</i> Lacord.	
15205. <i>megacornis</i> Blatch.	
<i>megalocera</i> Weise	
15209. <i>æqualis</i> Say	
<i>confusa</i> Lacord.	
<i>dissimilis</i> Schffr. 25-115	
	Fla.
15218. <i>rufa</i> Say	
<i>tuberculata</i> Lacord. (15210)	
<i>rutila</i> Melsh.	
15195. <i>pubicollis</i> Schffr.	

Donacia

- (*Poecilocera* Schffr.)
 15208. *harrisi* Lec.
 (*Plateumaris* Thoms.)
 21333. *sulcicollis* Lacord. Can.-Wis.
metallica†Say
affinis Kby.
kirbyi Lacord.
jucunda Lec.
rufa†Leng (15218)
 15217. *flavipes* Kby.
chalcea Lacord.
 15217a. *shoemakeri* Schffr. 25-129 N.J. N.Y. D.C. Va.
 15217b. *lodingi* Schffr. 25-129 Ala.
 21334. *nitida* Germ. N.Y.
binodosa Lec. nec Germ.
 21335. *notmani* Schffr. 25-132 N.Y.
 15216. *emarginata* Kby.
junci Coup.
 15216a. *pacifica* Schffr. 25-135 Cal.
 15216b. *frosti* Schffr. 25-136 Mass.-Alta.
 15215. *metallica* Ahrens
femoralis Kby. (15214)
cataractæ Newm.
parva Lacord.
nana Melsh.
indica Melsh.
gentilis Lec.
 21336. *germari* Mann. Nfld.-Cal. Alas.
aurifer Lec.
dives Lec.
femoralis†Lec.
serricauda Schffr. (20165)
 21336a. *flavipennis* Mann. Oreg.-Alas.
 21337. *diversa* Schffr. 25-143 Ind. Wis. Ont.
harrisi†Blatch.
 21338. *fulvipes* Lacord. Alta.-Pa.
cuprea†Lec.
pusilla†Leng (pars)
 15213. *pusilla* Say
rugifrons Newn.
 15213a. *pyritosa* Lec.
 15213b. *robusta* Schffr.
 21339. *wallisi* Schffr. 25-147 Man. Mich.-Alas.
aurifer var. Lec.
 21340. *dubia* Schffr. 25-152 Wyom.-Alas.
 21341. *neomexicana* Schffr. 25-154 N.Mex.
 21342. *longicollis* Schffr. 25-156 B.C.-Nev.
 21343. *vermiculata*† Schffr. 25-158 Cal.
Syneta
 15221a. *minuta* Brisley 27-60
Thricolema
 a distinct genus Brisley 27-56
Zeugophora
atra Fall. 26-203 n.n.
 for *abnormis*†Cr. nec Lec.

Crioceris

- according to Hatch 27-211:
incrucifer Pic 06-119-123 Mich.
4-punctata Schust. " " "
linnei Pic " " "
anticeconjuncta Pic " " "
apiceconjuncta Pic " " "
impupiliata Pic " " "

Lema

- 15253b. *nigriventris* Fall 28-238 Cal.
 20169 = 15255, fide Fall 28-238
 15255 is subsp. of 12253,
 Brisley 28-118
 15257. *californica* n.n. Heinze 27-142,
 for *aemula*||

Coscinoptera

21344. *inornata* Fall 27-382 L.Cal.

Euryscopa

21345. *alicula* Fall 27-383 L.Cal.

Saxinis

21346. *microstriga* Fall 27-384 Ariz. Mex.

Chlamys

- (*Boloschesis* Jacobson 24-239)
Arthrochlamys Ihering,
 Rev. do Mus. Paulista VI, 1904, p.
 642)
 (cf. Laboissiere 29-256)

21347. *subelata* Schffr. 26-184 Ariz. Cal.
 21348. *scabripennis* Schffr. 26-184 Tex. N.Mex. Ariz. Cal.

21349. *quadrilobata* Schffr. 26-186 Tex.

20173. = *mœstifica* Lac.

Monachulus

21350. *viridanus* Fall 27-139 Fla.

Bassareus

21351. *clathratus* Melsh. valid sp.
 fide Blatch. 28-71

Metachroma

21352. *insulare* Fall 27-390 L. Cal.
 21353. *opacipenne* Fall 27-138 L. Cal.
 21354. *coronadense* Fall 27-138 Cal.

21355. *anaemicum* Fall 27-138 Fla.
 15588. = *adustum* Suffr. 66-339,
 fide Blake 80-214

Typophorus

- 15625a. *sturmi* Lef. is subsp.,
 fide Chittenden 25-91

Paria

21356. *juniperi* Blatch. 27-143 Ind.

Colaspidea

- 20188 occurs in Cuba,
 fide Blatch. 28-49

Hydrothassa Thoms. 66-279

21357. *boreela* Schffr. 28-289 Man.Alta.B.C.
 15636, 15637, 15638, also belong here

- Calligrapha**
- 15675a. *confluens* Schffr. 28-290 N.S.-Mass.
21358. *alni* Schffr. 28-290 N.S.-Mass.
- Phædon ***
15695. *prasinella* (Lec.) 61-358 Wash.-So.Cal.
punctatus Hatch 28-46, Fall 29-145 Wash.
vandykei Hatch 28-61, Fall 29-145 Cal.
15696. *purpurea* Linell 98-482, Fall 29-151 Ut. Ariz.
purpureescens Hatch 28-61,
Fall 29-150 Ariz.
15698. *oviformis* (Lec.) 61-457,
Fall 29-151 N. Eng.-Alas.
? *vancouverensis* Hatch 28-62,
Fall 29-151
15699. *viridis* (Melsh.) 47-175, Fall 29-149 Que. Fla. N.Mex.
æruginosus Suffr. 58-395,
Fall 29-149 N. Am.
- microreticulatus Hatch 28-46,
Fall 29-148 N. Y.
dietrichi Hatch 28-46, Fall 29-148
N. Y.
? oklahomensis Hatch 31-103
as variety Okla.
15697. *armoraciæ* (L.) 58-369, Fall 29-152 Eur. N. Am.
? *americanus* Schffr. 29-287,
and Fall i. litt. Mich.
21359. *niger* Hatch 28-47 Wash.
planus Hatch 31-104, and i. litt.
21360. *carri* Hatch 28-46, Fall 29,
and Schffr. 29 Que.-Alta.
? *cochlearia* Fall nec Fab.,
fide Schffr. 29
21361. *uniformis* Fall 29-150 Mass. N.J. Ga.
21362. *cyanescens* Stål 60-470, Fall 29-150 Mex. Ariz.
huachucæ Hatch 28-62 Ariz.
- Gastroidea**
(*Gastrophysa* Redt.)
21363. *formosa* (Say) is valid,
fide Schffr. 28-45
- 15705 = *Nodonota puncticollis* Lef. 28-45
- Lina**
21364. *interrupta* Fab. 01-438
- 21364a. 4-guttata Schffr. 28-43 Alta.
- 21364b. *aeneicollis* Schffr. 28-43
- 15710c. *maculicollis* Schffr. 28-44 Ut.
- 15711a. *scriptoides* Schffr. 28-44 N. J.
- Phyllodecta**
21365. *americana* Schffr. 28-46 Pa.
- 21365a. *pallipes* Schffr. 28-47 Ohio.
- Triarius**
21366. *suturalis* Martin 28-34 Ariz.
- Diabrotica**
- cf. Lever 30-656, and Laboissiere 25
- Luperodes**
21367. *bimarginata* Blake 28-143 N. C.
- Oedionychis**
- 15871a. *lamprocyanea* Blake 27-11 Ariz. Colo.
- 15868a. *badia* Blake 27-14 Va.
scripticollis Say = 15868,
fide Blake 27
- 15875b. *pallicida* Blake 27-27 Tex. Okla.
21368. *amplivittata* Blake 27-24 N.Am.(U.S.?)
21369. *spilonota* Blake 27-36 Fla.
21370. *obsidiana* (Fab.) 01-499
- 21370a. *blakeæ* n.n.
flava || Blake 27-40 nec Gmelin
Ala. Ill. Kan.
21371. *discicollis* Cr. 73-61 Fla.
21372. *lateralis* Jac. 86-412 Ariz.
21373. *durangoensis* Jac. 92-318 Ariz.
15886. *circumdata* Rand. replaces
limballis Melsh.
21374. *subvittata* Horn is valid,
fide Blake 27
15889. *quercata* (Fab.) reidentified,
fide Blake 27
15872. *gracilis* is syn. fide Blake 27
Harold's names, jocosa, horni,
longula not identified
- Disonycha**, fide Blake 30-210
- 15895e (= *costipennis* Duv.) is valid Fla. Cuba.
- 15895 is valid E. of Miss. So. St.
- 15895d is valid Fla.
21375. *uniguttata* (Say) is valid U.S. E. of Rockies
- 15895a is valid Cal.
- 15895b. (= *procera* Cs.) is valid E. of Rockies
- vicina Kby. remains doubtful
- 15902a is valid fide Blatch. 30-43
- Haltica**
- 15937 = *tombacina* Mann.,
fide Fall 26-204
21376. *cupreolus* Fall 26-204 n.n. for
tombacina ♀ Horn
21377. *vitiosa* Blatch. 28-71 Fla.
21378. *brisleyi* Gentn. 28-59 Ariz. Colo. Neb.
21379. *nigra*¹ Gentn. 28-61 N. Mex.
15925. *aeneola* n.n. Blatch. 25-245,
for ænescens ||
21380. *canadensis* Gentn. 26-149 Man.
21381. *elongata* Gentn. 26-151 Man.

* We have included, in treating Phædon, Hatch's paper of 1931 in which he disputes in part the synonymy of Fall's paper of 1929, and describes *planus*. This name he later, in a letter to us, treated as an aberration. We have included also a letter from Fall, disputing Schaeffer's conclusions, in part.

Chalcoides

15968. Following Heikertinger 13-155, Schaeffer 24-145, Chittenden 25-120, the helxines of Linné is questionable or unrecognizable. The arrangement of names, fide Chittenden, is
fulvicornis (Fab.) 92-30
 Eur. N.Am.
 subsp. *nana* Say
 subsp. *violacea* Melsh.

Crepidodera

21382. *solani* Blatch. 25-167 Fla.

- Leptotrichalta** Heikertinger 25-68
 (*Leptotrix* Horn nec Meyer 1868)

Chætocnema

21383. *parvula*¹ Gentn. 28-62 Ariz.
 21384. *bicolor* Gentn. 28-63 Ariz.
 21385. *magnipunctata* Gentn. 28-64
 So. Cal.

Systema

21386. *floridana* Blatch. 28-72 Fla.

Longitarsus

21387. *waterhousei* Kutschera 64-274
 Eur. Mich. Ind.

(Wien. Ent. Monatschr. Vol. VIII)
menthae (Bedel) 98-189
menthae || Gentn. 25-109
menthaphagus Gentn. 26-152
 and 28-264

21388. *ovalis* Gentn. 26-153 Nfld.

Glyptina

21389. *maritima* Fal. 27-140 Mass.

Aphthona

21390. *schaefferi* Blatch. 27-144
 Fla.

- Phyllotreta** as arranged by Chittenden 27
 16075. *armoracie* (Koch) 03-75
 † Eur. Que.-Neb.

vittata Steph. 31-297

- 16075a. *biplagiata*¹ Chitt. 27-16
 Wis.

16064. *lepidula* (Lec.) 57-68 Cal.

16067. *oregonensis* (Cr.) 73-66
 Or.-Tex.

16068. *robusta* Lec. 78-614 Mich.-Man.

16065. *zimmermanni* (Cr.) 73-66
 N. Eng.-Man.

sinuata † Horn 89-295

20245. *utana* Chitt. 20-389 Ut.-Oreg.

16066. *vittata* (Fab.) 01-469
 † Eur. N. Eng. Cal.

striolata (Fab.) 07-148

sinuata † Redt.

- 16066a. *discedens* Weise 93-873
 Fla. Tex. D.C.

- 16066b. *monticola* Weise 93-873
 † Eur. Cal. D.C.

- 16066c. *lineolata* Chitt. 27-25 Ala.-Alas.

- 16066d. *vernicosa*¹ Chitt. 27-25
 Cal.

- 16066e. *artivitta*¹ Chitt. 27-26 Ia.

20243. *liebecki* Schffr. 19-439 Fla. Md. Ill.

21391. *alberta* Chitt. 27-28 Alta.

21392. *perspicua*¹ Chitt. 27-29 Oreg.

Phyllotreta

21393. *obtusa*¹ Chitt. 27-30 Colo.
 21394. *oblonga* Chitt. 27-31 Alta.

16073. *ramosa* (Cr.) 74-80 Cal. Nev. N.Y.
 16074. *bipustulata* (Fab.) 01-464
 N.Y. Wis. Kan.

20244. *conjuncta* Gentn. 24-168*
 Mich. Wis. Kan.

16069. *denticornis* Horn 89-297
 Cal. Oreg.

21395. *amplicornis*¹ Chitt. 27-35
 ?

16070. *ulkei* Horn 89-298 Ohio.
 16071. *decipiens* Horn 89-298

- Or. Mont. B.C.
 16071a. *ordinata* Chitt. 27-38 Nev.-Wash.
 16072. *albionica* (Lec.) 57-68 Colo.-B.C.

- 16072a. *corusca*¹ Chitt. 27-40 B.C.
 21396. *herbacea* Chitt. 27-41 Colo.
 21397. *prasina* Chitt. 27-42 Cal. Ariz. Tex.

16076. *chalybeipennis* (Cr.) 73-67 Mass.-Fla.

16078. *æneicollis* (Cr.) 73-67 Tex.-S. Dak.
 16077. *lewisii* (Cr.) 73-66 Md.-Oreg.

21398. *columbiana* Chitt. 27-46 B.C.
 21399. *subnitida* Chitt. 27-47 Cal.-N. Mex.

21400. *ærea* Allard 59-c † Eur. N.Y.
punctulata Foudras 60-255

21401. *inconspicua* Chitt. 27-49 Alta-Wash.

21402. *fulgida* Chitt. 27-50 Colo.-Cal.

21403. *transversovalvis*¹ Chitt. 27-51 Ut.

21404. *brevipennis* Chitt. 27-52 Man.

16080. *pusilla* Horn 89-302 Colo.-Cal.

21405. *laticornis* Chitt. 27-54 Ariz.
 21406. *viridicyanea* Chitt. 27-55 Cal.

21407. *politula* Chitt. 27-56 Oreg.

21408. *inordinata* Chitt. 27-57 Tex. Ariz.
 20242. *undulata* Kutsch. 60-301 ? N. Am.

16079. *lindahli* Dury (in Tanygaster?)
 16081. *picta* (Say) in Trachymetopa Weise,
 fide Heikertinger 25-58

- Anisostena**
 21409. *californica* VanD. 25-170 Cal.

- Brauchycoryna**
 21410. *dolorosa* VanD. 25-170 Cal.

16117. = *hardyi* Cr. fide VanD. 25

- Microrhopala**
 16131c. *militaris* VanD. 25-173 Cal.

- Chelemorphia**
 21411. *phytophagica* Cr. 73-77 is valid

- Ariz.

- Physonota**
 16142b. *arizonæ* Schffr. 25-234 Ariz.

21412. *helianthi* Rand. is valid
 fide Criddle 26-208

- Cassida**
 21413. *relicta* Spaeth 27-114 Ill.

* Variety of *bipustulata*, fide Chitt. 27.

Deloyala	21414. <i>marginepunctata</i> Schffr. 25-236
16155a. <i>diversicollis</i> Schffr. 25-235	Ala.
	Tex. Ariz.
Metriona	21415. <i>Iodingi</i> Schffr. 25-236 Ala.
16157b. <i>floridana</i> Schffr. 25-235	Coptocyclus
	21416. <i>pinicola</i> Schffr. 25-235 Ala.
	Ela.

MYLABRIDÆ

On larval characters two subfamilies, *Pachymerinæ* and *Bruchinæ* are suggested by Böving and Craighead.

Caryobruchus Bridwell 29-148
New genus proposed for 16163
and 16164

Mylabris
21417. *wheeleri* Blatch. 30-35
21418. *prolixus* Fall 26-204 Fla.
 Alas.

Spermophagus
cf. Bridwell 30-29 on status of
robiniae Fab.

BRENTIDÆ

Kleine 27.

Platystrophus Kleine 17-39
Brentus 16260 = *mexicanus* Boh. 40-532
 This generic name is proposed for
Eupsalis and the varieties *lecontei*
 and *sallei* are treated by Kleine as
 valid, without explanation.

PLATYSTOMIDÆ

(ANTHROBIDÆ) (CHORAGIDÆ)

This family is treated under the name Choragidae in Bradley's Manual. Several nomenclatorial changes are made by Pierce 30; in the same paper keys to several genera by Barber and Buchanan are printed, as well as other keys by Pierce.

Wolfrum, in Col. Cat. parts 102 (1929) restores the family name Anthribidae, makes two subfamilies, and submerges the genera Gonops and Toxotropis in Ormiscus.

Böving and Craighead, on larval characters, elevate the rank of the family to a series, Platystomoidea, divided into two subfamilies, Brachytarsinæ (legs present) and Choraginæ (legs absent) in larval stage.

Meconemus Labram and Imhoff 38-51, fide Pierce (<i>Ischnocerus</i> Schön.)	Eusphyrus 21425. <i>schwarzii</i> Pierce 30-28 Fla.
21419. <i>angulata</i> Martin 30-71 Ariz.	Discotenes Labram and Imhoff 38-51, fide Pierce (<i>Phanosolcena</i> Schffr.)
Toxotropis Key, Pierce 30 (<i>Gonops</i> Lec.) fide Pierce	Ormiscus 21426. <i>angulatus</i> Pierce 30-6 Tex.
21420. <i>simplex</i> ¹ Pierce 30-8 Ga.	21427. <i>solidus</i> ¹ Pierce 30-7 Tex.
21421. <i>sparsus</i> ¹ Pierce 30-9 Tex.	Eurymycter Key, Pierce 30
21422. 4-maculatus Pierce 30-9 Fla.-D.C.	21428. <i>latifascia</i> Pierce 30-17 N.Y. Ont.
21423. <i>mitchelli</i> Pierce 30-10 Tex.	21429. <i>bicarinatus</i> ¹ Pierce 30-17 Wash.
21424. <i>victoriensis</i> Pierce 30-11 Tex.	21430. <i>tricarinatus</i> Pierce 30-17 N.C.-Wis.

Tropidères		Pseudanthribus Pierce 30-24 (<i>Anthribus</i> Geoff.)
21431. <i>barberi</i> Pierce 30-13	Tex.	
Allandrus Key, Barber 30		Brachytarsus
21432. <i>populi</i> Pierce 30-19	Ariz. Ut. Id. Mich.	21433. <i>annulatus</i> Carr 30-279 Alta.
		Brachytarsoides Pierce 30-29 n. gen. for 16310 and others
Piezocorynus Key, Buchanan 30		
16288. = <i>plagifer</i> Jordan 04-277,		Euxenus
fide Pierce		21434. <i>ater</i> ¹ Blatch. 30-238 Fla.

CURCULIONOIDEA

The series Brentoidea, Curculionoidea, and Scolytoidea are consolidated by Böving and Craighead on larval characters. They state that the larvae of Curculionidæ and Scolytidæ "cannot be separated." The submerged larvae of Lissorhoptrus, living between the leaves of rice, lead to their separation as a subfamily Lissorhoptrinæ. The families suggested are Belidæ, Brentidæ, Attelabidæ (including Rhynchitinæ = Cimberinæ and Attelabinæ) Apionidæ, Curculionidæ, Calendridæ, Platypodidæ, and Scolytidæ.

CURCULIONIDÆ

Fall 25, 26, 27, 28, 29; Chittenden 25, 26, 28, 30; Blatchley 25, 28; Pierce 25; Satterthwait 25; Fisher 25; Voss 25; Buchanan 26, 27, 29; Barber 26; Van Dyke 27, 28, 29, 30; Cotton 27; Carr 29, 30; Brown 29, 30; Ryan 29; Frost 30; Crosby and Blauvelt 30; Mutchler 30; Bradley 30.

Diodyrhynchus (in subfamily Cimberinæ, fide Bradley 30-259)	Apion
21435. <i>slevini</i> Martin 30-130	Cal.
Rhynchites	
21436. <i>quadripennis</i> Fall 29-292	
	Tex.
21437. <i>delectus</i> Fall 29-292	So.Cal.
16357a. <i>levirostris</i> ¹ Fall 29-293	
	Cal.
21438. <i>insularis</i> Fall 29-293	Cal. Is.
Attelabus	
(<i>Himatolabus</i>)	
21439. <i>constrictipennis</i> Chitt. 26-163	
	Ariz.
21440. <i>disparipes</i> Chitt. 26-164	Ariz.
21441. <i>coloradoensis</i> Voss 25-244	
	So.Colo.
(<i>Pilolabus</i>)	
21442. <i>californicus</i> Voss 25-243	
	Cal.
According to Col. Cat. pars 110:	
16365a. is a synonym of 16365; the	
synonymy under 16369 is to be	
reversed; the subgenera are	
Pilolabus for californicus,	
Himatolabus for 16369,	
Synolabus for 16366. 16367 and	
16368, Cyrtolabus for Chittenden's	
species, and Homœolabus for 16365	
Apion	
21443. <i>alaskanum</i> Fall 26-205 Alas.	
21444. <i>dilaticolle</i> Fall 25-85 N.J.	
21445. <i>bischoffi</i> Fall 25-86 N.Y. N.J. Va.	
atripes [‡] Fall, 98 nec. Smith	
	Pseudanthribus Pierce 30-24 (<i>Anthribus</i> Geoff.)
	Brachytarsus
	21433. <i>annulatus</i> Carr 30-279 Alta.
	Brachytarsoides Pierce 30-29 n. gen. for 16310 and others
	Euxenus
	21434. <i>ater</i> ¹ Blatch. 30-238 Fla.
	Calomycterus
	21450. <i>setarius</i> Roelofs 73-175, fide Mutchler 30-1 N.Y.
	Panscopus Key, Buchanan 27 (<i>Nomidus</i>)
	21451. <i>schwarzi</i> Buch. 27-30 Ut.
	21452. <i>rugicollis</i> ¹ Buch. 27-31 Wash.
	21453. <i>bufo</i> ¹ Buch. 27-31 Cal.
	21454. <i>pallidus</i> Buch. 27-31
	B.C. Id. Mont.
	21455. <i>tricarinatus</i> ¹ Buch. 27-32
	Oreg.
	(<i>Pseudopanscopus</i> Buch. 27-33)
	21456. <i>costatus</i> ¹ Buch. 27-33 B.C.
	16575=16636, fide Buch.
	16584a=16584, fide Buch.
	16586=16576, fide Buch.
	<i>Panscopidius</i> =Nocheles, fide Buch.
	Pantomorus
	16659. =godmani Cr.
	fide Bradley 30-262

- Mesagroicus** Schön. 40-281
 (Lepidocricus Pierce) fide Buchanan 29
 21457. minor Buch. 29-6 Ohio-Colo.
 21458. oblongus Buch. 29-8 Neb.-Wyom.
 21459. plumosus Buch. 29-9 Tex.
 21460. elongatus Buch. 29-10 Oreg.
 21461. nevadianus Buch. 29-11 Nev.
 21462. incertus Buch. 29-11 Wash.
 21463. hispidus Buch. 29-12 Cal.
 21464. strigisquamosus Buch. 29-13 Cal.
 21465. ocularis Buch. 29-13 Cal.
- Trigonoscuta**
 16695=16673 fide Buch. 27-184
- Brachyrhinus** cf. Chitt. 25-290, and Buch. 27-183
 21466. cribicollis Gyll. 34-582
 fide VanD. 29-8 and Ryan 29-567 Cal.
- Agronus**
 21467. carri Buch. 29-102 Alta.
- Euciliinus** (Simoini) Buch. 26-179
 21468. mononychus Buch. 26-180 Ut. Ariz.
- Trichalephus**
 21469. brunneus¹ VanD. 27-15 Wash.
 21470. foveirostris Chitt. 25-141*
- Acmægenius**
 21471. granicollis¹ VanD. 27-14 Wyom.
- Lepidophorus**
 21472. rainieri VanD. 30-149 Wash.
 21473. alternatus VanD. 30-150 Wash. Or.
- Desiantha** (*Hyperini*) Pasc. 70-193
 21474. nociva Lea 09-174 fide Blatch. 25-92 †Miss.
- Lepyrus** Key to sp. Van D. 28-57
 21475. nordenSKIOLDI Faust 87
 21475a. canadensis Csy.
 21475b. cinereus VanD. 28-57 Alas.
 21476. oregonus Csy.
 21476a. tesselatus VanD. 28-56 Alta.
- Listronotus**
 21477. impressus VanD. 29-106 Cal.
 21478. elegans VanD. 29-107 Cal.
 21479. leucozonatus Chitt. 26-341 O. Fla. N.Y.
 (*Listroderes*)
21480. apicalis Waterh. 41-123,
 fide Chitt. 26-71
- Hyperodes**
 21481. annulipes Blatch. 25-92 Fla.
 21482. carinatus Blatch. 28-242 Fla.
 16810=16834, fide Fall 26-206
 vitticollis†Dietz=16835a,
 fide Fall 26-206
- Pissodes**
 21483. robustus VanD. 27-11 Cal.
 21484. ochraceus VanD. 27-12 Cal.
- Anculopus** Van D. 27-12
 21485. foveatus VanD. 27-13 Wash.
- Notaris**
 21486. flavipilosus Chitt. 30-48 Alas.
 21487. goliath Buch. 27-38 Nev. Oreg.
 16923=bimaculatus Fab., fide Buch. 26-36
- Smironyx**
 21488. minutissimus¹ Blatch. 28-244 Fla.
- Tanysphyrus**
 21489. atra¹ Blatch. 28-244 Mass.
- Bagous**
 21490. carinatus Blatch. 25-95 Fla.
- Myrmex**
 (*Otidocephalus*)
 21491. ventralis¹ VanD. 30-151 Tex.
 21492. dimidiatus¹ VanD. 30-152 Tex.
 21493. octolineatus Champ. 03-242 fide VanD. 30-153 Ariz.
- Curelio** ** L. 58 377-386.
 (*Balaninus* Germ.)
 Arranged as follows by Chittenden, 1927:
 *
 17155. proboscideus Fab. E.U.S.
 17177. auriger Csy. E.U.S. Ariz?
 **
 17159. nasicus Say E.U.S. Tex.
 17156. caryae Horn E.U.S. Tex.
 17157. rectus Say E.U.S. Tex.
 21494. macrodon¹ Chitt. 27-154 Tex.
 21495. longidens Chitt. 27-155 Mass. Fla. Tex.
 21496. ruficristatus¹ Chitt. 27-156 Tex.

 21497. orthorhynchus Chitt. W. Va. N.J.-Tex.
 21498. longinasus¹ Chitt. 27-158 Ariz.
 21499. multifasciatus¹ Chitt. 27-159 Wis.
 21500. pardus Chitt. 27-160 So.Cal.
 21501. gracilis Chitt. 27-161 Ariz.
 21502. wenzeli Chitt. 27-161 W. Tex.

 17160. pardalis Chitt. E.U.S. Tex.
 17176. victoriensis Chitt. Tex.-S.C.
 17176a. fulvus Chitt. 27-165 S.C.-Ala.
 21503. emarginatus Chitt. 27-165 N.Mex.
 17170. strictus Csy. N.J. Ut.

 17175. q-grisea Chitt. Ariz.
 17161. confusor Ham. E.U.S. Dak.
 17167. uniformis Lec. Cal. Ut. B.C.
 21504. parvidens Chitt. Gulf. St. N.C.
 17162. baculi Chitt. E.U.S. Tex.
 17162a. curtus Chitt.

* Referred to Plinthodes Van D. 27-15.

** Curcio nucum designated as type by Latreille 1810, fide Pierce Proc. Ent. Soc. Wash. 1925, pp. 113-114.

Curculio

21505. cervulinus Chitt. 27-174
Cal.
17169. undulatus Csy. Ariz.
21506. microdon Chitt. 27-175 Tex.
21506a. rectitibialis Chitt. N.Mex.

17164. obtusus Blanch. E.U.S. Can. Tex.
21507. numenius Chitt. 27-178 Can.-Colo.
21508. funicularis Chitt. 27-179 N.Mex. Can.
21509. iowensis Csy. (17161a.) N.Y. Wis. Tex.
21510. ibis Chitt. 27-181 Ariz.
21511. exilis¹ Chitt. 27-182 Can.

17166. monticola Csy. W.Tex. N.Mex.
21512. crassirostris Chitt. 27-184 Ariz.
21513. aurivestis¹ Chitt. 27-185 Cal.
21514. brevinasus Chitt. 27-185 Cal.
17168. nanulus Csy. N.Mex.
21515. striatus Chitt. 27-187 W.Tex.
17163. humeralis Csy. Fla.
21516. albidus Chitt. 27-189
? haroldi Faust 90-292, fide
Chitt. 28-69 China N.Am?
17155a, 17155b = 17155
17158, 17177a, 17178, 17179 = 17177
auctus Csy. = 17159
sparsus Gyll. rostratus Gyll.,
and nasatus Say = 17159?
appalachius Csy. = 17160
17173, 17171, 17172,
and ordinatus Csy. = 17170
proprius Csy. = 17175
17165 = 17167
17180 = 17166
17174 = 17168

Anthonomus

(Coccotorus)

21517. pruniphilus Chitt. 25-130 Tex.
(Anthonomus)
21518. nubilooides Fall 28-239 Me. and West
21519. australis Blatch. 25-98 Fla.
21520. bicorostris Blatch. 25-97 Fla.
17239a. picipes¹ Blatch. 28-249 Ill.
17267. xanthus Blatch. 25-99 = 17267
fide Fall 28-238 Mass.
? 17312 = 17273, fide Fall 28-230.
denied Blatch. 30-41

Epimechus

21521. flavirostris Fall 28-239 So.Cal.

Orchestes

21522. uniformis Brown 29-110
Man.
21523. testaceus Mul. 76-90 fide
Frost 30-97 Me. N.S.
17345a. is valid species, occurs in Quebec,
fide Brown 30
- Cleonus**
21524. piger Scop. 63-23, fide
Crosby and Blauvelt 30-164
N.Y.
- Lixus**
21525. novellus Blatch. 25-101 Ind.
21526. pusio¹ Blatch. 28-250 Fla.
21527. blakeae Chitt. 28-90 Cal.
21528. albisetiger Chitt. 30-2 Tex.
21529. aspericollis Chitt. 30-3 Kan.
21530. coloradensis¹ Chitt. 30-4
Colo.
21531. perstriatus Chitt. 30-5 Colo.
21532. acirostris Chitt. 30-6 N.C.
21533. ordinatipennis¹ Chitt. 30-7
La.
21534. quadratipunctatus¹ Chitt. 30-8
Colo.
17425a. profundus Chitt. 30-9 Ga.-Tex.
21535. crassipunctatus¹ Chitt. 30-9
Ariz.
21536. ivae Chitt. 30-10 La.
21537. dissimilis Chitt. 30-11 Ga.
21538. triceratus Chitt. 30-12
N.Y. Ala. Kan.
21539. planicollis Chitt. 30-13 Ia. La.
21540. pervestitus Chitt. 30-14
Ariz. N.Mex.
21541. flexipennis¹ Chitt. 30-15
Ia.
21542. buchanani¹ Chitt. 30-16 Ia.
21543. pluchea¹ Chitt. 30-17 Tex.
17437a. ocellatus Chitt. 30-18 N.Y. N.J.
21544. capitatus¹ Chitt. 30-19 Md.
21545. lodingi Chitt. 30-20 Ala. Fla. La.
21546. regularipennis Chitt. 30-21
Ind. D.C. La.
21547. cleonoides¹ Chitt. 30-22 Tex.
21548. mephitis¹ Chitt. 30-23 S.C.
21549. elephantulus¹ Chitt. 30-24
Ill.

Baris

21550. seminola¹ Blatch. 28-251
Fla.
21551. palmensis¹ Blatch. 28-252
Fla.

Geræus

- (Centrinaspis Csy.) (type 17582)
21552. argentis Blatch. 25-102 Ind.
21553. bracatoides¹ Blatch. 28-253
Fla.

Limnobaris

- (Anacentrus Csy.) (type 17622)
21554. vicarius Blatch. 28-254 Fla.
(Sibariops Csy.) (type 17637)
21555. pellax¹ Blatch. 28-255 Fla.

Barinus

- 20601 belongs here, fide Fall 28-240

- Cylindrocopturus ***
 21556. medicatus Carr 29-134 Alta.
 21557. vanduzeei VanD. 30-153 Cal.
 21558. crassus VanD. 30-154 Cal.
 21559. hemizoniae VanD. 30-155 Cal.
 21560. cretaceus VanD. 30-155 Ariz.
 21561. unicolor VanD. 30-156 Cal.
- Ceutorhynchus**
 21562. fulvotertius Fall 26-206 Alas.
- Perigaster**
 21563. alternans¹ Blatch. 28-256 Fla.
- Acanthoscelidius** n. n. Dalla Torre and Hustache
 (*Acanthoscelis*||Dietz nec Dej.)
- Ceutorhynchus**
 21564. aeratus Dietz is valid,
 fide Col. Cat. pars 113**
 21565. hirtellus Dietz is valid,
 fide Col. Cat. pars 113
 21566. hamiltoni Dietz is valid,
 fide Col. Cat. pars 113
 21567. rubidus Gyll. 37-484 Miss.
- Auleutes**
 21568. epilobii Payk. is valid,
 fide Col. Cat. pars 113
 N.Am. Sib. Eur.
- Conotrachelus**
 21569. cinereus¹ VanD. 30-158 Tex.
 21570. asperatus¹ VanD. 30-159 Ariz.
 21571. setiferous¹ VanD. 30-160 Ariz.
 21572. nigromaculatus VanD. 30-161 Ariz.
 21573. retusus Fall 29-59 Fla.
- Ryssematus**
 21574. beutenmuelleri¹ VanD. 30-161 N.C.
 21575. arizonicus VanD. 30-162 Ariz.
 21576. acutecostatus Champ.
 fide VanD. 30-163 Ariz.
- Chalcodermus**
 21577. martinii¹ VanD. 30-163 Ariz.
- Cophes** Champ. 05-515
 21578. gibbus Champ. 05-517,
 fide VanD. 30-164 Ariz.
- Euscepes**
 21579. deceptus¹ Blatch. 25-106 Fla.
- Micralcinus**
 21580. kalmbachi Buch. 27-169 La.
- Gerstaeckeria**
 21581. doddi Fisher 25-426 Tex.
- Apteromechus**
 21582. microstictus Fall 25-88 and 123
 Fla.
 21583. texanus¹ Fall 25-88 Tex.
- Thecesternus**
 18005 is an aberration of 18002,
 fide Col. Cat. pars 106
- Trichacorynus**
 21584. sulcirostris¹ Blatch. 28-259 N.J.
- Phloeophagus**
 21585. californicus VanD. 27-16 Cal.
 21586. canadensis VanD. 27-17 Alta.
- Pseudopentarthrum**
 21587. fraternum Blatch. 28-260 Fla.
- Pentarthrinus**
 21588. dissimilis Blatch. 25-108 Fla.
- Calendra** Clairv. 98-62
 (= *Sphenophorus* fide Pierce 19-26)
 21589. sequoiae VanD. 30-165 Cal.
 21590. multilineatus Satt. 25-269 Minn.
 21591. medoraeensis Satt. 25-270 Kan.
 21592. elongata Roelfs., 75-187
 fide Cotton 27-93

SCOLYTIDÆ

- Sphaerosinus** Eggers 29-40
 21593. striatus Eggers 29-41 N.Am.
- Polygraphus**
 21594. hoppingi Sw. 25-51 Ariz.
- Hylastes**
 21592. yukonis Fall 26-207 Yukon

* This genus and Eulechriops are not Zygopini, fide Barber 26-53.
 ** In this catalogue, besides the changes noted above, the tribe Ceutorhynchini is treated as a subfamily divided into tribes Mononychini, Coeliodini, and Ceutorhynchini. In the latter 17844 is referred to *Eubrychius* Thoms. with 17846 as a synonym, 17827, 17829, 17831, 17832, 17833, 17834, and 17845 are placed in *Phytobius*, and *Coelogaster* Dietz is restored.

Pityophthorus

21596. aplanatus Schedl 30-195
Alta.
21597. varians Schedl 30-196 N.S.
21598. watsoni Schedl 30-197 N.B.
21599. boycei Sw. 25-192 Cal.
21600. rugicollis Sw. 25-193 N.Mex.
21601. carinulatus Sw. 25-193 N.Mex.
21602. elongatus Sw. 25-194 = 20673
fide Blackm. 28-133 B.C.
21603. cutleri Sw. 25-195 B.C.
21604. borealis Sw. 25-195 Arctic Can.
21605. gracilis Sw. 25-195 Oreg.
21606. exilis Sw. 25-196 Oreg.
21607. tenuis Sw. 25-196 B.C.
21608. scalptor Blackm. 28-30 Cal.
21609. anceps Blackm. 28-31 Colo.
21610. fuscus Blackm. 28-32 Mont.
21611. aquilus Blackm. 28-33 Ariz.
21612. absonus Blackm. 28-35 Cal.
21613. crinalis Blackm. 28-41
Md. Fla. Mich.
21614. juglandis Blackm. 28-42
N.Mex. Ariz.
21615. inquietus Blackm. 28-46
N.Mex.
21616. monophyllæ Blackm. 28-47
Cal.
21617. socius Blackm. 28-48 Cal. N.Mex.
21618. abietis Blackm. 28-49
Ut. Ariz. N.Mex.
21619. albertensis Blackm. 28-50
Alta.
21620. exiguum Blackm. 28-51 Colo. Ariz.
21621. segnis Blackm. 28-52 Ariz. N.Mex.
21622. idoneus Blackm. 28-55 Idaho
21623. hopkinsi Blackm. 28-56 Cal.
21624. ponderosæ Blackm. 28-57
N.Mex. Ariz.
21625. tumidus Blackm. 28-58 Cal.
21626. solus¹ Blackm. 28-64 Ariz.
21627. comosus Blackm. 28-65 N.Mex. Ariz.
21628. crassus Blackm. 28-67
N.Mex. Colo. Ariz.
21629. cognatus Blackm. 28-69
N.C.
21630. durus Blackm. 28-70 Ariz.
21631. schwarzi Blackm. 28-71
N.Mex.
21632. demissus Blackm. 28-74
Mont. Ut.
21633. venustus Blackm. 28-75
Ariz. N.Mex. S.D.
21634. artifex Blackm. 28-76 Cal.
21635. setosus Blackm. 28-77 Cal.
21636. cælator Blackm. 28-78
S.D. Colo. Ariz.
21637. opimus Blackm. 28-80
N.Mex. Colo.
21638. brevis Blackm. 28-81 Ariz. N.Mex.
21639. angustus Blackm. 28-83
N.Y.
21640. concavus Blackm. 28-85
Mich. Me.
21641. mundus Blackm. 28-86 N.H. N.Y.

Pityophthorus

21642. modicus Blackm. 28-94
N.Mex. Ariz.
21643. navus Blackm. 28-95 Cal.
21644. novellus Blackm. 28-96 Cat.
21645. immanis Blackm. 28-98
Ariz. N.Mex.
21646. cascoensis Blackm. 28-99
Me.
21647. tonsus Blackm. 28-101 Mich. N.H.
21648. ornatus Blackm. 28-102
Colo.
21649. infulatus Blackm. 28-103
N.Mex.
21650. mollis Blackm. 28-104 N.Mex. Ariz.
21651. hubbardi Blackm. 28-105
Ariz.
21652. blandus Blackm. 28-107
Cal. Ariz.
21653. barberi Blackm. 28-112
N.Mex. Colo. Ut.
21654. jeffreyi Blackm. 28-113
Cal.
21655. grandis Blackm. 28-119
Ariz. Wyom.
21656. bellus Blackm. 28-123 W.Va.-Tex.
21657. ingens Blackm. 28-124 Ariz.
21658. agnatus Blackm. 28-125
N.Mex. Tex. Ariz.
21659. comptus Blackm. 28-127
Ariz.
21660. depygis Blackm. 28-128 Colo.
21661. burkei Blackm. 28-129 Cal. Id.
21662. clarus Blackm. 28-130 Ariz.
21663. acutus Blackm. 28-134 Ariz. N.Mex.
21664. citus Blackm. 28-137 Ariz. N.Mex.
21665. solers Blackm. 28-138 N.Mex. Ariz.
21666. electus Blackm. 28-140 Oreg.
21667. kenti Blackm. 28-141 Wyom.
21668. fortis Blackm. 28-142 Tex. Colo.
21669. virilis Blackm. 28-143 N.Mex. Colo.
18430a. australis Blackm. 28-94
Ariz.
18425b. hamamelidis Blackm. 28-39
W.Va.
18425c. acerni Blackm. 28-39 W.Va.
18447 (= 18445) fide
Blackm. 28-131
18434 (= 18433) fide
Blackm. 28-108
18431 (= 18435) fide
Blackm. 28-97
18437 (= 18438) fide
Blackm. 28-72
18450 belongs in Ambrosiodmus
18449 belongs in Pityoborus
= 18451 fide Blackm. 28-146

Pityoborus

21670. secundus¹ Blackm. 28-146
Ut.

Pityophilus Blackm. 28-147

21671. barbatus Blackm. 28-147
N.Mex. Ariz.

- Myeloborus** Blackm. 28-16
18421 etc. belong here
21672. amplus Blackm. 28-18 Ariz. N.Mex.
21673. keeni Blackm. 28-19 Cal.
21674. pinguis Blackm. 28-20 Colo.-Ariz.
21675. catulus Blackm. 28-21 Id. Wyom.
21676. fivazi Blackm. 28-23 N.Y. Wis.
21677. iniquus Blackm. 28-27 Wyom. Colo.
- Ips**
21678. chamberlini Sw. 25-196 Oreg.
21679. ponderosæ Sw. 25-197 Ariz.
- Hylocurus**
21680. spadix Blackm. 28-188 N.C. Pa.
21681. schwarzii Blackm. 28-189 Tex.
- Micracisella** Blackm. 28-192
(*Pseudomicracis*||Blackm. nec Egg.)
21682. lignator Blackm. 28-195
Ariz.
- Thysanoes**
21683. xylophagus Blackm. 28-198
Ariz. N.Mex.
- Pseudothysanoes**
21684. hopkinsi Blackm. 28-200
Cal.
21685. phorodendri Blackm. 28-202
Tex. Ariz.
21686. sedulus Blackm. 28-204
Ariz.
21687. gambetti Blackm. 28-205
Ariz. N.Mex.
21688. barberi Blackm. 28-206 Ariz.

APPENDIX

CALOSOMA AS ARRANGED BY BREUNING; NUMBERS OF 1920
CATALOGUE AND 1927 SUPPLEMENT IN PARENTHESIS.

Calosoma Web.

- 179. *aurocinctum* Chd. (179)
- 180. *scrutator* Fab. (180)
- 181. *willcoxi* Lec. (181)
- 182. *sycophanta* L. (182)
splendidum Dej. W.I. Fla.
(*Synkalosoma*) (*Caminara* Motsch.)
- 183. *frigidum* Kby. (183)
levettei Csy.
(*Callistriga* Mots.)
- ? *alternans* Fab. 92-146 W.I. U.S. ?
ab. *cupraescens* Roe
- 184. *sayi* Dej. (as subsp. of
alternans) (184)
virginica Csy.
armatum Lap.
abdominale Géh.
(*Chrysostigma* Kby.)
- 204. *calidum* Fab. (204)
lepidum Lec. (204a)
expansa Csy.
laticollis Csy.
comes Csy. (204b.)
- 204d. *stellatum* Csy.
concreta Csy. (204c)
- 205. *morrisoni* Horn (205)
- 206. *tepidum* Lec. (206)
irregulare Walker
celator Csy.
indigens Csy.
pallax Csy. (206a)
cogitans Csy. (18566)
semicuprea Csy. (206b)
(*Tapisnothenes*)
- 207. *cancellatum* Esch. (207)
ænescens Lec.
esuriens Csy. (207a)
transversa Csy. (207b)
rectilatera Csy. (18568)
praestans Csy. (18569)
sagax Csy. (18567)
(*Carnegonia*)
- 186. *prominens* Lec. (186)
angulatum Lec.
- 186a. *parvicollis* Fall (187)
subgracilis Csy.
clemens Csy. (188)
pertinax Csy. (18565)
- 195. *lecontei* n.n. Csiki
lugubre||Lec. (195)
marginalis Csy.
(*Carabiosoma*)
- 185. *angulatum* Chev. (185)
angulicolle var. Chd.
uniforme Géh.
- ? *glabratum* Dej. S.Am.
- 194. *peregrinator* Guér. (194) subsp.
of *glabratum*
carbonatum Lec. (196)
forreri Géh.
affine Bates nec Chaud.
ingens Csy. (194a)
amplipennis Csy. (194d)
apacheana Csy. (194c)
- 191. *sponsa* Csy. (191) subsp.
of *glabratum*

Calosoma Web.

- parviceps* Csy. (190)
- eremicola* Fall (192)
- rugosipennis* Schffr. (193)
- hospes* Csy. (189)
- ? *affine* Chd. Mex.
- 199. *tristoides* Fall (199) subsp.
of *affine*
- 198. *triste* Lec. (198) subsp.
of *affine*
- 200. *obsoletum* Say (200)
- microsticta* Csy. (200a)
- 201. *semitaeve* Lec. (201)
davidsoni Csy. (201a)
adjutor Csy. (201b)
- 202. *simplex* Lec. (202)
(*Callitropa*)
- 176. *externum* Say (176)
longipenne Dej.
- 177. *macrum* Lec. (177)
- 178. *protractum* Lec. (178)
dolens Chd.
truncatum Géh.
(*Paracalosoma*)
- 197. *palmeri* Horn (197)
(*Blaptosoma*)
- ? *laeve* Dej.
- 203. *haydeni* Horn (203) subsp.
of *laeve*
(*Callisthenes* Fisch.)
- 209. *moniliatus* Lec. (209)
laqueatus Lec. (209a)
bicolor Walker 66-313
vancouverensis Csiki
- 209b. *concinnus* Csy. (209b)
- 210. *wilkesi* Lec. (210)
- 211. *discors* Lec. (211)
inversus Csy. (211a)
- 211b. *schaefferi* n.n.
for *irregularis*||Schffr. (212)
- 211c. *dietzi* Schffr. (213)
tularensis Csy. (213a)
gravidulus Dsy. (213b)
latipennis Csy.||nec Horn
- 208. *subæneum* Chd. 69-28 (208)
- 208a. *latipenne* Horn (221)
- 208b. *opimum* Csy. (221b)
arcuatus Csy. (221a)
- 219. *luxatum* Say (219)
- 219e. *zimmermanni* Lec. (214)
opacus Géh. (214a)
tegulatus Csy. (216a.)
viator Csy. (216b)
debilis Csy. (18570)
parowanum Csy. (18571)
- ab. *pimeloides* Walker (217)
- pustulosus* Csy. (218)
- ab. *monticola* Csy. (219a)
- nevadensis* Csy. (219b)
- ab. *diffractum* Csy. (219c)
- ab. *striata* n.n.
for *striatulus*||Lec. (215)
- exaratus* Csy. (216)
- reflexus* Csy. (18572)
- utensis* Csy. (18573)
- semotus* Csy. (18574)
- ab. *subasperatus* Schffr. (220)
- ab. *klamathensis* Csy. (219d)

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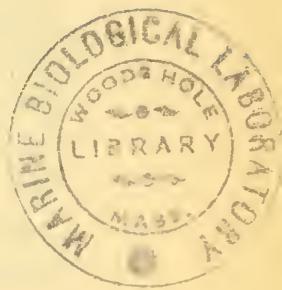
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THIRD SUPPLEMENT TO CATALOGUE OF COLEOPTERA OF AMERICA, NORTH OF MEXICO

ADDITIONS AND CORRECTIONS TO DECEMBER 31, 1933



CICINDELIDÆ

Nicolay and Weiss 32

Amblycheila

21689. *picolominii* is a good species.
fide Martin 32-111

Cicindela

21690. *alata* Lilj. 32-215

III.

Cal.

According to Nicolay and Weiss 32:
45e. *auguralis* Csy. is variety of
limbalis
45 d is synonym of 45

CARABIDÆ

Darlington 31; Lapouge 31; Netolitsky 31; Fall 32; Jeannel 31;
Valentine 31, 32; Csiki 31, 32; Brown 32.

Scaphinotus

21691. *confusus* Darl. 31-146
N.C.
128a is valid as subspecies,
fide Darl. 31.
angelli Beut. is synonym
of *guyoti*, fide Darl. 31.

Calosoma

The same method is used by
Lapouge for *Calosoma*, which be-
comes subtribe *Callisomina*, divided
into four genera and twelve sub-
genera. Of these *Isostenia* contains
210, *Lyperostenia* contains 198,
Paratropa contains 177 and 178,
Acamegonia contains 194; the re-
mainder are nearly the same as in
Breuning's arrangement given in
Appendix to our second supple-
ment. In the treatment of the spe-
cific names Lapouge differs in
many instances with Breuning.
They appear to agree that 176, 177,
178, 179, 180, 181, 182, 183, 184,
185, 186, 194, 195, 200, 201, 202,
204, 205, 206, 207, 208, 209, 210,
211, 219, are good species; but dif-
fer as to the status of many other
names.

Maronetus

21692. *unistriatus*¹ Darl. 31-149
N.C.

Sphaeroderus

21693. *multicarinatus* Darl. 31-151
N.C., Tenn.

Carabus

Lapouge in *Genera Insectorum*,
fasc. 192 a-b, 1931, treats the
species of *Carabus* as a subtribe,
Carabina, divided into genera and
subgenera. Our *sylvosus* is placed
in the genus *Eocarabus*, subgenus
Tanaocarabus; *taedatus* in genus
Oreocarabus, subgenus *Neocarabus*;
chamissonis in genus *Hemicarabus*,
subgenus *Cryocarabus*. 170a and
169f, are treated as subspecies; the
other names under 168, 169 and
170 as synonyms or as varieties of
the recognized subspecies.

Callisthenes

According to Lapouge, if this
genus is recognized as separate
from *Calosoma*, *Callitropa*, for 176,
177, 178, 186, 195, 194 (with subsp.
incerta Lapouge 24-38) and 201,
and *Caminara* for 184, must also be
recognized.

Loricera

241. pilicornis (Fab.) 75-243 is correct
name fide Van Dyke, i. litt.

Nebría

21694. appalachia Darl. 31-153

N.C., Tenn.

Bembidion

21695. bryanti Carr 32-191 Br.Am.,
N.W.T.

(*Furcacampa* n. subg.

Netolitsky 31-158)

705 is the type.

Microtrechus

21696. barberi Jeannel 31-444 N.C.

Trechus

910b. brachyderus Jeannel 31-432
Mont.

20711a. arcticollis Jeannel 31-428
Idaho

21697. gravidulus Jeannel 31-429
N.Mex.

21698. beutennülli Jeannel 31-436
N.C.

21699. schwarzii Jeannel 31-437
N.C.

Pseudanophthalmus

20715a. limicola Jeannel 31-451
Va.

20715b. parvicollis Jeannel 31-452
Va.

921a. stricticollis Jeannel 31-466
Ind.

921b. morrisoni Jeannel 31-466
Ind.

21700. intermedius Valentine 31-249
and 32-276 Tenn.

21701. robustus Valentine 31-250
Tenn.

21702. punctatus Valentine 31-250
and 32-266 Va.

21703. higginbothami Valentine 31-251
W.Va.

21704. hirsutus Valentine 31-252
Tenn.

21704a. delicatus Valentine 32-270
Va.

21705. lodingi Valentine 31-252
Ala.

21706. humeralis Valentine 31-253
Tenn.

21706a. brevis Valentine 32-273
Tenn.

21707. gracilis Valentine 31-253
Va.

21708. grandis Valentine 31-254
W.Va.

21708a. elongatus Valentine 32-265
W.Va.

21708b. orthosulcatus¹ Valentine 32-265
W.Va.

21709. fuscus Valentine 31-254
W.Va.

subæqualis Valentine 31-255
W.Va.

21709a. constrictus Valentine 32-267
W.Va.

21710. potomaca¹ Valentine 32-262
W.Va.

Pseudanophthalmus

21710a. senecæ¹ Valentine 32-263
W.Va.

21711. hypertrichosis Valentine 32-266
W.Va.

922a. bathycola Valentine 32-268
Va.

21712. digitus¹ Valentine 32-270
Tenn.

21713. rotundatus Valentine 32-271
Tenn.

21714. fullerii¹ Valentine 32-272
Tenn.

21715. alabamæ Valentine 32-273
Ala.

Horologion

Valentine 32-2
21716. speekites¹ Valentine 32-3
W.Va.

Pterostichus

1004, add idahoensis Casey
as syn. fide Darl. 31.
(*Gastrellarius*)

21717. unicarum Darl. 31-155

N.C., Tenn.

(*Monoferonia*)

21718. primus Darl. 31-159 N.C., Tenn.

1476a. plethora Darl. 31-161 N.C.

21719. carolinus Darl. 31-162 N.C., Ga.

21719a. fumorum Darl. 31-163

N.C.

1477. diligendus Chd. fide Darl. 31,
with osculans Csy. and
apalachius Horn as syn.

Rembus

This genus in Col. Cat. pars 115,
is placed in a tribe Oodini
and separated from Licinini

Dicaelus

21720. darlingtoni Fall. 32-19

Fla.

Calathus

The changes made in the Platynini
in Col. Cat. pars 115, are
numerous, beginning with the re-
duction of the tribe to a subtribe,
Agoni, and introducing many new
names for genera, subgenera, pre-
occupied species names, etc. In
Calathus the synonymy announced
in our first supplement is dis-
regarded.

Unless otherwise noted all of the
following changes in the subfamily
Harpalinæ are suggested by Csiki
in Col. Cat. pars 115 or pars 124.

Pristodaetyla

1488b. brunnescens Mann. 52-204

Aleut.Is.

1488c. breviuscula Mann. 52-204

Aleut.Is.

Laemostenus

1494 is removed to Aechmites
Schauf. 65-88

Platynus

Is treated as Agonum with many
subgenera, as follows:

(*Agonodromius*) Reitt. 08-139

Includes 1573, 1574, 18888,
and 18886. 18887. as var. of 1573.

Platynus

- (*Batenus*) Motsch. 64-317
 Includes 1563, 1564.
 (*Platynomericrus*)
 Includes 1589, 18883
 (*Oxypselaphus*) Chaud. 43-415
 Includes 1532, 1592 (Anchus Lec. 1854)
 (*Europhilus*)
 Includes 1587, 1588
 (*Rhadine*)
 Includes 1495 to 1506,
 18803 to 18807
 (*Platynidius*)
 Includes 1507 to 1509,
 18808 to 18813
 (*Anchomenus* and *Agonum*)
 Include the remaining species except 1593
1576. *ruficornis* Goeze 77-663
 (= *albipes* Fab. 96-33) is transferred from *Agonum* to *Anchomenus*.
1584. *lene* Dej. 28-166
 (= *ruficornis* Lec., *picipennis* var. Kby., *gratiosus* Mann.) remains in *Agonum*.
1587. *picipennis* Kby. (= *lenum* Lec. etc.) in *Europhilus*

Colpodes

Is treated as a genus.

Perigona

Is treated as a tribe, *Perigonini* *discicollis* Chd. 76-353 is given as syn. of 1601.

Atranus

Is transferred to subtribe *Agoni*

Anchonoderus

1608. *horni* n.n. Csiki 31
 (= *apicalis* Horn nec Reiche)

Colliuris

(*Odacanthella*)
 1612a. *picta* is a good species
 1612b. *suturalis* is a var. of *picta*
 (*Calcollius*)
 1613 is placed in this subgenus
 All the species from 1610 to 1614 are placed in the tribe *Colliurini*; 1622 to 1625 in tribe *Zuphiini*; 1635 to 1638 in tribe *Cyclosomini*; 1639 in tribe *Nematotarsini*. The species 1637 and 1638 are in subg. *Personocellus*.

Lebia

1671. add syn. *axillaris* Lec. 48-193
 Csiki in Col. Cat. pars 124 revives *chalcoptera* G. & H.
 (*flaviventris* Mots.) and as synonyms, *cupripennis* Boh., *erythrocephala* Dej. and *brunnicollis* Mots.
 (*Metabola*)
 1651 is placed in this subgenus (*Dianchomena*)

Lebia

1675. ? *flavolineata* Mots. 64-227 is added as a synonym (*Aphelogenia*)
 1681. *flavoguttata* Chev. 35 No. 161 is added as synonym. *connecta* Chd. 71-40 added as a variety.

Coptodera

This genus and *Phloeoxena* are placed in a subtribe *Catascopi*. Synonymy under 1688 is compared with *rutila* Bates from Brazil.

Dromius

- (*Dinodromius*)
 1691 and 1692 are placed in this subgenus.
 1691 to 1701 are placed in subtribe *Dromii*.

Blechrus

The genus name *Microlestes* is preferred, and Casey's arrangement is substantially adopted except that *linearis* Lec. is made a synonym.

Metabletus

- 1699 is made a separate genus.

Axinopalpus

- 19006 is syn. of 1700;
 19007 is syn. of 1701.

Euproctinus L. & M. 27-14

- (*Euproctus* Sol. nec Gené)
 (*Andrewesella* Csiki 32-1456)

Callida

21721. *rubricollis* Dej. 25-225 Cuba, U.S.
elegans Chd. 44-469
 subtribe *Callidi* includes 1705 to 1724.

Plochionus

- (*Menidius*)
 1723 and 19014 belong in this subgenus

Cymindis

- 1725 to 1759 form subtribe *Cymindina*
 1740 is syn. of 1744;
 1738a is syn. of 1738;
 1743 is transferred to *Pinacodera*

Pinacodera

- fuscicollis* Mots. 64-298 is syn. of 1725
planipennis Csy. 13-184 (nec Lec.) is syn. of 1901b.

Pentagonica

- This genus is placed in the tribe *Scopodini*
americana Mots. 64-224 is syn. of 1760

Inna

- This genus is placed in the tribe *Euchilini*

Chlaenius

- This genus in Col. Cat. pars 115 is divided into subgenera:
Epomis for 1806
Glyptoderus for 1804
Chlaenius s. str. for remainder

Chlaenius

1804. *aurolimbatus* Laferte 54-261
chrysopleurus Chd. 56-276
? *validus* Chev. 35 No. 174 is valid
but ? N.Am.
1810. *exaratus* Laferte 51-249 is valid
1813. *cœrulicollis* Chd. 76-78
insperatus Horn 85-134
1814. *emarginatus*‡ Kby. and
indutus Laferte are syn.
1817. *impunctifrons*‡ Kby. is syn.
1831. 1831a and *chlorophanus* Lec. 48-345
are syn.
1836. *lecontei* Hald. 43-304 is syn.
1841. *kuntzeni* n.n. Csiki
for *diffinis*||Chd. nec Laferte
21722. *regularis* Lec. 49-179
21722a. *apacheanus* Csiki. 14-34
1848. *rufilabris* Dej. 26-329 is syn.

Oodes

- 1862 is subgenus *Lachnocrepis*
1871 is transferred to *Oodes* s. str.
1872 is subgenus *Stenocrepis*

Dercylinus

- 1877 is transferred to this genus

Geophilus

This genus is placed in subtribe by Csiki Col. Cat. pars 121, from which also following notes are derived.

Piosoma

In subtribe Diorychi with
Selenophorus, etc.

Nothopuss

In subtribe Euryderi (name
Euryderus for genus)

Crataeanthus

In subtribe Acinopi

Glanodes, Opadius, Pharalus

- All made subgenera of *Harpalus*,
1895. *indianus* n.n. Csiki
for *testaceus* || Lec. nec Hald.

Harpalus*(Pardileus)*

Includes 1910, 1915, 1919, 1920
(synonymy reversed), 1922, 1925,
1925a

(Harpalus s. str.)

1935. *montuosus* n.n. Csiki
for *montanus* || Lec. nec Sturm
1936. *baergi* n.n. Csiki
for *rufimanus* || Lec. nec Marsh
1971. *fulgens* n.n. Csiki
for *nitidulus* || Chd. nec Steph.
1979. *funerarius* n.n. Csiki
for *funestus* || Lec. nec Serv.
1996. transpose synonymy
2006. read *basilaris* Kby. 37-41
obesulus Lec. 52-185
extensus Walk. 66-314
The four names unrecognized by
American authors, viz.: *ventralis*
Lec., *ooidioides* Chd.,
comis Hald., and *curtatus* Mann.
are treated by Csiki as good species.
He also alters spelling of 19076 and
19079.

Selenophorus

- The subtribe Diorychi includes this genus, *Piosoma*, *Gynandropus*, *Hartonymus*, and *Trichotichnus* for 2010, 2011, 2012, 2013, 19094. *Selanalius* Csny. and that author's subgenera are not recognized.
2015. *iripennis* Say is the name preferred.
2020. *schaeferi* n.n. Csiki
for *angulatus* || Csny. nec Chd.

Discoderus

This genus is placed in subtribe Anisotarsi, which includes also all the species from 2070 to 2144, plus 2155, 2270, 2271, and 2272.

Anisodactylus

Includes as subgenera *Gynandrotarsus* (= *Triplectrus*, *Cephalogyna*, and *Haplocentrus*).

2082. *dilatatus* Say 34-431 is syn.

Dicheirus

The species *immanis* Horn and *depressicollis* Mots. are treated as good species.

Anisotarsus

2130. Genus *Stilboldius* suppressed. Synonymy reversed.
2131. add syn. *læviusculus* Chd. 37-43.
2132. synonymy reversed.
2135. *similis* Say 23-29 with *agilis* Dej. as syn.

Pelmatellus

2155. synonymy reversed.

Trichocellus

21723. *porsildi* Brown 32-3 N.W.T.

Bradycellus

The subtribe Bradycelli, fide Csiki, includes *Trichocellus*, *Bradycellus* (with subgenera *Triliarthrus*, *Catharellus*, *Stenocellus*, *Amerinus*, and *Liocellus* (= *Glycerius*). He appears to have been ignorant of Fall's remarks re *Tachyceillus* in 1930.

2167. *lecontei* n.n. Csiki
for *cordicollis* || Lec. 48-306

Acupalpus

The species from 2205 to 2244 form a subtribe Acupalpi, with one genus divided into subgenera: *Acupalpus* s. str., *Philodes*, *Goniolophus*, *Stenolophus*, and *Agonoleptus*. (*Stenolophus*)

21724. *laticollis* Mots. 64-202 La.

? *splendidulus* Mots. 64-201

N.Am.

Agonoderus

The species from 2245 to 2269 are treated as subtribe Agonoderi, all in one genus

2261. *similis* Lec. 73-325 nec Kby. is syn.

Pogonodaptus

2273. This genus is also included in Agonoderi.

Polpochila

This name replaces *Cratocara*. The genus is placed in subtribe Anisotarsi.

2270. *riehli* Schaum. 68-126 is a syn.

DYTISCIDÆ

Brown 31, 32; Fall 32.

- Derovatellus** Sharp. 80-286
 21725. *floridanus* Fall 32-146 Fla.
Hydroporus
 21726. *compertus* Brown 32-4 B.C.
 2476. *pinguis* Fall (1919) is a syn.
 21727. *deceptus* n.n. Fall 32-145
 for *addendus* Fall nec Cr.
 2522. *aequus* Fall (1922) is a syn.
 20775. *brodei* Gell. is a var. of 2486.
 21728. *barbarei*¹ Fall 32-146 So.Cal.
 (*Neophorus*) Guignot 31-47
 19202 is placed in this subgenus
Agabus
 21729. *verus* Brown 31-115 Man.
 21730. *verisimilis* Brown 32-4 B.C.

GYRINIDÆ

Gyrinus

21731. *instabilis* Fall 31-155 Alas.
 21731½ *opacus* var. *blairi* n. n.
 Omar Cooper 31-239
 (= *lecontei* O.C. 30-68
 nec Fall) Greenland

LIMNEBIIDÆ *

Ochthebius

21732. *insulanus* Brown 31-116
Vanc.

Limnebius

21733. columbianus Brown 32-5
B.C.

HYDROPHILIDÆ

Hydrophilus

- The species 2789 to 2791 belong in
this genus.
fide Mutchler 31

Tropisternus

21734. columbianus Brown 31-119
Vanc.

Hydrochara Berthold 1827

- The species 2793 to 2796 belong here.

Enochrus

- Echinos**
21735. collinus Brown 31-118 Que.
Cercyon

LEIODIDÆ

Hydnobius

21736. simulator Brown 32-6 B.C.

Leiodes

21739. *bradorata* Brown 32-204

Leiodes

- Lelodus validus* Brown 22, 202, One

81740 nature Rev. 22-205 Que. 2

* For the establishment of this family, see the writings of Böving and introduction to second supplement.

STAPHYLINIDÆ

Pinophilus

21741. confusus Fall 32-56 N.C., Fla.
 21742. gracilis Fall 32-57 La.
 3884 is syn. of 3883, fide Fall 32

Aræocerus

21743. elegans Fall 32-57 Tex.

Megaquedius

Is not generically distinct,
 fide Gridelli 14

PSELAPHIDÆ

Rhexidius

21744. perscitus Fletcher 32-29
 N.C.

Hamotus

(*Hamotoides*)

21749. opimus Fletcher 32-34 Fla.

Arthmius

21750. elongatus Brend. 90-239

21745. morbus¹ Fletcher 32-33
 Ariz.

Ariz.

Reichenbachia

21746. snowi¹ Fletcher 32-31 Ariz.
 21747. ignobilis¹ Fletcher 32-32 Ariz.
 21748. gentilis¹ Fletcher 32-33
 Cal.

MELYRIDÆ

Endeodes

21751. insularis Blackwelder 32-134
 Cal.

Menovectura Blais. 31-181

21756. serrulata Blais. 31-182 Cal.

21752. rugiceps Blackwelder 32-135
 Cal.

Listrus

21757. inyoensis Blais. 31-178 Cal.

Malachius

21753. californicus Barrett 31-102
 Cal.

Eschatocrepis

21758. desertus Blais. 31-329 Cal.

Trichochrous

21754. blackwelderi Blais. 31-323
 Cal.

Allonyx

21755. varipes Blais. 31-180 Cal.

Corporaal 32 states that this generic
 name is preoccupied by Allonyx
 Jacq. Duv. 60-196.

TELEGEUSIDÆ

Telegeusis

21759. nubifer Martin 31-91 Ariz.

MELOIDÆ

Epicauta

21760. magnomaculata Martin 32-169
 Cal.

PYTHIDÆ

Rhinosimus

8215. lecontei n.n. Blair 32-254
 Alas.
 æneirostris Lec. 79-4 nec Mann.
 8217. viridiaeneus Rand. 38-23
 Me. Ind.
 Can.
 æneirostris Mann. 53-45
 nitens Lec. 66-168

PYROCHROIDÆ

Dendroides

8225. canadensis Latr. 1810,
fide Barber 32-36
bicolor Newn.
21761. pacificus Barrett 32-171
Cal.

ANTHICIDÆ

Notoxus

21762. parvidens Fall 32-62 Alta. Wyo.

CEBRIONIDÆ

Cebrio

21763. knausi VanD. 32-464 Utah
Scaptolenus
21764. socius Fall 32-60 Tex.
21765. fuscipennis Fall 32-61 Ariz.

PLASTOCERINÆ*

- Euthysanius**
21766. cribicollis VanD. 32-455
Cal.
21767. piceus VanD. 32-456 Cal.
Octinodes
21768. amplicollis VanD. 32-459
Cal.

Aplastus

21769. cylindricus VanD. 32-461
Utah
21770. arizonicus VanD. 32-462
Ariz.
21771. pilosus¹ VanD. 32-463 Cal.

Euplastius

- 8539 and 8540 doubtfully U.S.
fide Van Dyke

ELATERIDÆ

Benedict 31; Fall 32; Van Dyke 32.

Adelocera

21772. nobilis Fall 32-58 Ariz.
21773. candida¹ Fall 32-59 Ariz.
21774. mexicana Cand. 57-70
fide Fall, occurs in Fla. Ariz.
(VanD.)
21775. maculata Lec. 66-389.
fide VanD.. occurs in Cal. B.C.

Conoderes Esch. 29-31

- (*Monocrepidius*) Esch. 29-31)
21776. bicarinatus¹ VanD. 32-297
Ariz.
21777. varians (Steinh.) 75-121
Ariz.
21778. amplicollis (Gyll.) 33-194
Ala. Fla.
fucosus Blatch. 25-163
According to VanD. 32:
8605 is syn. of 8604
8608 is syn. of 8607
(*Heteroderes* Latr. 34-155)
8606 belongs here. fide VanD. 32.

Limonius

21781. nebulosus VanD. 32-345 Ariz.
21782. huguenini VanD. 32-346
Cal.
21783. ulkei Horn 71-314 is valid,
fide VanD. Cal.
21784. clypeatus Mots. 59-369 is valid,
fide VanD.
8620a. seminudus VanD. 32-348
Cal. Wash.
Id.
21785. ursinus VanD. 32-349 Colo.-Alta.
21786. kuscheli VanD. 32-349 Cal.
21787. lanei VanD. 32-350 Wash.-Alta.
21788. beutenmuelleri VanD. 32-351
N.C.
according to VanD. 32:
8623 = var. of 8648,
8628 = 8627,
8638 = var. of 8630
8644 = var. 8647,
8651 = var. of 8630,
8655 = 8647,
Nothodes = Limonius,
Pheletes is a subgenus in Limonius,
8652 belong in Athous

Limonius

21779. pictus VanD. 32-343 No-Cal.
21780. bicolor VanD. 32-344 Cal.

* Reduced to a subfamily of Cebriidae, Plastocerinae, by Van Dyke 32, by Hyslop 23, and by Böving 31.

Leptoschema

- 8656a. elegans VanD. 32-357 Cal.
Elathous Reit. 90-317
 8657 and 8658 belong here
 fide VanD. 32
 8659 = 8658, fide VanD. 32
 21789. californicus VanD. 32-359
 Cal.

Athous

21790. appalachius VanD. 32-372
 N.C.
 8666a. carmeli VanD. 32-374 Cal.
 8666b. angelicus VanD. 32-374
 So.Cal.
 8696a. sierræ VanD. 32-376 Cal.
 8660a. maritimus VanD. 32-378
 Cal.Or.
 21791. brevis VanD. 32-379 Cal.
 21792. sordidus¹ VanD. 32-380 So.Cal.
 21793. rufipennis¹ VanD. 32-380
 Cal.
 21794. essigi VanD. 32-381 Cal.
 21795. arizonicus VanD. 32-384
 Ariz.
 21796. erebus¹ VanD. 32-385 Mich.
 8676a. reflexus Lec.
 8676b. lengi Dury
 According to VanD. 32:
 8674. scissus Lec. 57-46 (= ingens Fall)
 8664 is var. of 8660
 8671 is syn. of 8667
 8683 is subsp. of 8682
 8688 is syn. of 8662
 8672 is subsp. of 8666,
 8798 belongs in Athous
 21797. simplex Lec. 76-516 is valid,
 8678 is doubtfully N. Am.
 8661 is a European sp.
 8697 belongs in Lilius

Ludius

21798. uliginosus VanD. 32-408
 Cal.
 21799. silvaticus VanD. 32-409
 Cal.
 21800. aplastoides VanD. 32-411
 Cal.
 21801. atlas VanD. 32-412 Cal.
 21802. dolorosus VanD. 32-413
 Cal.
 21803. tenellus VanD. 32-414 Cal.
 21804. patricius¹ VanD. 32-415
 Wash.
 21805. humboldti VanD. 32-415
 Or.Cal.
 21806. tahoensis VanD. 32-418
 Cal.
 21807. rainieri VanD. 32-421 Wash.
 21808. nunenmacheri VanD. 32-422
 Cal.
 21809. shastensis¹ VanD. 32-423
 Cal.
 21810. blaisdelli VanD. 32-424
 Cal.
 21811. appalachius VanD. 32-425
 N.C.
 21812. hoppingi VanD. 32-434
 B.C.

Ludius

- According to VanD. 32:
 8704 is syn. of 8705.
 8707a is syn. of 8708,
 8716 is syn. of 8714,
 8723 is syn. of 8711,
 8731 is subsp. of 8730,
 8732 is subsp. of 8730,
 8739 is subsp. of 8730,
 8733a. pygmaeus VanD. 32-418
 Man.
 8737 is subsp. of 8733,
 8736 is subsp. of 8733,
 8738 is subsp. of 8733,
 8755 is subsp. of 8754,
 8742 is race of 8741,
 8743 is same as 8745. N.B.-Or.
 8784 is female of 8707,
 8781 is subsp. of 8797,
 8749 is subsp. of 8791,
 8791b. diversicolor (Esch.)
 8791c. russicollis (Germ.)
 8791a. is syn. of 8791
 8782 is syn. of 8780,
 8751a. brunnipes Bland
 8758 and 8759 are syn. of 8712,
 8783a. lateralis Lec.
 8788 is subsp. of 8785.
 8777a. tinctus Lec.
 8746 is subsp. of 8774,
 8786 is subsp. of 8787,
 8767 is subsp. of 8766,
 8790 is var. of 8787.

Elater

- (including *Ectamenenogonus*)
 21813. ursinus VanD. 32-301 Cal.
 21814. fenyesi VanD. 32-302 Cal.
 8973a. uteanus VanD. 32-303 Utah
 21815. varipilis VanD. 32-306 Cal. B.C.
 21816. bimaculatus VanD. 32-307
 Cal.
 8927a. hoppingi VanD. 32-306
 B.C.
 21817. brunneicolor VanD. 32-308
 Cal.
 21818. brevis VanD. 32-309 Wash. B.C.
 21819. sturmi Germ. 44-188 is valid,
 fide VanD. 32
 8949 = 8975, fide VanD. 32
 8953a is valid, fide VanD. 32

Megapenthes

21820. illinoiensis¹ VanD. 32-314
 Ill.
 21821. obtusus VanD. 32-315 N.Mex.
 Ariz.
 21822. variolatus VanD. 32-316
 Ariz.
 21823. megalops VanD. 32-317
 Ariz.
 According to VanD. 32:
 8981. aterrimus (Mots.) 59-382
 8642 belongs here
 8972 belongs here
 8789 is syn. of 8787
 8793c. ater VanD. 32-430 Cal.
 8794a. olympiae VanD. 32-431 Cal.

Eanus	Anchastus
21824. granicollis VanD. 32-435 Wash.	21834. subopacus VanD. 32-321 Cal.
Hypnoidus	9006a. corvus VanD. 32-322 Cal.
(<i>Cryptohypnus</i>)	21835. ventralis VanD. 32-322 Ariz. (? = 9011a)
21825. glacialis VanD. 32-326 Mont. B.C.	21836. arizonicus VanD. 32-323 Ariz.
8831a. hirsutus VanD. 32-327 Utah	According to VanD. 32: 9003 = 9004, 9008 = 9012,
8824 is syn. of 8825, fide VanD. 32	regularis Mots. = 9004, recedens Lec. = 9004, hirsitulus Mots. = 9004, pilifer Mots. = 9004,
Paroedostethus VanD. 32-327	Melanotus
21826. relictus ¹ VanD. 32-328 Cal.	9017a. franciscanus VanD. 32-332 Cal.
Melanactes	9056 and 9057 = 9017
21827. agrypnoides ¹ VanD. 32-446 Ariz.	Cardiophorus
Sericus	21837. aptopoides Cand. 65-40 fide Benedict 31-156 Ariz.
21828. rugosus VanD. 32-452 Cal.	Aptopus
Agriotes	21838. lateralis Mexico
21829. cylindricus VanD. 32-447 Cal.	21838a. spadiceus Er. 40-331 fide Benedict i. litt. Ariz.
21830. bivittatus VanD. 32-448 Or.	Horistonotus
21831. criddlei VanD. 32-448 Man.-Wyo.	21839. umbilicatus VanD. 32-329 Ariz.
21832. porosus ¹ VanD. 32-449 N.C.	21840. lutzi VanD. 32-331 Ariz.
21833. blaisdelli VanD. 32-450 Cal.	
8889 and 8890 are subsp. of 8888, fide VanD. 32	
Ischiodontus	
9009 belongs here	

MELASIDÆ

Hypocœlus
21841. californicus VanD. 32-292 Cal.

THROSCIDÆ

Drapetes
21842. cylindricus Fall 32-61 Ariz.

BUPRESTIDÆ

Acmaeodera	Agrilaxia
21843. carlota Fall 31-81 Ariz.	19651. arizonæ Obenb. 22-180 var. arizonæ Chamberlin 26-46 and 32-836
21844. lineipicta Fall 31-81 Ariz.	huachucæ n.n. Obenb. 30-551.
Glyptoscelimorphæ	Agrilus
21845. viridis Chamberlin 31-47 Cal.	21847. nodicornis ¹ Fall 31-82 Ariz. arbuti Fisher 28 (= manzanita Chamb. 29) populi Fisher 28 (= trichocarpæ Chamb. 29)
Melanophila	
21846. arcuata Fall 31-83 Ariz.	

DRYOPIDÆ

Helichus
21848. columbianus Brown 31-118 B.C.

HELMIDÆ

Limnius

21849. *cryophilus* Musgrave 32-79
'Tenn.

HELODIDÆ

Cyphon

21850. *cooperi* Schffr. 31-174 N.Y.

DERMESTIDÆ

Dermestes

9740. *peruvianus* Cast. 40-33
(= *angustus* Csy.)

Perimegatoma

according to Hopping 32-173:
9766. *cylindrica* Kby. 37-113 (= 9766 and
9767)
9764. 9763 is a syn.

BYRRHIDÆ

Morychus

21851. *albertanus* Brown 32-8 Alta.

Simplocaria

21852. *remota* Brown 32-8 N.W.T.

OSTOMIDÆ

Tennochila

21853. *sonorana* Barrett 32-171 Cal.

NITIDULIDÆ

Glischrochilus

21854. *quadrisignatus* (Say) 35-169,
fide Siepmann 31
21854a. *canadensis* Brown 32-259
B.C. Ont. Que.
similis Melsh. 46-108
fide Siepmann 31
bipustulatus Melsh. 46-108
fide Siepmann 31
21855. *siepmanni* Brown 32-259
Que. B.C.
21856. *moratus* Brown 32-261
Mont. Alta. B.C.

Glischrochilus

10141. *lecontei* n.n. Brown 32-262
cylindricus || Lec. nec. Oliv.
10138a. *rubromaculatus* Reit.,
fide Brown 32-255
According to Siepmann 31:
10137a. *quadrimaculosus* Melsh. 46-108
geminatus Melsh. 46-108
Pallodes
21857. *plateosus* Schffr. 31-174 Ariz.

CUCUJIDÆ

Cucujus

10221b. *subnitens* Schffr. 31-175
Ariz. Ut.

EROTYLIDÆ

Ischyurus

10301a. *alabamae* Schffr. 31-175
Ala.

LATHRIDIIDÆ

Lathridius21858. *laevior*¹ Brown 32-208 Que.

ENDOMYCHIDÆ

Epipocus21859. *subcostatus* Gorh. Ariz.
fide Benedict 31-156

COCCINELLIDÆ

Korschefsky 31, 32; Dobzhansky 31.

In the arrangement of genera and tribes the following changes are made in Col. Cat. 118 and 120:

Oxynychus Lec. is recognized as genus for 10938.

Pentilia and *Pentiliini* are used for *Microweisea* and *Microweiseini*.

Exoplectra is placed in tribe *Exoplectrini*.

Rhizobiini are consolidated with *Coccidulini*.

Psyllobora is placed in *Coccinellini*.

Cycloneda and *Olla* are in *Synonychini*.

Cleis is changed to *Mulsantina* Ws. 06-34.

Arawana is suppressed in *Chilocorus*.

Brumus is recognized as valid genus.

The taxonomic changes proposed by Korschefsky are numerous in nearly every genus. They are as follows:

Hyperaspis

Unnumbered names under 10877, 10922, 10923, and 10930, are called aberrations.

The unrecognized names *festiva*, *floridanus*, and *annularis*, are treated as good species.

The species *mendica* Muls. 53-232 is included.

10874a is treated as an aberration. The species *subsignata* Cr. 74-226 is valid.

19739a may be a good species (pp. 192, 198, 586).

10938 is transferred to *Oxynychus*.

Brachyacantha

The variety *americana* Leng 11-302, is said to occur in Ky., Kan., Tex. 10974a is treated as syn. of 10974.

10974b. *fulvopustulata* Melsh. 47-178.

10972d. *troglodytes* Muls. 50-534, ab. of 10972.

stellata Csy. syn. of 10972d. *uteella* Csy. ab. of *stellata*.

Microweisea

10991. *caseyi* n.n. Korsch. 31-223 for *minuta* || Csy.

Scymnus

The first four of the unrecognized species in our catalogue are treated as valid.

guttiger Muls. is called ab. of 11093. *marginellus* " " " " "

11011a is syn. of 11011.

Scymnus

21860. *lowei* Muls. 50-980, described from Mex. La. Tex. Cal.

19759. *minor* n.n.

11014. *read postpunctus*.

11067. *calaveras* Csy. 99-150 treated as valid.

11033. reverse synonymy.

11115a. (including *caseyi* Ws. n.n.) treated as syn. of 11115. *femoralis* Say is treated as ab. of 11115.

Novius

11130 is transferred to *Rodolia*.

Psyllobora

11150. *borealis*, *separata*, *deficiens*, called ab.

Four Boh. Eugen. Resa. names are revived.

Anisosticta

11154. is treated as *strigata* Thunb. 95-113 with *bitriangularis* Say and *multiguttata* Rand. as ab.

21861. *novemdecim-punctata* L. 58-366 as good sp. with *irregularis* Ws. as ab.

Ceratomegilla

11158. is treated as *maculata* DeG. with *fusculabris* Muls. (= *strenua* Csy.), and *medialis* Csy. 99-76, as aberrations.

Adonia

11160. is treated as *palaearctic*.

Hymenorüs

21885. papagonis Fall 31-201 Ariz.
 21886. parvus Fall 31-203 L.Cal.
 21887. semirufus Fall 31-203 Fla.
 21888. capensis¹ Fall 31-205 L.Cal.
 21889. jacobinus Fall 31-206 So.Cal.
 21890. digressus Fall 31-206 So.Ariz.
 21891. montivagus Fall 31-207
So.Cal.
 21892. inutilis Fall 31-208 Nev. Ut.
N.Mex.
 21893. trivialis Fall 31-210 L.Cal.
 21894. fuscipennis¹ Fall 31-211
Fla.
 21895. caducus Fall 31-213 Ala. Fla.
 21896. thoracicus Fall 31-214 So.Cal.
 21897. disparatus Fall 31-215 Tex.
 21898. oblivious Fall 31-216 Tex.
 21899. alienus Fall 31-217 Ariz.
 21900. idoneus Fall 31-218 Ariz.
 21901. tritus Fall 31-219 Ariz.
 21902. incertus¹ Fall 31-220 Ariz.
 21903. tenuistriatus Fall 31-226
Ala. N.C.
 21904. brevis¹ Fall 31-230 Ariz.
 21905. rufovalis¹ Fall 31-230 Ariz.
 21906. simidus¹ Fall 31-232 Tex.

Hymenorüs

21907. exilis¹ Fall 31-233 Ariz.
 21908. facetus¹ Fall 31-234 L.Cal.
 21909. horrescens Fall 31-235 Tex. N.Mex
 21910. milleporus Fall 31-236 Ariz.
 21911. nevadensis Fall 31-236 Nev.
 21912. significans¹ Fall 31-237 Tex.
 21913. conicicollis¹ Fall 31-239 Ga.
 21914. quietus¹ Fall 31-240 Mo.
 21915. texensis Fall 31-241 Tex.
 21916. heteropygus Fall 31-241 Fla.
 21917. inopiatus Fall 31-242 Fla. Ga.
 21918. crinitus Fall 31-244 Ariz.
 21919. liebecki Fall 31-245 Ariz.
 21920. quadricollis Fall 31-246 Tex.
 According to Fall 31:
 21921. obesus Csy (= pilosus†Csy. nec
Melsch.)
11280 (=11270)
11287 (=11285)
11288 (=11289)
11266 (=19764)

TENEBRIONIDÆ

Blaisdell 31, 32,

Nyctoporis

21922. vandykei Blais. 31-41 Cal.
11702 (= 11703) fide Blais. 31
Apsena
11916a. rufescens Blais. 32-56
L.Cal.
21923. insularis Blais. 32-58 L.Cal.
11918a. subvestita¹ Blais. 32-68
So.Cal.
21924. barbara Blais. 32-61 So.Cal.
21925. leachi Blais. 32-70 Cal.
11920a. opaca Blais. 32-81 So.Cal.
11920b. simplex Blais. 32-84 Cal.
11920 (= 19840) fide Blais. 32

Eleodes

21926. tanneri Blais. 31-74 Utah
 21927. strumosa Blais. 31-76 Ut.Nev.
 paradoxa Blais. 31-78 n.n.
 for 11901h.
 patulicollis Blais. 31-78 n.n.
 for 11988b.

Helops

21928. fresnoensis Blais. 31-44
Cal.

Talanus

21929. stenochinus Lec. (= 12484)
fide Fall 32-145

MONOMMIDÆ

Schenkling, Col. Cat. pars 117.

Hyporhagus

- lecontei Thom. is syn. of lævipunc-
tatus from Cent. & So. Amer.

PTINIDÆ**Ptinus**

21930. raptor Str. fide Schffr. 31-176
†Eur. N.Y.

ANOBIIDÆ

Ernobius21931. *schedli* Brown 32-9 Ont.

BOSTRICHIDÆ

Tetrapriocera12872. synonymy should be reversed,
fide VanDyke

SCARABAЕIDÆ

Brown 31, 32; Fall 32; Barrett 31, 32; Chapin 31; Dawson 32;
Sim 31, 32; Schaeffer, 31; R. Hopping 31; Saylor 32.**Phanæus**

19944 and 19945 belong here.

Aegalia21932. *convexa* Fall 32-183 So.Cal.13102a. *nigrella* Brown 31-47 Cal.13102b. *punctata* Brown 31-47 Cal.

(Leptaezialia Brown 31-12)

21933. *humeralis* Brown 31-13 (genotype)

Ont.N.H.

N.Y.

21934. *montana* Brown 31-14 B.C. Wyo.

Colo.

(Anomalaegalia Brown 31-15)

13106. *spissipes* Lec., genotype

(Psammoporus Thoms. 63-92)

(Dimalia Muls. 71-406)

21935. *opaca* Brown 31-17 B.C. Alta.21936. *terminalis* Brown 31-18

Alta. Colo.

21937. *nana* Brown 31-19 Mass.21938. *criddlei* Brown 31-42 Man. Ont.

Alta.

Micrægalias Brown 31-1113101. *pusilla* Horn. genotype**Aphodius**21939. *testaceiventris* Fall 32-185

Kan.

21940. *incommunis*¹ Fall 32-186

B.C.

21941. *fortunus*¹ Fall 32-187 Ariz.21942. *claudus* Fall 32-188 Tex.21943. *crenicollis*¹ Fall 32-189 Cal.21944. *ruficularis*¹ Fall 32-189 Ariz.

13117 is valid. fide Fall.

21945. *vandykei* Barrett 31-101

Cal.

13205a. *sheldoni* Barrett 32-172

Cal.

21946. *tuberosus* Barrett 32-240

Cal.

Atænius13216b. *exiguus* Brown 32-10 Fla.**Psammobius**21947. *armaticeps* Fall 32-190

Fla. Ga.

Psammobius21948. *blandus*¹ Fall 32-191 Tex.21949. *mimeticus* Fall 32-192 L.Cal.

Lichnanthe Burm. 44-26

13313 to 13319 belong in this genus.

which is not a synonym of

Amphicoma,

fide Chapin i litt.

Serica21950. *imitans* Chapin 31-5 N.J.21951. *chaetosoma* Daws. 32-529

Cal.

21952. *ventura* Daws. 32-530 Cal.21953. *personata* Daws. 32-531

Cal.

21954. *caliginosa* Daws. 32-532

Cal.

21955. *acicula* Daws. 32-533 Cal.21956. *pavonia* Daws. 32-533 Cal.21957. *falli* Daws. 32-534 Cal.21958. *ligulata* Daws. 32-535 Cal.21959. *praetermissa* Daws. 32-536

Cal.

13355. *georgiana* Leng,

fide Daws. 32 N.H.-Tex.

21247. is subsp. of 19974, fide Daws. 32

19966. is syn. of *atricapilla* Kby.13372a. *blatchleyi* Daws. 32-545

Mass. N.C.

21960. *similis* Lewis 95-391 Japan, N.Y.

brunneatSchfr. 31-176,

fide Sim 32-381

Diplotaxis21961. *mus*¹ Fall 32-192 Ariz.21962. *protensa* Fall 32-193 N.Mex.21963. *vilosipes*¹ Fall 32-193 Cal.21964. *futilis*¹ Fall 32-194 Ariz.21965. *producta* Fall 32-195 Tex.21966. *pinalica* Fall 32-196 Ariz.21967. *deserta* Fall 32-196 Cal.21968. *incuria* Fall 32-196 Nev.**Phyllophaga**21969. *contaminata*¹ Fall 32-197 L.Cal.21970. *extranea*¹ Fall 32-198 L.Cal.

Listrochelus	Dichelonyx
21971. plenus Fall 32-199	Ariz.
21972. juvenilis Fall 32-200	Ariz.
Thyee	
21973. bidentata Fall 32-201	Cal.
13633 to 13637 are 13645,	
fide Fall 32	
Dichelonyx	Pocalta *
21974. deserta R. Hopp. 31-236	
Cal.	21977. leonina Fall 32-203 So.Cal.
	According to Fall 32:
	13775 (= 13776, 13777, 13778),
	13781 (= 13780)

LUCANIDÆ

Diphyllostoma
21978. linsleyi Fall 32-160 Cal.

CERAMBYCIDÆ

R. Hopping 31, 32; Linsley 31, 32; Schaeffer 32; G. R. Hopping 32.

Asemum	Necydalis
(Liasemum Csy.)	21985. diversicollis ¹ Schffr. 32-152
Fide R. Hopping 31 the species	Utah
14118 and 14119 are valid but not	
generically distinct from Asemum.	
All the species under Asemum are	
synonyms of 14112.	
Vandykea Linsley 32-118	Molorchus
21979. tuberculata Linsley 32-118	21986. eburneus Linsley 31-37
Cal.	Cal.
Haplidus	Poecilobrium
21980. palpalis ¹ Linsley 32-114	21987. gibsoni R.Hopp. 31-234
Ariz.	B.C.
21981. antennatus Linsley 32-115	
Cal.	
14150 (= 20017),	
fide Linsley 32-114	
Oeme	Anacomis
21982. rotundicollis Linsley 32-116	14614b (= 14614d), fide R.Hopp. 31
Tex.	
Eucrossus	Clytini , fide G. R. Hopping 32:
14145 (= 20011) fide Linsley 32	Megacyllene suppressed in Cyllene
	14691 (= 14690, 14689,
	14686, 14687, and 14688)
Idoemea	14680 (= 14681, 14682)
This genus not distinct	14691c is a good sp. N.B. Me.,
from Styloxus,	N.Y. Pa.
fide Linsley 32	14699 (= 14700)
Methia	14726 (= 20110, 20111)
21983. fragilis Linsley 32-121 Cal.	14711 (= 14711a, 14710)
Romaleum	14708 (= 14709)
14199 (= 14200), fide Schffr. 32-152	14705 (= 14706)
	14728 (= 14729), and goes in
Pidonia	Clytus
21984. quadrata R.Hopp. 31-233	14730 (= 14731, 14732)
B.C. Vanc.	14734 (= 14735)
Anoplodera	14736 (= 14737, 14738)
21286. rubra L. (= planata S. & H.),	Rhopalopachys suppressed in
fide R.Hopp. 32-72	Neoclytus
	Microclytus and Cyrtophorus
	excluded
* Paracotalpa Ohaus 15-256 (= Pocalta Csy. 15-92), and Parabyrsopolis Ohaus 15-256 (= Parareoda Csy. 15-99), fide Chapin.	Tragidion
	21988. texanum Schffr. 32-152
	Tex.
	Pogonocherus
	According to Schffr. 32-154:
	15059. is not a var. of 15064
	20144. is a syn. of 15064
	21989. (schaefferi Linsl. i. litt.) n.n.
	for vandykei Schffr. 32-153
	Cal.

* Paracotalpa Ohaus 15-256 (= Pocalta Csy. 15-92), and Parabyrsopolis Ohaus 15-256 (= Parareoda Csy. 15-99), fide Chapin.

CHYSOMELIDÆ

Blake 31; Beller and Hatch 32; Carr 32; Fall 32; Hatch and Beller 32;
Johnson 31; Schaeffer 31, 32; Spaeth 32.

Pachybrachys

Opinions differ as to spelling;
some prefer Pachybrachis

Cryptocephalus

21990. pallidicinctus¹ Fall 32-21 So.Cal.
21991. apicedens¹ Fall 32-22 N.Mex.
21992. merus Fall 32-23 Tex.Ariz.
21993. cuneatus¹ Fall 32-24 Ga.
21994. ochraceus¹ Fall 32-25 Fla.

Myochrous

21995. movallus Johnson 31-148 So.Dak.

Chrysochus

15628 is subsp. of 15627,
fide Beller & Hatch 32*

Lina

- 21364e. quadriguttoides Beller &
Hatch 32-98 Wash.

Phyllodecta

21996. aklaviki Carr 32-192 N.W.T.

Trirhabda

21997. adela Blake 31-14 Ut. Ill.-
Cal.
21998. borealis Blake 31-16 Mass.-Wash
21998a. indigoptera Blake 31-17 So.Dak.-Ill.
21999. neoscotiae Blake 31-17 N.S.

22000. viridicyanea Blake 31-19 Wis.-Alta.
22001. pilosa Blake 31-20 Wyo.-Cal.
22002. confusa Blake 31-27 So.Cal.
22003. sericotrachyla Blake 31-28 So.Cal.

15724. bachiardis is correct name,
fide Blake 31

Derospidea

- Blake 31-32
15725 (genotype) and 15739,
fide Blake 31

Coraia

- Clark 65-323
15741 belongs here, fide Blake 31

Galerucella

22004. spiræophila Hatch & Beller 32-107
Wash. Or.
15752a. pallida (ab. nov.) Beller &
Hatch 32-109 Wash.

Monoxia

- 15755a. texana Schffr. 32-237 Tex.

Phyllobrotica

22005. antennata Schffr. 32-237
Tenn.
22006. stenidea Schffr. 32-238
N.Y. Pa.
D.C.

- Pseudoluperus** Beller & Hatch 32-115
22007. bakeri Beller & Hatch 32-115
Wash.

Luperus

- 15822a. asclepiadis Schffr. 32-238
B.C.
(*Calomicrus* Steph. 34-293)
22008. pallipes Beller & Hatch 32-113
Wash.
22009. concavus Beller & Hatch 32-114
Wash.

Monolepta

- 15857 (= 15813), fide Schffr. 32

Homopœta

15891. cyanipennis Fab. 98
(= *æquinoctialis*‡)
var. *octomaculata* Cr.,
fide Blake 31-76

Disonycha

22010. latiovittata Hatch & Beller 32-108.
Wash.Mont.
22011. brevicornis Schffr. 31-281
Colo.
22012. nigriventris Schffr. 31-282
Or.Id.Mont.
22013. neglecta Schffr. 31-283
Kan.-Or.
22014. punctipennis Schffr. 31-284
Ia. Minn.
22015. stenosticha¹ Schffr. 31-285
Tex.
22016. laticollis Schffr. 31-284
N.Y.
According to Schffr. 31:
15896b. puncticollis Lec. Cal.
15896c. punctigera Lee. Kan. W.St.
20204a. (= 20205)
21375. uniguttata Say (= 15895b)
22017. procera Csy. (= pallipes‡Blake)

Haltica

22018. kalmiae viridana Schffr. 32-240
Va. Md. N.C.
Tenn.
22019. oregonensis Schffr. 32-241
Oreg.
22020. subopaca Schffr. 32-242
Ariz.

Derocrepis Weise S6-730

- According to Schffr. 32:
15969 and 15970 belong here
15971 belong in Chalcoides

Hippuriphila

22021. equiseti Beller & Hatch 32-127
Wash.

Systema

22022. discrepans Schffr. 32-244
Ariz.
22023. variata Schffr. 32-243 Ariz.
16029a. corni Schffr. 32-244 Ala.

Physonota

22024. pacifica Spaeth 32-198
Cal.

* These authors have proposed a number of changes in the rank of names heretofore in use, and in synonymy. They follow Maulik 25 in the use of *Chrysolina* Mots. for *Chrysomela*, and *Chrysomela* L. for *Lina* (or *Melasoma*). In some of these changes we await the confirmation of other American authors,

MYLABRIDÆ

Bridwell 32

The name Bruchidæ is used by Bridwell, who proposes subfamilies Bruchinæ, Pachymerinæ, Amblycerinæ, Kytorhininæ (for 21418), and Eubaptinæ (not N. Am.).

PLATYSTOMIDÆ

(Anthribidæ) Jordan 31-281

Brachytarsus

22025. *franseria* Barrett 31-188
Cal.

CURCULIONIDÆ *

Auletes

22026. *mariposae* Zimm. 32-181
Cal.

Rhynchites **

Voss, Koleop. Rund., XVIII, 1932,
153-189, Monogr. der
Rhynchitinae.—Tribus Rhynchitini.
In this incomplete work Voss
proposes the following changes and
additions:

Coenorrhinus Thoms. 59-130

(*Merhynchites* **)
16348 and form ventralis
Voss 32-176
cerdonis Voss 32-176 (Schauf. i.l.)
Calif.
mandibularis Voss 32-176
Calif.
intermedius Voss 32-176
Calif.
homocidea Voss 32-177 (Schauf. i.l.)
Western
N.A.
a luctuosa Voss 32-177
(*Pselaphorhynchites* **)
Schilsky 03-H.)
16357 16360, 16361
micanus Voss 32-183 N.Am.
sanguinipes Voss 32-184
Nevada

Attelabus

(*Himatolabus*)
According to Fall 31:
22027. *axillaris* Gyll. Ariz.Mex.
21442 is not from Cal.
21441 is syn. of rhois,

Listronotus

According to Buchanan 32-7:
16790 (= ? 16792)
16801 (= 16790‡Weed)

Pissodes

16849 (= 16850),
fide Dietrich 31-872

Sterennius Schon. 36-242

(*Paraplinthus* Faust).22028. *tuberosus* Boh. 36-243,
fide Marshall 32-355 Alas.

Hylobius

16874. congener n.n.
(= confusus||Kby.) Col. Cat. 122

Hilipus (nec Heilipus)

16877. reverse synonymy.

Myrmex

According to Marshall 32-345:
17103. *lineata* (Pasc.) 72-454
vittatus Horn 73-448

Tachypeterillus

17186a. *magna* List. 32-10 Colo.
17187a. *cerasi* List. 32-8 Colo.

Curelio

17161 (= 21509), fide Col. Cat. 122
haroldi is not N.Am.,
fide Col. Cat. 122
?, coccinae Patton, Ent. News, 97-76

Anacentrus Buch. 32-330

Includes fide Buchanan:

22029. *subnudus* Buch. 32-330 (genotype)
La.

17626 (= 17625)
17630 (= 20520, 20521, 30522),
17650 (= 20516),
17624 (= 20519),
20512

Oligolochus

(*Anacentrus* s. str.), fide Buch. 32
17622

* The changes proposed in Col. Cat. pars 114 and pars 122 and 123 are as follows:
The subfamily Eremininæ includes 16499-16500; the subfamily Leptopinæ includes 16501-16592; the subfamily Cylindrorrhinæ includes 16772-16838; the subfamily Hylobiinæ includes 16870-16880, 18008-18012 and 17441-17442.

The subfamily Leptopinæ is divided into the four tribes: Diotognathini, Promecopini, Leptopini (= Tropiphorini) and Ophryastini.

The subfamily Hylobiinæ is divided into the four tribes: Hylobiini, Liparini, Anchonini, and Sternechini.

The changes in generic and specific names are noted in our text.

** The work of Voss is so incomplete that we think it better, at the present time, to merely call attention to the proposed changes and additions.

Ceutorhynchus

22030. opertus Brown 31-119 B.C.
 22031. carteri Brown 31-120 Alta.
 22032. handfordi Brown 31-120
 Man.
 22033. dubitans Brown 31-121 Sask.

Perigaster

17824. reverse synonymy, fide Buch. 31
 22034. longirostris Buch. 31-323
 Ont. N.J.
 Wash.

Phytobius

17845. belongs in *Litodactylus* Redt.,
 fide Brown 32-11
 (*Eubrychiopsis*)
 22035. albertanus Brown 32-11
 Alta.

SCOLYTIDÆ

Philosinus

22036. variolatus Bruck 31-126
 Cal.
 22037. aciculatus Bruck 31-127
 Ariz.

Gnathotrichus

22038. denticulatus Blackm. 31-270
 Colo. N. Mex.
 Tex. Ariz.
 22039. alni Blackm. 31-271 Colo.
 (*Gnathotrichoides* Blackm. 31-267)
 22040. aciculatus Blackm. 31-272.
 B.C. Wash.
 Ore. Cal.
 Ariz. N. Mex

Pseudopityophthorus

22041. fagi Blackm. 31-228 W. Va.
 22042. pubescens Blackm. 31-229
 N. C.
 22043. granulatus Blackm. 31-230
 Ariz.
 22044. agrifoliae Blackm. 31-230
 Cal.
 22045. pulvereus Blackm. 31-232
 Ariz.
 22046. yavapaii Blackm. 31-233
 Ariz.
 22047. opacicollis Blackm. 31-235
 Ariz.

Pityophthorus

22048. smithi Schedl. 31-163 B.C.
 22049. pygmaeus Schedl. 31-165
 Que.
 22050. pilifer Schedl. 31-166 Ont.

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 Comstock, John H., d. March 20, 1931.
 Comstock, Anna B., d. Aug. 24, 1930.
 Crevecoeur, F. F., b. June 23, 1862; d. April 7, 1931.
 Criddle, Norman, b. May 14, 1875; d. May 4, 1933.
 Dietz, W. G., b. July 30, 1848; d. April 13, 1932.
 Dimmock, G. W., d. May 17, 1930.
 Forbes, S. A., b. May 29, 1844; d. March 13, 1930.
 Henneguy, L. F., b. March 18, 1850; d. Jan. 28, 1928.
 Lewis, George, b. Aug. 5, 1839; d. Sept. 5, 1926.
 Manee, A. H., b. March 30, 1858; d. Dec. 26, 1927.
 Mann, B. P., b. April 30, 1848; d. March 22, 1926.
 Reynolds, L. R., b. April 22, 1878; d. Oct. 9, 1922.
 Robinson, Wirt, d. Jan. 19, 1929.
 Rousseau, E., b. May 27, 1872; d. Nov. 13, 1929.
 Skinner, Henry, d. May 29, 1926.
 Taschenberg, O., d. March 20, 1922.
 Varas y Arangua, E., b. 1900; d. Aug. 17, 1930.
 Wasmann, Erich, d. Feb. 27, 1931.

SECOND SUPPLEMENT TO
CATALOGUE OF NORTH AMERICAN COLEOPTERA
DESCRIBED AS FOSSILS

By H. F. WICKHAM

The few fossil beetles described as new in the years 1927 to 1932 inclusive are listed below. Some changes in family assignment are also noted. New abbreviations requiring mention follow.

Ark. Eoc.	Wilcox Clays
Dak. Cret.	Fox Hills, So. Dak.
New Mex. Jur.	Jurassic, east of Santa Rosa.
Oreg. Olig.	Lower John Day Beds.
Tenn. Eoc.	Wilcox Clays.
Vanc. Pleist.	Vancouver Island.
Wash. Mioc.	Beds near Spokane, formerly listed as Eocene.

CARABIDÆ

DYTISCIDÆ

Dytiscus, L.
latahensis Wickh. 31-31S Wash. Mioc.

GYRINIDÆ

Protopyrininus Hatch 27a-92
confinis (Scudd.) 00a-80, nec Lec.
= sculpturatus (Mjöb.). Europe.

PAUSSIDÆ

Paussopsis Ckll.
Does not belong in Paussidae, according to Wasmann 26-25

ELATERIDÆ

Adelocera Latr.
perantiqua Ckll. and LeVeque 31-359 Roan Mt. Eoc.

Elater, L.
berryi Wiedb. 29-148 Tenn. Fac

TENEBRIONIDÆ

Tenebrionites Ckll.
alatus Ckll. 27c-587 Flor. Mioc.

MELANDRYIDÆ

Silpha colorata Scudd. belongs here, according to Hatch 27b-369.
Compared with *Emunesa connectens* Newm.

SCARABAEIDÆ

Phyllophaga Harr.
disrupta Ckll. 27c-587 Flor. Mioc.

Melolonthites Heer
collinsi Wickh. 29-149 Tenn. Eoc.

PASSALIDÆ

Passalus Fab.
? *indormitus* Ckll. 27a-65 Oreg. Olig.

CERAMBYCIDÆ

Criocephalus Muls.
? *pavitus* Ckll. 27c-585 Flor. Mioc.

CHYSOMELIDÆ

Donacia Fab.
connelli Ckll. 27b-304 Vanc. Pleist.

CURCULIONIDÆ

Otiorhynchites Fritsch
wilcoxiatus Wickh. 29-149 Ark. Eoc.
Curculionites Heer
hylobioides Northrop 28-32 Dak. Cret.
vulpinus Northrop 28-36 Dak. Cret.
northropi Ckll. 28-37 Dak. Cret.

POSITION UNCERTAIN

Xiphenax Ckll. 31--97
jurassicus Ckll. (larva) 31-97 New Mex. Jur.

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INDEX

- Acamatoxenus, 20
Acamegonia, 77
Acanthoscelidius, 51
Acanthoscelis, 51
Acmægenius, 49
Acmæodera, 28, 85
Acmæops, 41
Acoma, 39
Acropteroxys, 33
Acrotona, 20
Actenodes, 29
Acupalpus, 80
Adalia, 35, 88
Adelocera, 83, 103
Adonia, 87
Æchmites, 78
ÆGIALATIDÆ, 25
Ægialatis, 25
Ægialia, 38, 90
Ægialites, 25
Agabus, 15, 81
Agathidium, 19
Agonoderus, 80
Agonodromius, 78
Agonoleptus, 80
Agonom, 78, 79
Agrilaxia, 29, 85
Agrilus, 29, 85
Agriotes, 85
Agronus, 49
Alaudes, 36
Alaus, 27
ALLECULIDÆ, 35, 88
Allonyx, 23, 82
Allopoda, 36
Alosterna, 40
Amblopusa, 20
Amblycheila, 9, 77
Ambrosiodmus, 52
Americomaseus, 13
Amerinus, 80
Amphioxa, 14
AMPHIZOIDÆ, 14
Anacæna, 16
Anacentrinus, 93
Anacentrus, 50, 93
Anacomis, 42, 91
Anaferonia, 12
Anatis, 88
Anchastus, 85
Anchomenus, 13, 79
Anchonoderus, 13, 79
Anchorius, 33
Anculopus, 49
Andrewesella, 79
Anilloferonia, 13
Anisodactylus, 80
Anisotarsus, 80
Anisostena, 46
Anisosticta, 87
Anisotoma, 19
ANOBIIDÆ, 37, 90
Anogdus, 19
Anomalægia, 90
Anomalopides, 39
Anomalopus, 39
Anoplium, 40
Anoplodera, 41, 91
Anthaxia, 29
ANTHICIDÆ, 26, 83
Anthobates, 24
Anthobatula, 24
Anthobium, 19
Anthonomus, 50
ANTHRIBIDÆ, 47, 93
Anthribus, 48
Aphelogenia, 79
Aphodius, 38, 90
Aphricus, 26
Aphthona, 46
Apion, 48
Aplastus, 26, 83
Apsena, 89
Apteroloma, 18
Apteromechus, 51
Aptopus, 27, 85
Areocerus, 82
Arawana, 88
Archicarabus, 10
Arthmius, 82
Arthrochlamys, 44
Asaphidion, 11
Asemum, 91
Astenus, 20
Atænius, 39, 90
Ataxia, 42
Athous, 27, 84
Atranus, 79
Attelabus, 48, 93
Auleutes, 51, 93
Axinopalpus, 14, 79
Bactridium, 32
Bagous, 49
Balaninus, 49
Barinus, 50
Baris, 50
Bassareus, 44
Batenus, 79
Batrishes, 20
Batyle, 42
Bembidion, 11, 78
Berginus, 34
Bidessus, 15
BIPHYLLIDÆ, 33
Bitoma, 34
Blapstinus, 36
Blaptosoma, 10, 54
Blechrus, 79
Bledius, 19
Blitophaga, 18
Bolbocerosoma, 39
Boloschesis, 44
BOSTRICHIDÆ, 37, 90
Bothriopterus, 13
Brachyacantha, 87
Brachycorina, 46
Brachyleptura, 41
Brachypsectra, 26
BRACHYPSCTRIDA, 26
Brachypterolus, 32
Brachyrhinus, 49
Brachyspasta, 25
Brachytarsoidea, 48
Brachytarsus, 48, 92
Bradycellus, 80
BRATHINIDÆ, 16
BRENTIDÆ, 47
Brentus, 47
Brontes, 33
BRUCHIDÆ, 93
Brumus, 88
Brychius, 14
Bulæa, 35
BUPRESTIDÆ, 28, 85
Buprestis, 29
BYRRHIDÆ, 86
BYTURIDÆ, 31
Calathus, 78
Calendra, 51

INDEX¹

- Callida, 79
 Callidium, 42
 Calligrapha, 45
 Callisthenes, 10, 54, 79
 Callistriga, 10, 54
 Callitropa, 10, 77
 Calocorius, 79
 Calomericus, 92
 Calomycterus, 48
 Calosoma, 10, 54
 Calospasta, 25
 Caminara, 54, 77
 Canifa, 36
CANTHARIDÆ, 22
 Cantharis, 22
 Canthon, 38
 Canthydrus, 15
CARABIDÆ, 10, 77, 103
 Carabiosoma, 10, 54
 Carabites, 103
 Carabus, 10, 77
 Cardiola, 20
 Cardiophorus, 27, 85
 Cariderus, 25
 Carnegiea, 10, 54
 Cartodere, 34
 Caryobruchus, 47
 Cassida, 46
 Casnonia, 13
 Catharellus, 80
 Cebrio, 26, 83
CEBRIONIDÆ, 26, 83
 Centrinaspis, 50
 Centrodera, 40
 Cephalogyna, 80
CEPHALOIDÆ, 23
 Cephaloon, 23
CERAMBYCIDÆ, 40, 91, 104
 Ceratomegilla, 87
 Cercyon, 81
 Ceutorhynchus, 51, 94
 Chætocnema, 46
 Chalcodermus, 51
 Chalcoïdes, 46
 Chalcophora, 29
 Charisalia, 41
 Chauliognathus, 22
 Chelymorpha, 46
 Chilocorus, 88
 Chlænius, 79
 Chlamys, 44
CHORAGIDÆ, 47
 Chrysobothris, 29
 Chrysobracton, 11
 Chrysochus, 92
CHRYSOMELIDÆ, 43, 92, 104
CHRYSOMELOIDEA, 43
 Chrysophana, 28
 Chrysotrigma, 10, 54
 Cicindela, 9, 77
CICINDELIDÆ, 9, 77
CIIDÆ, 37
CISIDÆ, 37
 Cleis, 88
 Cleonus, 50
CLERIDÆ, 23
 Clivina, 11
 Clytini, 91
- Clytoleptus, 42
 Clytus, 42
 Coccinella, 88
COCCINELLIDÆ, 35, 87
 Coccotorus, 50
 Cœlambus, 15
 Cœlocnemis, 36
 Cœlosattus, 36
 Cœnorhinus, 93
 Colaspidea, 44
 Colliurus, 13, 79
 Collops, 22
 Colpodes, 13, 79
COLYDIIDÆ, 34
 Colydium, 34
 Conoderes, 83
CONONOTINÆ, 25
 Cononotus, 25
 Conotrachelus, 51
 Cophes, 51
 Coptocyclo, 47
 Coptodera, 79
 Coraia, 92
 Cordalia, 20
 Corticaria, 34
 Corylophodes, 19
 Corynetes, 23
CORYNETIDÆ, 23
 Cœscinoptera, 44
 Cotinis, 40
 Coxelus, 34
 Cratacanthus, 80
 Cratocara, 80
 Crenitulus, 16
 Crepidodera, 46
 Criophalus, 104
 Crioceris, 44
 Cryobius, 13
 Cryocarabus, 77
 Cryptocephalus, 92
 Cryptohynpus, 85
CRYPTOPHAGIDÆ, 33
 Cryptophagus, 33
CUCUJIDÆ, 33, 86
 Cucujus, 86
 Curculio, 49, 93
CURCULIONIDÆ, 48, 93, 104
 Curculionites, 104
CURCULIONOIDEA, 48
 Curtonotus, 13
 Cycloneda, 88
 Cylindrocopturus, 51
 Cyllene, 42
 Cymatoderá, 23
 Cymindis, 14, 79
 Cyphon, 31, 86
 Cyphonotida, 41
 Cyrtolabus, 48
 Cyrtotonotus, 13
- DASCILLIDÆ, 31
DASCILLOIDEA, 30
 Dasytes, 23
 Delphastus, 35
 Deloyala, 47
 Dendroides, 25, 83
 Dercylinus, 80
 Dermestes, 86
- DERMESTIDÆ, 32, 86**
 Derocrepis, 92
 Derospidea, 92
 Derovatellus, 81
 Desiantha, 49
 Diabrotica, 45
 Dialytellus, 39
 Dialytes, 39
 Dianchomena, 79
 Dianous, 20
 Diaperis, 36
 Diaulota, 20
 Dicelus, 78
 Dicentrus, 40
 Dicerca, 29
 Dicheirus, 14, 80
 Dichelonyx, 39, 91
 Dichoxenus, 48
 Didactyla, 39
 Dimalia, 90
 Dinacoma, 39
 Dinapate, 37
 Dineutes, 15
 Dineutus, 15
 Dinodromius, 79
 Diodyrhynchus, 48
 Diphylostoma, 91
 Diphytaxis, 28
 Diploccelus, 33
 Diplotaxis, 90
 Diplous, 12
 Dirhagus, 28
 Discoderus, 80
 Discotenes, 47
 Disonycha, 45, 92
 Dissochætus, 19
 Donacia, 43, 104
 Drapetes, 28, 85
 Drasterius, 27
 Dromius, 79
DRYOPIDÆ, 31, 85
DRYOPOIDEA, 30
 Dyschirius, 11
DYTISCIDÆ, 15, 81, 103
 Dytiscus, 103
- Eanus, 27, 85
 Ecarinospherula, 19
 Ectamenogonus, 84
 Ecyrus, 42
 Elaphroterus, 10
 Elaphrus, 10
 Elater, 84, 103
ELATERIDÆ, 27, 83, 103
 Elathous, 84
 Eleodes, 36, 89
 Embaphion, 36
 Emmesa, 36, 104
 Endeodes, 82
ENDOMYCHIDÆ, 35, 87
 Endothina, 36
 Enyaulus, 29
 Enochrus, 16, 81
 Enoclerus, 23
 Eocarabus, 77
 Ephistemus, 33
 Epicauta, 24, 82
 Epilachna, 88

- Epimechus, 50
 Epipocus, 87
 Epomis, 79
 Ernobius, 90
 Erolestus, 23
EROTYLIDÆ, 86
 Erythrolitus, 35
 Eschatocrepis, 82
 Euæsthetus, 20
 Eubrychiopsis, 94
 Eucilinus, 49
 Euconnus, 19
 Eucrossus, 91
 Eufallia, 34
 Eulabis, 36
 Eumichthus, 40
 Europhilus, 79
 Eupagoderes, 48
 Euparixa, 39
 Euphoria, 40
 Euplastius, 88
 Euproctinus, 79
 Euproctus, 79
 Eurygenius, 26
 Eurymycter, 47
 Europa, 32
 Euryptera, 41
 Euruscopta, 44
EURYSTETHIDÆ, 25
 Eurytrachelus, 11
 Euscepes, 51
 Eusphyrus, 47
 Eustrophinus, 36
 Euthysanius, 26, 83
 Euxenus, 48
EUXESTINÆ, 34
 Euxestus, 34
 Evarthrus, 13
 Exoplectra, 87

 Ferestria, 12
 Fornax, 28
 Fortax, 12
 Furcacampa, 78

 Galerita, 14
 Galerucella, 92
 Gastrellarius, 78
 Gastroidea, 45
 Gastrophysa, 45
 Gaurodytes, 15
 Gaurotes, 41
 Geodromicus, 19
 Geopinus, 80
 Geotrupes, 39
 Geræus, 50
 Gersteckeria, 51
 Glanodes, 80
 Glaresis, 39
 Glischrochilus, 86
 Glycerius, 80
 Glyptina, 46
 Glyptoderus, 79
 Glyptophorus, 33
 Glyptoscelimorpha, 85
 Gnathotrichoides, 94
 Gnathotrichus, 94
GNOSTIDÆ, 20

 Gnostus, 20
 Goes, 42
 Goniolophus, 80
 Gonops, 47
 Gorginus, 35
 Grammoptera, 40
 Graphoderes, 15
 Gronocarus, 39
 Gynæcomeloe, 25
 Gynandrotarsus, 80
 GYRINIDÆ, 15, 81
 Gyrinus, 15, 81, 103

HALIPLIDÆ, 14
 Haliplus, 14
 Haltica, 45, 92
 Hamotoides, 82
 Hamotus, 82
 Hapalips, 33
 Haplidus, 91
 Haplocentrus, 80
 Haplosalia, 40
 Harpalus, 14, 80
 Heilipus, 93
 Helichus, 85
HELMIDÆ, 86
HELMINÆ, 31
 Helmis, 31
 Helobata, 16
HELODIDÆ, 31, 86
HELOPHORIDÆ, 16
 Helophorus, 16
 Helops, 89
 Hemicarabus, 10, 77
HEMIPEPLIDÆ, 33
 Hemipeplus, 33
 Hesperohipis, 29
 Hetærius, 21
 Heterarthron, 37
 Heteroderes, 83
 Heterosilpha, 18
 Hilipus, 93
 Himatolabus, 48, 93
 Hippodamia, 88
 Hippuriphila, 92
 Hister, 21
HISTERIDÆ, 21
 Holotrochus, 19
 Homœolabus, 48
 Homopœta, 92
 Hoplia, 39
 Hoppingiana, 22
 Horistonotus, 85
 Hornia, 25
 Horologion, 78
 Hydnobius, 19, 81
 Hydnocera, 23
 Hydrobius, 16
 Hydrocanthus, 15
 Hydrochara, 81
HYDROCHIDÆ, 16
 Hydrochus, 16
 Hydrocyclus, 16
HYDROPHILIDÆ, 16, 81
 Hydrophilus, 16, 81
 Hydroporus, 15, 81
 Hydrothassa, 44
 Hylastes, 51

 Hylis, 28
 Hylobius, 93
 Hylocurus, 53
 Hymenorus, 88
 Hyperaspis, 35, 87
 Hyperini, 49
 Hyperodes, 49
 Hypnoidus, 27, 85
 Hypocaccus, 21
 Hypocœlus, 28, 85
 Hypocoprus, 32
 Hypodacne, 34
 Hypophœeus, 36
 Hyporhagus, 28, 89
 Hypulus, 36

 Ibidion, 40
 Idiopidonia, 40
 Idœmea, 91
 Ilybius, 15
 Inna, 79
 Ips, 53
 Ischiodontus, 27, 85
 Ischnocerus, 47
 Ischyros, 86
 Isohydnocera, 23
 Isorhipis, 28
 Isostenia, 77

 Judolia, 41

 Knausia, 88

LACCONOTINÆ, 25
 Laconotus, 25, 36
 Læmophileus, 33
 Læmostenus, 78
LAMPYRIDÆ, 21
 Languria, 33
LANGURIIDÆ, 33
 Lara, 31
LARINÆ, 31
LATHRIDIIDÆ, 34, 87
 Lathridius, 34, 87
 Lathrobium, 20
 Lebia, 79
 Lecontella, 23
 Leichenum, 36
 Leiodes, 19, 81
LEIODIDÆ, 19, 81
 Leistidius, 11
 Leistus, 11
 Lema, 44
 Leonia, 25
 Leonidia, 25
 Lepidocricus, 49
 Lepidophorus, 49
 Leptacmœops, 41
 Leptægialia, 90
 Leptoschema, 84
 Leptostylus, 42
 Leptotrichaltaica, 46
 Leptotrix, 46
 Leptura, 41
 Lepturges, 42
 Lepyrus, 49
 Lichnanthe, 90
 Lichnocarabus, 10

INDEX

- Ligyrus, 40
 Lilius, 84
 Limonius, 27, 83
LIMNEBIIDÆ, 81
 Limnebius, 81
 Limnius, 31, 86
 Limnobaris, 50
 Lina, 45, 92
 Liocellus, 80
 Listoderes, 49
 Listronotus, 49, 93
 Listrus, 22, 82
 Lixus, 50
 Longitarsus, 46
 Loricera, 10, 78
 Lorocera, 10
 Loxandrus, 13
LUCANIDÆ, 40, 91
 Ludius, 27, 84
 Luperodes, 45
 Luperus, 92
LYCIDÆ, 21
 Lyperostenia, 77
 Lytta, 24
 Macrobasis, 24
 Macropogon, 31
 Macrosiagon, 24
 Malachius, 22, 82
 Maronetus, 77
 Mecomycter, 23
 Meconemus, 47
 Megacyllene, 91
 Megapenthes, 84
 Megaquedius, 82
 Melandrya, 36
MELANDRYIDÆ, 36, 104
 Melanactes, 85
 Melanastus, 36
 Melanius, 13
 Melanophila, 29, 85
 Melanotus, 27, 85
 Melasis, 28
 Meligethes, 32
 Meloe, 25
MELOIDÆ, 24, 82
MELOIDEA, 24
 Melolonthites, 104
MELYRIDÆ, 22, 82
 Melyrodes, 23
 Menidius, 79
 Merynchites, 93
 Mesagroicus, 49
 Metabletus, 79
 Metabola, 79
 Metachroma, 44
 Metamelanius, 13
 Methia, 40, 91
 Metriona, 47
 Metrius, 11
 Micracisella, 53
 Microgialia, 90
 Micralcinus, 51
 Microlestes, 79
 Microlipus, 22
 Micromaseus, 13
 Microrhagus, 28
 Microrhopala, 46
 Microscapha, 36
 Microtrechus, 12, 78
 Microweisea, 87
 Molorchus, 42, 91
 Monachulus, 44
 Monanus, 33
 Monaxia, 92
 Moneilema, 42
 Monocrepidius, 27, 83
 Monoferonia, 78
 Monoletta, 92
MONOMMIDÆ, 89
 Monotoma, 32
MONOTOMIDÆ, 32
 Monovectura, 82
MORDELLIDÆ, 24
 Morion, 11
 Morychus, 86
 Mulsantina, 87
MURMIDIINÆ, 34
 Myas, 12
MYCETAZIDÆ, 35
 Mycetochara, 35
MYCETOPHAGIDÆ, 34
 Mychocerus, 34
MYCTERINÆ, 25
 Mycterus, 25
 Myeloborus, 53
MYLABRIDÆ, 47, 93
 Mylabris, 47
 Myochrous, 92
 Myrmecoxenus, 34
 Myrmex, 49, 93
 Namunaria, 34
 Neaphænops, 12
 Nebria, 10, 78
 Nebriola, 11
 Necrobora, 18
 Necrocharis, 17
 Necrodes, 18
 Necrophila, 18
 Necrophorus, 17
 Necydalis, 91
 Nematidium, 34
 Neobaphion, 36
 Neobellamira, 41
 Neocarabus, 77
 Neoclytus, 42
 Neoemmesa, 36
 Neoharmonia, 88
 Neophorus, 81
 Nephanea, 20
 Nicrophorus, 17
NITIDULIDÆ, 32, 86
 Nocheles, 48
 Nomidus, 48
 Nomius, 11
 Notaris, 49
NOTERIDÆ, 15
 Nothodes, 83
 Nothopush, 80
 Notiophilus, 10
 Notoxus, 26, 83
 Novius, 87
 Nyctoporis, 89
 Oberea, 42
 Ochodæus, 39
 Ochrosidia, 39
 Ochthebius, 81
 Octinodes, 83
 Odacanthella, 13, 79
 Odonteus, 39
OEDEMERIDÆ, 23
 Oedionychis, 45
 Oeme, 40, 91
 Oiceoptoma, 18
 Olibrus, 35
 Oligolochus, 93
 Olla, 88
 Omaseulus, 13
OMOPHRONIDÆ, 14
 Omus, 9
 Onthophagus, 38
 Oodes, 80
 Opadius, 80
 Orchestes, 50
 Oreocarabus, 77
 Oreodytes, 15
 Oreosphærula, 19
 Ormiscus, 47
 Ortholeptura, 41
ORTHOOPERIDÆ, 19
 Orthoperus, 19
 Osorius, 20
 Osphya, 36
OSTOMATIDÆ, 32
OSTOMIDÆ, 86
 Otidocephalus, 49
 Otiorhynchites, 104
 Oxacis, 23
 Oxelytrum, 18
 Oxycrepis, 13
 Oxynychus, 87
 Oxypselaphus, 79
 Pachybrachys, 92
 Pachylopus, 21
 Pachyscelus, 30
 Pachyteles, 10
 Pactopus, 28
 Pallodes, 86
 Panscopidius, 48
 Panscopus, 48
 Pantomorus, 48
 Parabrateon, 11
 Parabyrsopolis, 91
 Paracalosoma, 10, 54
 Paracotalpa, 91
 Paraliaphilus, 14
 Parallelina, 40
 Parandra, 40
 Paraopsimus, 40
 Paraplinthus, 93
 Parareoda, 91
 Paratropa, 77
 Pardileus, 80
 Paria, 44
 Paroedostethus, 85
PASSALIDÆ, 104
 Passalus, 104
 Patroboidea, 12
PAUSSIDÆ, 103
 Paussopsis, 103
PEDILIDÆ, 26

- Pedilus, 26
 Pelecotoides, 24
 Pelmatellus, 80
 Pelophila, 11
 Peltodytes, 14
 Pemphus, 10
 Pentagonica, 79
 Pentarthrinus, 51
 Pentilia, 87
 Perigaster, 51, 94
 Perigona, 79
 Perimegatoma, 32, 86
 PEROTHOPIDÆ, 28
 Perothops, 28
 Peryphes, 12
 Peryphus, 11
 Phædon, 45
 PHALACRIDÆ, 35
 Phalacrus, 35
 Phanaeus, 38, 90
 Phanasolena, 47
 Pharalus, 80
 Pharaxonotha, 33
 Philetes, 83
 PHENGODIDÆ, 21
 Philas, 18
 Philodes, 80
 Philonthus, 20
 Phlegon, 28
 Phleophagus, 51
 Phleosinus, 94
 Photinus, 21
 Photuris, 21
 Phyllobrotica, 92
 Phyllodecta, 45, 92
 Phyllophaga, 39, 90, 104
 Phyllotreta, 46
 Phymatodes, 42
 Physonota, 46, 92
 Phytalus, 39
 Phytophobius, 94
 Pidonia, 40, 91
 Piezocorynus, 48
 Pilolabus, 48
 Pinacodera, 79
 Pinophilus, 82
 Pinotus, 38
 Piosoma, 80
 Pisenus, 34
 Pissodes, 49, 93
 Pityoborus, 52
 Pityophilus, 52
 Pityophthorus, 52, 94
 PLASTOCERIDÆ, 26
 PLASTOCERINÆ, 83
 Plataphodes, 11
 Plateros, 21
 Platidius, 12
 Platycerus, 40
 Platyderides, 38
 Platynidius, 79
 Platynomircus, 79
 Platynus, 13, 78
 Platysmatus, 13
 PLATYSTOMIDÆ, 47, 93
 Platystrophus, 47
 Plinthocœlium, 42
 Plinthodes, 49
 Plochionus, 79
 Pocalta, 91
 Podabrus, 22
 Poecilobrium, 91
 Poecilonota, 29
 Pogonocherus, 42, 91
 Pogonodaptus, 80
 Polemius, 22
 Polopchila, 80
 Polycaon, 37
 Polycesta, 28
 Polygraphus, 51
 Polypylla, 39
 Polypria, 25
 Plistodactyla, 78
 Prosthenianus, 37
 Protogyrinthus, 103
 Protonecrodes, 18
 Psammobius, 90
 Psammonporus, 90
 Pselaphorhynchites, 93
 PSELAPHIDÆ, 20, 82
 Psiloscelis, 21
 Pseudallonyx, 23
 Pseudanophthalmus, 12, 78
 Pseudanthribus, 48
 Pseudauptinus, 14
 Pseudargutor, 13
 Pseudatenius, 39
 Pseudebæus, 22
 Pseudolagarus, 13
 Pseudoluperus, 92
 Pseudomicracis, 53
 Pseudomorpha, 14
 PSEUDOMORPHIDÆ, 14
 Pseudopachyta, 40
 Pseudopanscopus, 48
 Pseudopentarthrum, 51
 Pseudopityophthorus, 94
 Pseudostrangalia, 40
 Pseudothysanæs, 53
 PSOIDÆ, 37
 Psyllobora, 35, 87
 Ptenidium, 20
 Pteroloma, 18
 Pterostichus, 12, 78
 PTILIIDÆ, 20
 Ptilinus, 37
 Ptilodactyla, 31
 PTILODACTYLIDÆ, 31
 PTINIDÆ, 37, 89
 Ptinus, 37, 89
 Ptosima, 29
 PYROCHROIDÆ, 25, 83
 PYTHIDÆ, 25, 82
 PYTHINÆ, 25
 Pytho, 25
 Reichenbachia, 82
 Rembus, 13, 77
 Rhadine, 13, 79
 Rhagodera, 34
 Rhagomicrus, 28
 Rhantus, 15
 Rhexidius, 82
 Rhinosimus, 82
 RHIPICERIDÆ, 26
 RHIPIPHORIDÆ, 24
 Rhipiphorus, 24
 Rhynchites, 48, 93
 Rhyssemus, 39
 Rodolia, 87
 Romaleum, 40, 91
 Rybaxis, 20
 Ryssematus, 51
 SALPINGINÆ, 25
 SANDALIDÆ, 26
 Sandalus, 26
 Saperda, 42
 Saprinus, 21
 Saxinis, 44
 Seaphinotus, 77
 Scaptolenus, 83
 SCARABÆIDÆ, 38, 90, 103
 Schizogenius, 11
 SCOLYTIDÆ, 51, 94
 Schwarzerion, 42
 SCYDMECIDÆ, 19
 Scydmaenus, 19
 Scymnillodes, 35
 Scymnus, 35, 87
 Selenophorus, 80
 Semijulistus, 23
 Serica, 39, 90
 Sericus, 85
 Sibariops, 50
 Silpha, 18, 104
 SILPHIDÆ, 17
 Simplocaria, 86
 Smicronyx, 49
 Sperchopsis, 16
 Spermophagus, 47
 Sphæriestes, 25
 SPHÆRIIDÆ, 21
 Sphæroderus, 77
 Sphærosinus, 51
 Sphenophorus, 51
 STAPHYLINIDÆ, 19, 82
 Stenelmis, 31
 Stenocantharus, 10
 Stenocellus, 14
 Stenocorus, 41
 Stenolophus, 80
 Stenotarsus, 35
 Stenus, 20
 Stephanopachys, 37
 Steremnius, 93
 Stereopalpus, 26
 Stethorhanis, 35
 Stilboldius, 80
 Stilbus, 35
 Stolonis, 13
 Strangalepta, 41
 Strategus, 40
 Strigodermella, 39
 Strophiona, 41
 Styloxus, 40, 91
 Synaphæta, 42
 Syncalosoma, 10, 54
 Syneta, 44
 Synolabus, 48
 Systema, 46, 92
 Tachycellus, 14
 Tachypterellus, 93

INDEX

- Tachys, 11
 Talaenus, 89
 Tanaocarabus, 10, 77
 Tanaops, 22
 Tanysphyrus, 49
 Taphrocerus, 30
 Tapisnothenes, 10, 54
 Telabis, 36
TELEGEUSIDÆ, 82
 Telegeusis, 82
 Temnochila, 86
 Temnopsophus, 22
TENEBRIONIDÆ, 36, 89, 103
 Tenebrionites, 103
 Tetraonyx, 24
 Tetrapriocera, 90
 Tetropium, 40
 Thalpius, 14
 Thanatophilus, 18
 Thecesternus, 51
 Thesalia, 40
 Thoracophorus, 19
 Thricolema, 44
THROSCIDÆ, 28, 85
 Throscus, 28
 Thyce, 39, 91
 Thysanoes, 53
- Tinodemus, 35
 Toxotropis, 47
 Trachykele, 29
 Trachypachus, 10
 Tragidion, 91
 Trechus, 12, 78
 Trepanedoris, 11
 Triæna, 13
 Triarius, 45
 Trichacorynus, 51
 Trichalophus, 49
 Trichelaphrus, 10
 Trichocelius, 80
 Trichochrous, 22, 82
 Tricrania, 25
 Trigonodera, 24
 Trigonognatha, 12
 Trigonoscuta, 49
 Triliarthrus, 14, 80
 Triphyllus, 34
 Triplectrus, 80
 Trirhabda, 92
 Trogoderma, 32
 Trogophlœus, 19
 Tropidères, 48
 Tropisternus, 16, 81
 Typhæa, 34
- Typitium, 23
 Typocerus, 41
 Typophorus, 44
 Uleiota, 33
 Usechimorpha, 36
 Usechus, 36
 Vandykea, 91
 Vectura, 23
 Vecturoides, 23
 Vincenzellus, 25
 Xarifa, 37
 Xestoleptura, 41
 Niphenax, 103
 Xylobius, 28
 Xylophilus, 28
 Xylotrechus, 42
 Zacotus, 14
 Zenoa, 26
 Zeugophora, 44
 Zezea, 13
 Zonitis, 25

