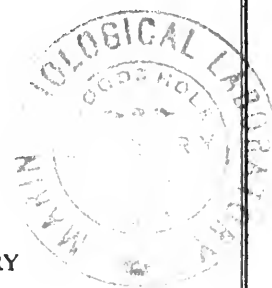


SECOND AND THIRD
SUPPLEMENTS
1925 to 1932 (inclusive)
to
CATALOGUE
of the
COLEOPTERA
of
AMERICA, NORTH OF MEXICO

By
CHARLES W. LENG, B.Sc.
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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
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JOHN D. SHERMAN, JR.
Mount Vernon
New York

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AFFECTIONATELY
DEDICATED TO
SAMUEL HENSHAW

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

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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	unpublished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 "*Horæ Entomologicæ*" (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 suborders Adephaga and Polyphaga, and the subdivision of the suborders into superfamilies, grouped into series, is found in both systems. The differences consist in the composition of the suborders, 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 annectent 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 Rhysodidæ 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, Haliplidæ, 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; Dromiinae, Odacanthinae; Driptinae, Nebriinae; Loricerinæ; Carabinae, Cychrinae, Chlaniinae; Licininae, Bembidiinae, Sphodrinae, Broscinae, Dyschiriinae, Scaritinae, Elaphrinae; Patrobinae, Pterostichinae, Amarinae, Harpalinae, Glyptinae. 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 Staphylinioidea 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.

Staphylinioidea. The component families, based on larval characters, would be Linnebiidæ, Hydroscaphidæ, Leptinidæ, Ptiliidæ, Anisotomidæ; Platypsyllidæ, Scaphidiidæ; Silphidæ, Staphylinidæ, Pselaphidæ, Scydmanidæ. The families also included, though their larvæ are imperfectly known or entirely unknown, are Clambidæ, Brathinidæ, Sphæritidæ, Sphariidæ, and Micropeplidæ. The differences between this and existing classification is the removal from Hydrophilidæ of the aberrant genera *Linnebius*, *Ochthebius*, and *Hydræna*; and the suppression of Silphoidea as a superfamily.

Forbes reached a similar result from his studies of the wings. "Ochthebius and Hydrana," 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 Helophoridæ, "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 striæ 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 Saprini 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 Staphylinoidæ 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*; *Catogenidæ*, *Læmophloeidæ*, *Phalacridæ*, *Smicripidæ*, *Corylophidæ*; *Nitidulidæ*, *Cybocephalidæ*; *Sphindidæ*; *Lathridiidæ*, *Murmidiidæ*, *Endomy-*

chidæ, Coccinellidæ, Erotylidæ, *Dacnida*, Melandryidæ, *Scraptiida*, 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 leptinidstaphylinoid 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 Byrrhidae. Two series, Dascilloidea and Cleroidea, are descended directly from the Byrrhoidea; Dryopoidea can be derived through the Ptilodactylidae; Elateroidea, through the Eurypogonidae; Cantharoidea and Scarabaeoidea from other dascilloid or dryopoid families.

With the Cleroidea may be associated Mordelloidea, Bostrichoida, 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 Eucinetidae are removed to Cucujoidea, other families to Dryopoidea, as stated below. The Nosodendridae and Heteroceridae are added, making four families, viz: Dascillidae, Heteroceridae, Helodidae, Nosodendridae.

Dryopoidea. This series includes new families Ptilodactylidae and Eurypogonidae, taken from Dascilloidea; Psephenidae, divided into subfamilies Psepheninae and Eubrianacinae of which the latter is taken from Dascilloidea; Chelonariidae; Dryopidae, divided into subfamilies Larinae, Pelonominae and Helminae.

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 Melyridae, Cleridae, and Corynetidae are removed to a new series Cleroidea. The family Brachypsectridae, following Blair, is considered valid on larval characters, but is included here, rather than in Dascillidae. The Cantharidae are divided into subfamilies Malthinae, Chauliognathinae, Malthodinae, and Cantharinae.

Elateroidea. The differences here from existing classification are slighter than in some preceding series. Plastoceridae are included in Cebriionidae, and Drapetes is removed from Throscidae to the subfamily Oestodinae of Elateridae. Sandalidae is treated as a family, quite distinct on larval characters from Rhipiceridae.

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

Cleroidea. The families included in this new superfamily are Dermestidae, Melyridae, Ciidae, Ostomatidae, Cleridae, Catogenidae (?), and Bothrideridae (?). 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 Meloidæ, 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, Asemínæ, Lepturínæ, Lamiínæ and Disteniínæ. 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 Spindidæ.

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, Diabroticinæ, 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 Choraginæ.

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

Charles W. Leng

Andrew J. Mutchler

September 1, 1933.

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. colosseus 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*.

Trachypachus

20680. *slevini* Van D. 25-111 Oreg.

Pemphus

Stenocantharus Gistel, 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.

Carabus

166f. *atlanticus* Lapouge 24-191
St. Pierre Miquelon

175a. *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. *georgiæ* n. n. Csiki 27 for *carinatus* Dej.

Csiki also makes several changes under *tædatus* which with *nemorialis* 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. *Synalosoma*

185. etc. in subg. *Carabiosoma*

184. in subg. *Callistriqua* Mots.

186. etc. in subg. *Carnegonia* Lap. i. 1.

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. *Chrysostrigma* Khy.

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. *sieræ* Van D. 25-113 Cal.

? *congesta* Mann. 53-121

is valid, fide Csiki 27. Alas.

Pachyteles

20682. *beyeri* Notm. 19-255 L. Cal.

Notiophilus

254. *obscuratus* n. n. Fall. 26-125 for *obscurus* ||

? *cribrilaterus* 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 *Harpalinæ* 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 sub-
genera of *Pelophila*.

Metrius

- 2069a. planatus Van D. 25-122
Cal.

Dyschirius

20694. criddlei Fall 25-369 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 sub-
tribes *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 wirbel-*
lose Tiere 1857-27 Mo.
316. added synonyms: *spinipes* Sulz.
and *subterreus* Bon.
317. added synonyms: *distinctus* Hald.,
ephiates 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 doubt-
fully 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* Dar-
lington 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. *concurrans* Fall 26-134 Alas.
20707. *picipes* ‡ auct. = *plagiatum* Zimm.,
fide Fall 26-133
686. *viridicollis* 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
(*Parabractcon* 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 follow-
ing new names result in part from this
course:

- S13. *unionis* n. n. Csiki for *laetifica*
Csy. nec Bates
S47. *latalatus* n. n. Csiki for *lati-*
pennis 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. chalybæus 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.
lævigatus Lec.
20712. conformis Jeannel 27-188 Cal.
912. pomonæ Fall.
914. arizonæ Schffr.
915. hydropicus Horn
omit flavipes Kby. == 2171
913. carolinæ Schffr.
20713. vandykei n. n. Jeannel 28-791
ruficollis || Van D. 26-06

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. termitiformis 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.
964. 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. idahoe 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 rotundi-
collis 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 brevisculus
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 bi-
color 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.
Melanius
1177. ohionis n. n. for purpuratus
Lec. nec Herr.
1181. is in subg. Pseudargutor
and is called leconteianum
Lut. which name is else-
where cited as synonym of
nitidus Kby.
1182. to 1187 are placed in subg.
Americomaseus n. n. 1930
for Micromaseus Csy.
nec Desbr. apparently con-
flicting with Omaseulus Lut.
published 1929.

Anilloferonia Van D. 26-115

20725. 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 erythropus
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 *Cella*, *Acrodon*, *Bra-*
dytus, *Curtonotus*, *Triæna*, etc., as sub-
genera 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 brun-
nipes Mots. nec Letzn.
1327. horni n. n. for femoralis
Horn. nec Dej. nec Letzn.
1350. subænescens n. n. for sub-
lævis 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. putzeysiana n. n. for
putzeysi Horn nec Fairm.
18720. maxwelli changed to
maxwellianus
1249. is synonym of 1250
Curtonotus is spelled *Cyrtonotus*
by Csiki.

A number of heretofore unrecog-
nized 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. syracusensis 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 *

(*Casnonia* Latr. 22-77)
(*Odacanthella* Liebke 30-658, type
1612)

- 1612b. suturalis Chaud. is valid,
fide Liebke
1613 and 1614 also belong here.

Galerita

- 1620b. ahasverus n. n. Liebke 29-297
intermedia || Csy. nec Fairm.
caseyi || Liebke 28-129

Pseudaptinus

20738. oviceps Van D. 26-121 Cal.

Thalpius

20739. microcephalus Van D. 26-122
Cal.

Axinopalpus

20740. utahensis Tanner 28-270
Ut.

Cymindis

19027. tarda n. n. Liebke 27-104
sinuata || Csy. nec Reiche
19028. caseyi n. n. Liebke 27-104
alternans || Csy. nec Ramb.

Zacotus

20741. subopacus R. Hopping 25-206
B. C.

Harpalus

20742. pacificus Fall 26-136 Alas.
20743. washingtoniensis Van D. 26-123
Wash.
20744. martini Van D. 26-124 Cal.

Dicheirus

20745. blaisdelli Van D. 26-125 Cal.

Tachycellus

(*Triliarthrus* Csy. based upon in-
consequential differences, fide Fall
30-251)

20746. frosti Fall 30-251 Mass.
20747. tibialis Kby. is distinct,
fide Fall 30-251 Mass.
E. Can.
2161 differs little from 2159
2165 differs little from 2164
2166 is a *Stenocellus*,
fide Fall 30-252

PSEUDOMORPHIDÆ

Newman 40, Horn 67, Notman 25

Pseudomorpha

20748. falli¹ Notman 25-15 So. Cal.
20749. hubbardi Notman 25-15 Ariz.
20750. tenebroides¹ Notman 25-16
Ariz.
20751. alutacea¹ Notman 25-17 N. Mex.
20752. vicina Notman 25-17 So. Cal. Nev.
20753. vandykel¹ Notman 25-18
Ariz.

Pseudomorpha

20754. consanguinea Notman 25-18
So. Cal. Ariz.
20755. vindicata¹ Notman 25-19
Ut.
20756. champlaini Notman 25-20
Ariz. Cal.
20757. schwarzi¹ Notman 25-21
Ariz.

OMOPHRONIDÆ

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

AMPHIZOIDÆ**Amphizoa**

2281. lecontei Matth.
planata Van D. 27-98
and 27-197 Alta.

20758. striata Van D. 27-197 Wash.

HALIPLIDÆ**Brychius**

20759. albertanus Carr 28-23 Alta.
20760. pacificus Carr 28-24 Cal.

Haliphus

cf. subg. *Paraliaphus* Guignot
30-74 for *H. triopsis* Aubé.

Peltodytes

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

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

NOTERIDÆ

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

Canthydrus

20761. *floridanus* is valid, fide Blatch. 30-38.

Hydrocanthus

20762. *simulator* Zimm. 28-165 Cal. Mass.

DYTISCIDÆ

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. *quebencensis* 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* 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 *Vatellinae* and *Cybistrinae* are reduced to tribes, *Agabetini* and *Coptotomini* are combined respectively with *Copelatinii* 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 Csy., 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 Zimmermann. 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. Indian Ins. 28-93
cf. *Hydrocycclus* 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.
elongatulus || 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 Winters 27-25

BRATHINIDÆ

The genus *Brathinus*, following Casey is associated with *Omaliniæ* 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 *Staphylinioidea*.

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. *nebraskæ* 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.
29799. *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. *sanfranciscæ* 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. *wallisii* 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. *immaculosis* 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. 1869-352
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 Catopocerini), and Silphini of the 1920 catalogue. The other tribes form a new family Leiodidæ, 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.
- var. variolosus Port. 24-149
Sitka, B. C.
?
- 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.
pygmaeus 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 including *Protoncicrodes* Port.)
includes 2922 and ? ab. bizonatus Port. from So. Cal.
- (*Thanatophilus* a subgenus credited 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 27-543
N. Y. N. J.
- (*Blitophaga* Reitt. a subgenus fide Hatch)
includes 2930, 2931
(*Heterosilpha* Port. 26-83)
includes 2929
20801. ænescens Csy. valid
fide Hatch 27-344 Cal.
(*Necrophila* Kby. including *Necrobora* 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.*(Anisotoma* of 1920 Cat.)20806. canadensis Brown 28-141
Sask. Man.20807. oklahomensis¹ Brown 28-142
Okla.
(Ecarinosphaerula Hatch 29-2)
type 3011**Anisotoma***(Leiodes* of 1920 Cat.)
(Orcosphaerula Ganglb. 99-209)
includes 3025, 3010 and20808. 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 = *Sciodrepa fumatus* Spence,
fide Hatch 27-15

SCYDMÆNIDÆ

Eucomus

20812. longiceps Fall 26-144 Alas.

Scydmanus

20813. adjutor Fall 26-144 Alas.

ORTHOPERIDÆ

Corylophodes20814. flavo-ocellus Blatch. 27-139
Fla.**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.

Geodromicus20820. rufipennis¹ 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 Catopinae (2945-2969), Coloninae (2970-2984), Bathyclinae (2943-2944), and Leiodinae (= Anisotominae). 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.

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. *torus*¹ 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

2857. *chalybæus* Lec., valid fide Benick
Euæsthetus
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. *sewardi* 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. *oklahomensis*¹ Hatch 30-12
Okla.

Diaulota

(= *Amblopusa* Csy. fide
Chamberlin and Ferris 29-155)

Acrotona

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**Batrissodes**

6217. author should be
Blatch. 10-326

Rybaxis

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

- 6571a. albertensis Hatch 26-275 Alta.
 6571b. carri Hatch 26-276 Alta.
 19437 = subsp. of 6571,
 fide Hatch 29-76
 20855. jaquesi Hatch 29-76 Ia.
 20856. lævicaudoides Hatch 29-77 Kan.

Psiloscelis

20857. carri Hatch 26-273 Aita.

Heterius

20858. carri Hatch 26-276 Alta.

Saprinus

20859. cynomyisi Brown 28-89 Okla.
 20860. carri Hatch 26-272 Alta.-Colo.
 6827. ab. oregonensoides Hatch 29-78 Cal.
 ab. distenguendoides Hatch 29-78 Mich.
 ab. sejunctoides Hatch 29-78 Ia.

Saprinus

6831. ab. pseudosejunctoides Hatch 29-78 Cal.
 ab. pseudosejunctus Hatch 29-78 Wash.
 ab. leconteoides Hatch 29-78 Colo.
 6831a and 6831c reduced to aberrations
 6829. ab. profusoides Hatch 29-79 Mich.-Ohio
 6830 reduced to aberration
 6836. ab. semisulcus Hatch 29-79 Mich. O. La.
 (*Hypocaccus* Thoms.)
 20861. eriensis Hatch 29-80 Mich. Ohio
 20862. ontarioensis Hatch 29-80 Ont.
 20863. ohioensis Hatch 29-80 Mich.
 20864. michiganensis Hatch 29-80 Mich.
 20865. jaquesi Hatch 29-81 Iowa
 20866. propensoides Hatch 29-81 Cal.
 (*Pachylopus* Er.)
 6901. palmatus Say
 ab. dimidiatipennis Lec, fide Hatch

LYCIDÆ

Plateros

20867. columbiensis Brown 29-108 B. C.

Plateros

6944. ab. humeralis Hatch 30-23 Okla.

LAMPYRIDÆ

Photinus

20868. ignitus Fall 27-208 Mass. N. Y.
 Pa.
 20869. ablucens Fall 27-209 Ill.
 20870. granulatus Fall 27-209 Kan.
 20871. stellaris Fall 27-210 Tex.
 20872. floridanus Fall 27-210 Fla.

Photinus

7004. (7007 is synonym)
 7005. (7008 is synonym)

Photuris

20873. flavicollis Fall 27-210 Tex.

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.

Chaulignathus

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 Cal.
20887. viduus Fall 28-85 Cal.
20888. fulvus Fall 28-85 Cal.
20889. tenuis Fall¹ 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 28-109 N. H.
20902. citrinus¹ Fall 28-100 Cal.
20903. heteronychus Fall 28-101
Man. Alas.
20904. furtivus¹ Fall 28-102 Colo.
20905. pruinosis Lec., valid
fide Fall 28-77 Cal.
- 20905a. diversipes Fall 28-77 Cal.
20906. flavicollis Lec. (7062a.),
valid fide Fall 28-81
basillaris Lec. = discoideus Lec.
fide Fall 28-81.
20907. punctulatus Lec. (7058b.) valid
fide Fall 28-80
7076 = 7089
20908. mexicanus Gorb. 85-284
Ariz.
20909. falli Hopping 29-252 B.C.

Cantharis

7100. mandibularis Kby. (= nigrifulus
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. 25-266 B. C.

Pseudebaeus

7279. ab. nigroapicalis Hatch 27-367

Trichocheilus

20918. kernensis Blais. 26-9 Cal.
20919. reticulicollis Blais. 26-10
Cal.
20920. vicinus Blais. 26-11 Cal.
20921. muiroi 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 7493 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. mimia Wolc. 28-211 Ariz.
 20948. liebecki Wolc. 28-211 N. J.
Erolestus Wolc. 27-109
 20949. cleroides 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 sub-families Hydnocerinæ, Thaneroclerinæ, Priocerinæ, Corynetinæ, Tillinæ, Orthopleurinæ, Clerinæ, Enoplinæ, and Tarsosteninæ.

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

(*Pelecotoides* Cast.)

7947. *schaefferi* Rivnay 29-18
Tex.
nubilus ‡ Schffr. nec Gerst.

Macrosiagon

20952. *fernaldum* Rivnay 29-26
Cal.
7952c. *maritimum* Rivnay 29-33
Fla. Ala.
7954b. *horni* Rivnay 29-36 Tex. Cal.
7956a. *pulchrum* Rivnay 29-38
N. C.

Rhipiphorus

20953. *columbianus* Brown 30-89
B. C.
20954. *calopterus* Rivnay 29-45
Me.
20955. *neomexicanus* Rivnay 29-50
N. Mex.
20956. *nomiæ* Rivnay 29-51 Ala.
20957. *aurantus* Rivnay 29-55
Tex.
20958. *mutchleri* Rivnay 29-57
Nev.
20959. *iridescens* 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 Zonabrini, Henoini, and Lyttini), Meloinæ, Horiinæ, and Nemognathinæ (including the tribes Sitarini and Nemognathini).

MELOIDÆ

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

Macrobasis

19616. *murina* Lec. valid fide Chitt. 26-118
Me.-Man.

Epicauta

20960. *impressifrons* Van D. 28-262
Cal.
20961. *foxi* Van D. 29-127 Cal.

Lytta

20962. *nigrocyanæa* Van D. 29-129
Colo.
20963. *maculicollis* Van D. 29-130
Cal.

Tetraonyx

20964. *albipilosa*¹ Van D. 29-127
Tex.

Calospasta8121b. *perpulchra* Horn, fide Van D.
29-1278121c. *cyanea* Van D. 29-132 Cal.**Brachyspasta** Van D. 28-45120965. *wickhami* Van D. 28-452
Colo.**Gynaecomeloe**20966. *parvicollis* Van D. 28-450
Cal.**Meloe**20967. *californicus* Van D. 28-426
Cal. Wash.20968. *quadricollis*¹ Van D. 28-431
Cal.20969. *franciscanus* Van D. 28-437
Cal. Nev.**Meloe**S142b. *occidentalis* Van D. 28-422
Id. Colo.

Alta.

S149 = *americanus* Leach nec auct.

fide Van D. 30

americanus Van D. 28 et auct. =

S142 fide Van D. 30

impressus Van D. 28 = S142a fide
Van D. 30**Hornia***(Leonia* and *Leonidia* are synonyms,
fide Mickel 29)

S155. S154 is a synonym, fide Mickel 29

20970. *anthophoræ* Mickel 28-38, fide
Mickel 29 Colo.**Zonitidis**20971. *arizonica* Van D. 29-132
Ariz.**Tricrania**belongs in Sitarini, fide Parker and
Boving 24.**EURYSTETHIDÆ**Strand 26-74 prefers *Aegialatidæ* as family name, based on *Aegialitis*
Gistl. Naturgesch. Tierreichs XI (1848) not *Aegialites* || Mann.**PYTHIDÆ**

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

PYTHINÆThe subfamily Pythinæ includes
Priognathus, *Leontia*, *Trimito-*
merus with species as given in
1920 Cat. and the genus *Pytho*,
below.**Pytho**20972. *americanus* Kby.20973. *deplanatus* Mann19618. *fallax* SeidlitzS203. *niger* Kby.20974. *seidlitzii* Blair 25-211*niger* † Seid. 16-408.S205. *strictus* Lec.

S204 is not found in N. Am.

SALPINGINÆ**Sphaeriestes** Steph. 31-218

includes S211, S212, S213

Vincenzellus Reitt. 11-418

includes S214

Cariderus Muls. 59-46includes S217, with S215, S216, and
nitens as synonyms.**CONONOTINÆ****Cononotus**

includes S208, S209, S210, 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, *Pyrochroinae*,
Pedilinæ (= *Pedilidæ*), and *Ischaliinæ* for *Ischalia* Pascoe and *Eup-*
leurida 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 28-260 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 Pyrochroidæ.

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**

S543a. *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

S544a. *brevicollis* Melsh. fide Pic is a variety.

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

** This family is united with Cebrioidæ 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

S571a. oklahomensis Hatch
30-23 Okla.

Monocrepidius

20990. fuscus Blatch. 25-163 Fla.
planidiscus Fall 29-56 is syn.
fide Blatch. 30-28 Ga. Fla.
20991. ferruginosus Fall 29-54
Ariz.
20992. delicatus Fall 29-55 Ga.
20993. difformis Fall 29-56 Ariz.

Limonius

20994. semiæneus Lec. 53-432 is valid
fide Blatch. 30-28 Ga. Fla.

Athous

For synonymy see Méquignon,
Bull. Soc. Ent. France. 30-95

Ludius

S705. not American, fide Quirsfeld i. litt.
S783. carbo Lec. = lobatus Esch. 22-69,
fide VanDyke 24
S773. reverse synonymy
S775. appropinquans (Rand.) should
replace elegans (Kby.), fide Fall,
also Quirsfeld i. litt.
Quirsfeld considers
tinctus Lec. a good species.

Eanus Lec. 62-171

genus is valid, fide Brown 30-161;
species are:
SS04. decoratus Mann. Yukon-Que.
vagus Lec.
costalis Cand. nec Payk.
20995. subarcticus Brown 30-163
Que.
SS03. estriatus Lec. L. Sup.
20996. maculipennis Lec. 66-85
Lab. Que.
pictus Cand.
20997. albertanus Brown 30-165
Alta.

Hypnoidus

20998. extricatus Fall 26-191 Alas.

Drasterius

20999. debilis Lec. 84-5, and
Quirsfeld i. litt. Mich. N. H.
N. Y.

Ischiodontus

21000. granosus Fall 25-180 Fla.

Melanotus

21001. simulans Blatch. 27-140 Fla.
21002. obscuratus Blatch. 27-141
Fla.
21003. piceatus Blatch. 27-141 Fla.

Cardiophorus

21004. aptopoides Cand. 65-40
fide Benedict i. litt. Ariz.

Aptopus

21005. lateralis spadiceus Cand. 93-176
fide Benedict i. litt. Ariz.

MELASIDÆ

Schenkling 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, Phacnoceris, Stethon, Deltometopus, Dromaeolus, Fornax); 3 Dirhaginae (Arhipis, Entomophthalmus, Dirhagus subgen. Hyporhagus*, Rhagomicrus, Adelothyreus); 4 Melasinae (Isorhipis, Melasis, Eurypytychus, Epiphanis, Palaeoxenis, Schizophilus, Hylis, Xylophilus, Hylachares, Sarpedon, Nematodes). He does not include Perothopinae in the family Melasidæ.

* This subgeneric name is a synonym of Hyporhagus 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.

Hylis Gozis 86-21 replaces Hypocælus

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. cœrulans 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. gila¹ Knull 30-16 Ariz.
 21016. confusa Fisher 25-41
 cubæcola‡ Kerr.
 9220. marginotata 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. 19633 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.

Ptosima

- 9291a. *schæfferi* 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.

Dicerca

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.

Hesperohipis 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
 ? *knulli* 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
teneogaster adding besides the six
 above cited, and *ærisa*
 Crotch. We are unwilling to accept
 such recognition until verified.

Agrilaxia

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

Chrysobothris

21030. *fragariae* 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 Knull 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. *baboquivoriæ* Fisher 28-184
Ariz.
21046. *lautuellus* Fisher 28-202
Tex.
21047. *pubifrons* Fisher 28-237
Idaho
21048. *mimosæ*¹ Fisher 28-241 Tex.
21049. *chiricahuæ* Fisher 28-243
Ariz.
21050. *æneocephalus* 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
Knull 25-469 Tex. Ohio
21068. *duncani* Knull 29-270 Ariz.
21069. *fisheriana* n.n. Knull 30-3
Ariz.
- fisheri*||Knull 29-271
21070. *parafloridanus* Knull 29-272
Fla.
21071. *trichocarpæ* Chamberlin 29-112
Or. B. C. Cal.
21072. *manzanitæ* Chamberlin 29-113
Oreg.
19669. cf. Nylén 29-219
- Pachyschelus**
- 9565b. *nicolayi* Obenb. 25-103 Ark.
- ? *biimpressa* Mots. 59-54, Tenn.
- ? *oblongus* Mots. 59-54 Tenn.
- fide Obenb. 25-96
- fide Obenb. 25-96
- 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.

- The Dryopoidea will include the following families:
Laridæ*, formerly Potamophilini.
Dryopidæ, including Dryopini, Helmini*, and Ancyronychini.
Chelonaridæ.
Ptilodactylidæ, including Ptilodactylinæ, Eurypogon*, and Anchyrtarsini.
Psephenidæ, including Psephenus and Eubrianax.
- The Dascilloidea will include the following families:
Heteroceridæ.
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."

- 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 Eurypogonidæ respectively.

DRYOPIDÆ

LARINÆ

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

21077. *castanipennis* Fall 25-177

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. *arizonica*¹ Brown 30-90 Ariz.

21083. *thermarum* Darl. 28-5 Oreg.

21084. *koebelei* Martin 27-68 Wash.
 9628=9619, fide Fall 25-180

Limnius

21085. *trivittatus*¹ Brown 30-91

21086. *subarcticus* Brown 30-241 Que.

21086. *subarcticus* Brown 30-241 Que.

PTILODACTYLIDÆ

Ptilodactyla

21087. *equilobata* Chapin 27-245

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

21092. *rubricollis* Pic 27-34 B.C.

21092. *rubricollis* Pic 27-34 Cal.

BYTURIDÆ

The genus *Byturus* is found on larval characters to belong nearer to the Anthicidæ than the Dermestidæ and is separable as a family. The Dermestidæ are divided into two subfamilies, Dermestinæ and Attageninæ. The genus *Thylotrias* is apparently included in the latter.

OSTOMATIDÆ

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

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 Silvanicæ and Hemiteplidæ, which have been shown by Böving and Arrow respectively to be distinct. We therefore retain the family name.

Monotoma

21096. *avara* Blatch. 28-65 Fla.
10160 is a synonym of 10159,
fide Hetschko
21097. *corpulenta* Mots. 68-200,
fide Hetschko La.
21098. *fulvipennis* Mots, 68-199,
fide Hetschko N. Am.
quadrioveata 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

Hypocoprus

10193. This genus is treated by Hetschko
as a tribe in Cucujidæ, and the
name of the species is given as
tenuis Csy.,
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 <i>Brontes</i> Fab.	Uleiota
10273. <i>denticulata</i> Smith 51-14 is added as a synonym	10194. 10195 and 10196 are only varieties.
10243. <i>testaceus</i> Csy. nec Fab. 84-87 is added as a synonym	21107. <i>Cathartus quadricollis</i> Guer. is valid Cosm.
21102. <i>testaceus</i> Fab. is valid Cosm.	10201 and 10203 are synonyms of above
10261. = <i>minutus</i> Oliv.	Monanus Sharp 79-85 (to follow <i>Planis-</i> <i>mus</i>)
21103. <i>puberulus</i> Lec. is valid	21108. <i>concinulus</i> Walk. 58-207 Cosm.
21104. <i>pusillimus</i> Mann. is valid Aleut. Alas.	Læmophilocus
21105. <i>gilæ</i> Csy. is valid but belongs in <i>Silvanus</i>	Key to species, Park 29-433.
21106. <i>unidentatus</i> Fab. 92-232 Cosm.	

HEMIPEPLIDÆ

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

LANGURIIDÆ

Lewis 84; Arrow 25, 29; Schenkling 28.

Languria

- 10279a. *ab. puncticollis* Say
21109. *interstitialis* Csy., valid
fide Schenkling
10287 transferred to *Acropteroxys*

Hapalips

belongs in *Languriidæ*,
fide Arrow 29-318.

Acropteroxys

21110. *thoracina* Csy., valid
fide Schenkling
10294 a, *ab. of 10292*,
fide Schenkling
obscura Mots, *ab. of 10292*,
fide Schenkling

BIPHYLLIDÆ

Arrow 29-306

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

CRYPTOPHAGIDÆ

Pharaxonotha

21111. *zamiæ* 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).

Nanunaria Reitt. 82-114

(*Coxclus* ‡ Horn nec Latr.)

Rhagodera

- 21115.
- laticeps*
- Blais. 25-326 San Benito Is.

Myrmecoxenus

10521. transferred from Mycetophagidæ
-
- and spelling changed.

Nematidium

- 10581.
- filiforme*
- Lec. is correct name for
-
- our species,
- mustela*
- Pascoe being
-
- a synonym of
- cylindricum*
- Fab.
-
- from South America.

Bitoma

- 21116.
- paradisea*
- Blatch. 30-32 Fla.

- 21117.
- cremata*
- Fab. 75-69,

fide Cooper 30-21 occurs on
L. I.

Colydium

- 21118.
- bicoloratum*
- Blatch. 25-165
-
- Fla.

MURMIDIINÆ

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*.

EUXESTINÆ

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.
-
- armatulus*
- Fall is synonym,
-
- fide Fall 26
-
- 21119.
- carinifer*
- n.n. Fall 26-197
-
- costicollis*
- ‡ Fall nec Lec.

Corticaria

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

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.

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

21124. *vicinus* Guill. 94-292 Mich.Mo.
21124a. *subsulcatus* Guill. 94-292
Mich.Mo.
21125. *propinquus* Guill. 94-293
Kan.
21126. *americanus* Guill. 94-294
Mich.

Olibrus

10778. *caseyi* n.n. Hetschko 28-142
egenus||Csy. nec Guill.
piceus Boh. 58-38 (Eugen. Reise)
Cal.(?)

Tinodemus Guill. 94-300

21127. *grouvellei* Guill. 94-302 Mich.

Stilbus

21128. *atomarius* L. 67-574,
fide Leonard N. Y. State List
N.Y.

Gorginus Guill. 94-283

(*Erythrolitus* Csy.)
10867. *rubens* (Lec.)

COCCINELLIDÆ*

Hyperaspis

21129. *pluto* Fall 25-311 Cal.
21130. *jovialis* Fall 25-311 Cal.

Scymnus

21131. *pellio* Blatch. 27-142 Fla.
11028. *melsheimeri* n.n. Weise 29-33
for *collaris* Melsh. nec Herbst
11047. *sanctus* n.n. Weise 29-33
for *decipiens* Csy. nec Weise
11084. *nevadensis* n.n. Weise 29-33
for *innocuus* Csy. nec Boh.
11085. *indianensis* n.n. Weise 29-33
for *rusticus* Csy. nec Weise
11092. *georgei* n.n. Weise 29-33
for *bisignatus* Horn nec Boh.

Scymnus

11115a. *caseyanus* n.n.
for *brunnescens* Csy. nec Mots.
caseyi||Weise 29-33 nec Berthes
11120. *lunaris* n.n. Weise 29-33
for *stigma* Csy. nec Weise

Delphastus

19760. removed to *Scymnillodes*,
Chapin 30-493.

Psyllobora

11150 b, is a valid species.
fide Blatch. 30-38

Adalia

11193a. *schuetti* Park 29-4 Iowa

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. santaclaræ 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. prætermisus Fall 26-199 Mass.-Yukon
? mexicanus Reit. 77-191, fide Blatch. 30 Fla.

Cœloenemis

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.
(*Emmesa*)
21156. testacea VanD. 28-252 Cal.
(*Neocmmesa* 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.

Osphyra

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.

** Included in Pythidae by Seidlitz.

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*(Prostephanus)*

21164. apax Lesne 30-102 Ariz.

Dinapate12923. See Fenyès, 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 Psoini, 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, Cleridæ; the second to the Cucujoidea. "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 Cucujoidea, with Schwarz and Barber, 1914, p. 177, as authority, but adds in a footnote, "il faut bien leur donner une place."

SCARABÆIDÆ

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 Scarabæoidea 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

21166. 13038a is a valid species,
fide Blatch. 28-68

Pinotus

21167. spadiceus Leuderwaldt 28-65
Va.

Phanaeus

13072. See Barber 28-383 regarding
nomenclature

Onthophagus

19946. aciculatus n.n.
Blatch. 28-128 for alutaceus ||
21168. oklahomensis Brown 27-128
Okla. Tex. Fla. N.C.
21169. knausi Brown 27-130 Kan. Neb.
21170. cynomisi Brown 27-131 Okla.
21171. cochisus Brown 27-132
Ariz.
13085. floridanus Blatch. 28-128 n.n.
for nigrescens ||
21172. blatchleyi Brown 29-86 Fla.
13081. medorensis Brown 29-204
Okla. Tex.
guatemalensis † Schffr. nec Bates

Aegialia

13105a. insularis Brown 29-87 Q. C. Is.
21173. arenaria (Fab.) 87-11
fide Darlington 27-98 Mass.
21174. lacustris Lec. 50-225,
fide Darlington 27-98 Me. N. H.

Aphodius

21175. subterraneus (L.) 58-348
fide Schott. 26-17 N. J.
13123. = tenellus Say, fide Brown 30,
putridus not in N. Am.
13195a. awemeanus Brown 28-306
Man.
21176. wickhami Brown 28-301
Colo.
21177. manitobensis Brown 28-302
Man.
21178. haywardi Brown 28-303
Colo.
21179. hirsutus Brown 28-303
Wash.
21180. albertanus Brown 28-304
Alta.
21181. fimbripes Brown 28-305
Ut.
21182. errans Brown 30-243 Que.
21183. edmontonus Brown 29-87
Alta.

Aphodius

21184. bryanti Brown 29-88 Alta.
21185. carri Brown 29-89 Alta.
21186. pyriformis Brown 29-205
Nev.
21187. corruptor Brown 29-206
Alta.-B. C.
21188. anomaliceps Brown 29-207
N. Mex.
21189. dentigerulus Brown 29-208
Okla.
21190. snowi Brown 29-209 Ariz.-Colo.
13186. = aleutus (Esch.) 22-27
fide Fall 26
21191. gravis Fall 27-137 Cal.
21192. davisii Fall 30-73 Cal.
21193. neodistinctus Brown 28-89
Okla.
13145. = 13146, fide R.Hopp. 28-6
13109b. garmani Brown 29-227
Wyom.
21194. pingellus Brown 29-228
Colo.-B. C.
21195. omissus Lec. is valid,
fide Brown 29-224
21195a. torpidus Horn,
fide Brown 29-224
21196. hyperboreus Lec. is valid,
fide Brown 29-224
angularis Lec. is syn.,
fide Brown 29-224
21197. pinguis Hald. is valid,
fide Brown 29-224
13108 is syn., fide Brown 29-224
13109a = 13109, fide Brown 29-224
21198. smithi Brown 30-2 B. C.
21199. cynomysi Brown 27-166
Okla.
21200. cavidomus Brown 27-167
Okla.
21201. martini VanD. 28-153 Cal.
21202. slevini VanD. 28-155 Cal.
(*Platyderides*)
includes 13151-13158, 13160,
13167, 13181, 19947
21203. russeus Brown 28-14 Okla. Kan.
21204. aquilonarius¹ Brown 28-16
Sask.
21205. thomomysi Brown 28-17
Man.
21206. insolitus Brown 28-18 Okla.
21207. criddlei Brown 28-19
Man. Alta. Sask.
21208. punctissimus Brown 28-35
Okla.

Aphodius

21209. oklahomensis Brown 28-36
Okla.
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. saluator¹ 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
Okla.
21224. cribratus 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. puncticolis Brown 29-91
Ont.
21229. neglectus Brown 29-92 Okla. Colo.

Ochodæus

13272 = 13259, fide Brown 30-4

Odontæus

21230. falli Wallis 28-151 Man.
21231. thoracicornis 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.

Bolhocerosoma

21237. lepidissimum Brown 28-193
Okla.
21238. confusum Brown 28-194
Okla. Ark. Ia.
21239. hamatum Brown 29-213
Ga.

Geotrupes

Nylen 29-219 reports a single
specimen of *G. sylvaticus* from
Rhode Island.

Acoma

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. austriicola 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. deani Luginbill 28-78 S.C.
21255. lota Luginbill 28-87 S.C.

Phytalus

21256. vanalleri Schffr. 27-215
Ala. Tenn.
Gronocerus Schffr. 27-213
21257. autumnalis Schffr. 27-213
Ala.

Polyphylla

- 13595, 13598, 13605, 13607,
13610, 13612, 13614, 13615,
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.

Thyce

13628. Delete locality N. Mex.
13645. belongs in *Thyce*

Dinacoma

21260. caseyi Blais. 30-174 Cal.

Diebelonyx

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)

Strigoderrella

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.



Ligyris

21265. *laevicollis* Bates 88-316,
fide Blatch. 28-49 Fla.

Strategus

13896a. *houstonensis* Knaus 25-182
Tex.

Cotinis

13931. *ab. brunnea* Hatch 30-25
Okla. Ind.

Euphoria

13936 is a var. of 13937,
fide Brown 30-5

LUCANIDÆ

Van Dyke 28

Platycerus

21266. *æneus* 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.

Tetropitum

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.

Oeme

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.

Eumichthus

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

Idlipidonia S. and H. 28-19 *

14534. *pedalis* Lec. (genotype)

Grammoptera Serv. 35-215 *

(*Parallelina* Csy.)
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.

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

Leptura *

21281. anthracina Lec. 75-175 is valid
Oreg.
subcostata Fall synonym,
fide S. and H., 28-26 Cal.
14481, 14475, 14486, 14482, 14487,
14474, 14471, belong here
14483 = 14482.
14478 and 14479 = 14474
14480, 14470, 14473 and
14472 = 14471
14488 and 14465 belong here

Typocerus *

21282. manitobensis¹ S. and H. 28-35
Man.
14545 = 14544
14542 = ? lunata Fab.
14547 = 14546
20080 = 14551
21283. deceptus Knull 29-144 Pa.

Charisalia *

14464 transferred to *Alosterna*

Anoplodera Muls. 40-285 *

(*Judolia* Muls.)
(*Ortholeptura* Csy.)
(*Brachyleptura* Csy.)
(*Strangalepta* Csy.)
(*Nestoleptura* Csy.)
(*Strophiona* Csy.)

14517, 14536, 14516, 14527,
14528 and 14431 belong here
14452, 14518, 20072 = 14516
14529 = 14527

21284. 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
21285. 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
21286. 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. = 14469
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
21287. 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 *Leptu-
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.

Plinthocælium Schmidt 24-382
includes 14599, 14600, 14602, 14604
14599b. smaragdinoides Schmidt 24-384
Tex.**Schwarzerion** Schmidt 24-387
includes 14603**Anacomis**

14614d. thujæ VanD. 27-103 B. C.

Callidium21288. vancouverense VanD. 27-104
B. C.

21289. pallidum VanD. 28-111 Cal.

21290. hardyi VanD. 28-112 B. C.

Phymatodes21291. 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. 27-10621295. 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. nigriventris 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.**Synaphata**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

Ataxia21321. 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. Flav. 27-64

ferruginea || Csy.

* 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 Bruchidæ (Mylabridæ) and Chrysomelidæ as a series, Chrysomeloidea. Within that series, on larval characters, the subfamilies of Chrysomelidæ heretofore recognized would become families, Sagrinæ becoming Sagridæ, Donaciinæ Donaciidæ, etc. In the Orsodacnidae two subfamilies, Orsodacninae and Zeugophorinae are indicated as required. The present subfamilies Chlamydinae, Clytrinae, Cryptocephalinae, and Lamprosominae, become components of a family Camptosomatidæ. In the family Galerucidæ the subfamilies Galerucinae, Diabroticinae (formerly the tribe Diabroticini) and Halticinae are provisionally assembled; but it is stated that "when better studied, the classification of the entire family Galerucidæ 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. *militaris* Lacord. Mass.-Fla.
floridæ Leng (15197)
 15202. *piscatrix* Lacord.
carolina Lacord.
cuprea Melsh.
alutacea Lec.
 15202a. *congener* Lec. Ga.Tex.
 15199. *palmata* Oliv.
claudicans Germ.
 21326. *texana* Cr. Tex.La.Fla.
 21326a. *minor* Schffr. 25-72 Mich.-Tex.
 15201. *rufescens* Lacord.
 15200. *hypoleuca* Lacord
 20161. *edentata* Schffr.
 20160. *parvidens* Schffr.
 21327. *cincticornis* Newm. (15198 a)
lucida Lacord.
 21327a. *tryphera* Schffr. 25-81 N.J. Mex.
 21327b. *tenuis* Schffr. 25-82 N.C. Fla. Mich.
 21327c. *rufipennis* Lacord. Can.-Va.
pulchella Lec.
 15198. *proxima* Kby.
 15198d. *californica* Lec. Cal.-B.C.
 21328. *cærulea* Oliv. N.Y.-Md.
episcopalis Lacord (15198 c.)
 21329. *magnifica* Lec. (15198 b.) Can.-Colo.
 15194. *hirticollis* Kby.
rudicollis Lacord.

Donacia

15196. *pubescens* Lec.
 21330. *quadricollis* Say N.Y.-H.B.T.
cupræa Kby.
curticollis Knab (15204)
 15206. *rugosa* Lec.
 20162. *assimilis* Lacord. N.J. Md.
glabrata Schffr.
 21331. *biimpressa* Melsh. Can. Fla.
aurichalcea Melsh.
torosa Lec. (15212)
distincta Leng
 21331a. *limonia* Schffr. 25-100 N.Y.-Mich.
 15207. *porosicollis* Lacord.
 15211. *distincta* Lec.
 15203. *subtilis* Kunze
ænea Ahrens
confluenta Say
æqualis Kby.
ærea Lacord.
confluens Lec.
 15203a. *fulgens* Lec. N.Y.-H.B.T.
 20164. *tuberculifrons* Schffr.
 21332. *vicina* Lacord. Ala.
 20163. *liebecki* Schffr.
pallipes Lacord.
 15205. *megacornis* Blatch.
megalocera Weise
 15209. *æqualis* Say
confusa Lacord.
dissimilis Schffr. 25-115 Fla.
 15218. *rufa* Say
tuberculata Lacord. (15210)
rutila Melsh.
 15195. *pubicollis* 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 Newm.
 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. *allicula* Fall 27-383 L.Cal.

Saxinis

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

Chlamys

- (*Boloschysis* 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. = *mæstifica* Lac.

Monachusulus

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 30-214

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.
 purpurescens 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.
 ? cochleariæ 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.
 huachucae Hatch 28-62 Ariz.

Gastroidea

- (*Gastrophysa* Redt.)
 21363. formosa (Say) is valid,
 fide Schffr. 28-45
 15765 = *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. pallida Blake 27-27 Tex. Okla.
 21368. amplivittata Blake 27-24
 N.Am.(U.S.?)
 21369. spilonota B.ake 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
 limbalis 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* Csy.) 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. nigra¹ 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 1911 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,
Schæffer 24-145, Chittenden 25-120,
the helixes of Linné is question-
able or unrecognizable. The ar-
rangement of names, fide Chitten-
den, is
fulvicornis (Fab.) 92-30
Eur. N.Am.
subsp. nana Say
subsp. violacea Melsh.

Crepidodera

21382. solani Blatch. 25-167 Fla.
Leptotrichaltica Heikertinger 25-68
(*Leptotrix* Horn nec Meyer 1868)

Chætocnema

21383. parvula¹ 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)
menthæ (Bedel) 98-189
menthæ || 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. armoraciæ (Koch) 63-75
† Eur. Que.-Neb.
vittata Steph. 31-297

- 16075a. biplagiata¹ 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. vernicosa¹ Chitt. 27-25
Cal.

- 16066e. artivittata¹ Chitt. 27-26 Ia.

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

21391. alberta Chitt. 27-28 Alta.

21392. perspicua¹ Chitt. 27-29 Oreg.

Phyllotreta

21393. obtusa¹ 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. amplicornis¹ 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. corusca¹ 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. transversovalis¹ 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. polita 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.

- Cal.

- Cal.

Brachycoryna

21410. dolorosa VanD. 25-170 Cal.

16117. = hardyi Cr. fide VanD. 25

- Cal.

Microrhopala

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

- Cal.

Chefymorpha

21411. phytophagica Cr. 73-77 is valid
Ariz.

- Ariz.

Physonota

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

- 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. | 21415. <i>lodingi</i> Schffr. 25-236 Ala. |
| Metrona | Coptocycla |
| 16157b. <i>floridana</i> Schffr. 25-235 | 21416. <i>pinicola</i> Schffr. 25-235 Ala. |
| Fla. | |

MYLABRIDÆ

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

- | | |
|--|---|
| Caryobruchus Bridwell 29-148 | Spermophagus |
| New genus proposed for 16163 and 16164 | cf. Bridwell 30-29 on status of robinæ Fab. |
| Mylabris | |
| 21417. <i>wheelocki</i> Blatch. 30-35 | |
| Fla. | |
| 21418. <i>prolixus</i> Fall 26-204 | Alas. |

BRENTIDÆ

Kleine 27.

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

PLATYSTOMIDÆ

(ANTHRIBIDÆ) (CHORAGIDÆ)

This family is treated under the name Choragidæ 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 Anthribidæ, 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 | Eusphyrus |
| (<i>Ischnocerus</i> Schön.) | 21425. <i>schwarzi</i> Pierce 30-28 Fla. |
| 21419. <i>angulata</i> Martin 30-71 Ariz. | Discotenes Labram and Imhoff 38-51, fide Pierce |
| | (<i>Phanosolcna</i> Schffr.) |
| Toxotropis Key, Pierce 30 | Ormiscus |
| (<i>Gonops</i> Lec.) fide Pierce | 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. <i>4-maculatus</i> Pierce 30-9 | 21428. <i>latifascia</i> Pierce 30-17 N.Y. Ont. |
| Fla.-D.C. | 21429. <i>bicarinatus</i> ¹ Pierce 30-17 |
| 21423. <i>mittelli</i> Pierce 30-10 T x. | Wash. |
| 21424. <i>victoriensis</i> Pierce 30-11 | 21430. <i>tricarinatus</i> Pierce 30-17 |
| Tex. | N.C.-Wis. |

Tropideres

21431. *barberi* Pierce 30-13 Tex.
 Allandrus Key, Barber 30
 21432. *populi* Pierce 30-19
 Ariz. Ut. Id. Mich.

Piezocorynus Key, Buchanan 30

16288. = *plagifer* Jordan 04-277,
 fide Pierce

Pseudanthribus Pierce 30-24

(*Anthribus* Geoff.)

Brachytarsus

21433. *annulatus* Carr 30-279 Alta.

Brachytarsoides Pierce 30-29

n. gen. for 16310 and others

Euxenus

21434. *ater*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 larvæ of Curculionidæ and Scolytidæ "cannot be separated." The submerged larvæ of Lissorhoptrus, living between the leaves of rice, lead to their separation as a subfamily Lissorhoptrinae. The families suggested are Belidæ, Brentidæ, Attelabidæ (including Rhynchitinae = Cimberinae and Attelabinae) 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; Cresby and Blauvelt 30; Mutchler 30; Bradley 30.

Diodyrhynchus (in subfamily Cimberinae,
fide Bradley 30-259)

21435. *slevini* Martin 30-130 Cal.

Rhynchites

21436. *quadripennis* Fall 29-292
 Tex.
 21437. *delectus* Fall 29-292 So. Cal.
 16357a. *levirostris*¹ Fall 29-293
 Cal.
 21438. *insularis* Fall 29-293 Cal. Is.

Attelabus

(*Himatolabus*)

21439. *constrictipennis* Chitt. 26-163
 Ariz.
 21440. *disparipes* Chitt. 26-164 Ariz.
 21441. *coloradoensis* Voss 25-244
 So. Colo.

(*Pilolabus*)

21442. *californicus* 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. *alaskanum* Fall 26-205 Alas.
 21444. *dilaticolle* Fall 25-85 N.J.
 21445. *bischoffi* Fall 25-86 N.Y. N.J. Va.
atripes† Fall, 98 nec. Smith

Apion

21446. *diffractum* Fall. 25-87 N.J. Mass. Id.
 21447. *speculiferum* Fall 27-140
 Alta.
 21448. *cyanitinctum* Fall 27-141
 Man.

Eupagoderes

21449. *giganteus* Chitt. 26-169 Cal.

Dichoxenus

16548 belongs here,
 fide Buchanan 27-184

Calomycterus

21450. *setarius* Roelofs 73-175,
 fide Mutchler 30-1 N.Y.

Panscopus Key, Buchanan 27

(*Nomidus*)

21451. *schwarzi* Buch. 27-30 Ut.
 21452. *rugicollis*¹ Buch. 27-31 Wash.
 21453. *bufo*¹ Buch. 27-31 Cal.
 21454. *pallidus* Buch. 27-31
 B.C. Id. Mont.
 21455. *tricarinatus*¹ Buch. 27-32
 Oreg.
 (*Pseudopanscopus* Buch. 27-33)
 21456. *costatus*¹ Buch. 27-33 B.C.
 16575 = 16636, fide Buch.
 16584a = 16584, fide Buch.
 16586 = 16576, fide Buch.
 Panscopidius = 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. cribricollis Gyll. 34-582
fide VanD. 29-8 and Ryan 29-567
Cal.
- Agronus**
21467. carri Buch. 29-102 Alta.
- Eucilinus** (Simoini) Buch. 26-179
21468. mononychus Buch. 26-180
Ut. Ariz.
- Trichalophus**
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. tessellatus 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
- Smieronyx**
21488. minutissimus¹ Blatch. 28-244
Fla.
- Tanysphyrus**
21489. atra¹ Blatch. 28-244 Mass.
- Bagous**
21490. carinatus Blatch. 25-95 Fla.
- Myrmex**
(*Otidoccephalus*)
21491. ventralis¹ VanD. 30-151
Tex.
21492. dimidiatus¹ VanD. 30-152
Tex.
21493. octolineatus Champ. 03-242
fide VanD. 30-153 Ariz.
- Curculio** ** 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. caryæ 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.
21498a. mandibularis 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-griseæ 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.** *Curculio* nucum designated as type by Latreille 1810, fide Pierce Proc. Ent. Soc. Wash. 1925, pp. 113-114.

Cureulio

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. *exilis*¹ Chitt. 27-182 Can.

17166. *monticola* Csy. W.Tex. N.Mex.
21512. *crassirostris* Chitt. 27-184
Ariz.
21513. *aurivestis*¹ 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. *nubiloides* Fall 28-239 Me. and West
21519. *australis* Blatch. 25-98 Fla.
21520. *bicorostis* Blatch. 25-97
Fla.
- 17239a. *picipes*¹ Blatch. 28-249
Ill.
17267. *xantus* 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. *pusio*¹ Blatch. 28-250 Fla.
21527. *blakeæ* Chitt. 28-90 Cal.
21528. *albisetiger* Chitt. 30-2 Tex.
21529. *aspericollis* Chitt. 30-3 Kan.
21530. *coloradensis*¹ Chitt. 30-4
Colo.
21531. *perstriatus* Chitt. 30-5 Colo.
21532. *acirostris* Chitt. 30-6 N.C.
21533. *ordinatipennis*¹ Chitt. 30-7
La.
21534. *quadratipectatus*¹ Chitt. 30-8
Colo.
- 17425a. *profundus* Chitt. 30-9 Ga.-Tex.
21535. *crassipunctatus*¹ Chitt. 30-9
Ariz.
21536. *ivæ* Chitt. 30-10 La.
21537. *dissimilis* Chitt. 30-11 Ga.
21538. *tricrostus* Chitt. 30-12
N.Y. Ala. Kan.
21539. *planicollis* Chitt. 30-13 Ia. La.
21540. *pervestitus* Chitt. 30-14
Ariz. N.Mex.
21541. *flexipennis*¹ Chitt. 30-15
Ia.
21542. *buchanani*¹ Chitt. 30-16 Ia.
21543. *pluchææ* Chitt. 30-17 Tex.
- 17437a. *ocellatus* Chitt. 30-18 N.Y. N.J.
21544. *capitatus*¹ Chitt. 30-19 Md.
21545. *lodingi* Chitt. 30-20 Ala. Fla. La.
21546. *regularipennis* Chitt. 30-21
Ind. D.C. La.
21547. *cleonoides*¹ Chitt. 30-22 Tex.
21548. *mephitis*¹ Chitt. 30-23 S.C.
21549. *elephantulus*¹ Chitt. 30-24
Ill.

Baris

21550. *seminola*¹ Blatch. 28-251
Fla.
21551. *palmensis*¹ Blatch. 28-252
Fla.

Geræus

- (*Centrinaspis* Csy.) (type 17582)
21552. *argenteus* Blatch. 25-102 Ind.
21553. *bracatoides*¹ Blatch. 28-253
Fla.

Limnobaris

- (*Anacetrus* Csy.) (type 17622)
21554. *vicarius* Blatch. 28-254 Fla.
- (*Sibariops* Csy.) (type 17637)
21555. *pellax*¹ 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. hemizoniæ 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. æratus 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. martini¹ VanD. 30-163 Ariz.

Cophes Champ. 05-515

21578. gibbus Champ. 05-517,
 fide VanD. 30-164 Ariz.

Eusepeus

21579. deceptus¹ Blatch. 25-106 Fla.

Micralcinus

21580. kalmbachi Buch. 27-169 La.

Gerstæckeria

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.

Phlæophagus

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. sequoiæ VanD. 30-165 Cal.
 21590. multilineatus Satt. 25-269 Minn.
 21591. medorænsis Satt. 25-270 Kan.
 21592. elongata Roelfs., 75-187
 fide Cotton 27-93

SCOLYTIDÆ

Sphærosinus 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 Cælogaster 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. *aquillus* 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. *exiguus* 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. *solus*¹ 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 Cal.
 21645. *immanis* Blackm. 28-98
 Ariz. N.Mex.
 21646. *cascoënsis* 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. *secundus*¹ 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.

Hyllocurus

21680. *spadix* Blackm. 28-188 N.C. Pa.
 21681. *schwarzi* Blackm. 28-189 Tex.

Micracisella Blackm. 28-192*(Pseudomicracisella 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.
 (*Syncalosoma*) (*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
 cælator Csy.
 indigens Csy.
 pallax Csy. (206a)
 cogitans Csy. (18566)
 semicuprea Csy. (206b)
 (*Tapinothenes*)
 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. semilaeve 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)
 laquaetus 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. subaneum 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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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. *picolomini* is a good species.
fide Martin 32-111

Cal.

Cicindela

21690. *alata* Lilj. 32-215

Ill.

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.

Maronetus

21692. *unistriatus* 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.

Calosoma

The same method is used by Lapouge for *Calosoma*, which becomes subtribe *Callisomina*, divided into four genera and twelve subgenera. Of these *Isostenia* contains 210, *Lyperostenia* contains 198, *Paratropa* contains 177 and 178, *Acamegonia* contains 194; the remainder are nearly the same as in Breuning's arrangement given in Appendix to our second supplement. In the treatment of the specific 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 differ as to the status of many other names.

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

Nebria

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. beutenmülleri Jeannel 31-436
N.C.
21699. schwarzi Jeannel 31-437
N.C

Pseudanopthalmus

- 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.

Pseudanopthalmus

- 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. fulleri¹ Valentine 32-272
Tenn.
21715. alabamæ Valentine 32-273
Ala.
Horologion Valentine 32-2
21716. speokites¹ 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. plethorus 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 Licini

Dicaelus

21720. darlingtoni Fall. 32-19
Fla.

Calathus

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

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

Pristodactyla

- 1488b. brunnescens Mann. 52-204
Aleut.Is.
1488c. breviscula Mann. 52-204
Aleut.Is.

Laemostenus

1494 is removed to Aechmites
{Schauf. 65-SS

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.
(*Platynomicrus*)
Includes 1589, 18883
(*Oxyptolaphus*) 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 ex-
cept 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
(*Calocolliuris*)
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. *Pcr-*
sonocellus.

Lebia

1671. add syn. axillaris Lec. 48-193
Csiki in Col. Cat. pars 124 revives
chalcoptra 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
(*Aphlogenia*)
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.

Blechnus

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 sub-
genus

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

Chlænium

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 Csy. 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

Geopinus

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

Piosoma

- In subtribe Diorychi with
 Selenophorus, etc.

Nothopus

- In subtribe Euryderi (name
 Euryderus for genus)

Cratacanthus

- 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., oodioides 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, Har-
 tonymus, and Trichotichnus for
 2010, 2011, 2012, 2013, 19094.
 Selanalius Csy. and that author's
 subgenera are not recognized.

2015. iripennis Say is the name preferred.
 2020. schaefferi n.n. Csiki
 for angulatus || Csy. 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 Gynandrotar-
 us (= 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 Stilbolidus suppressed. Syn-
 onymy 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.

Trichoecellus

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

Bradycellus

The subtribe Bradycelli, fide Csiki,
 includes Trichoecellus, Bradycellus
 (with subgenera Triliarthrus, Cath-
 arellus, Stenocellus, Amerinus, and
 Liocellus (= Glycerius). He ap-
 pears to have been ignorant of
 Fall's remarks re Tachycellus 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, Steno-
 lophus, 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 Aniso-
 tarsi.

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 (19191) is a syn.
21727. deceptus n.n. Fall 32-145
for addendus Fall nec Cr.

2522. æquus Fall (19222) is a syn.
20775. brodei Gell. is a var. of 2486.
21728. barbaræ! 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 *

Oelthebius

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

Hydrochara Berthold 1827

The species 2793 to 2796 belong
here.

Tropisternus

21734. columbianus Brown 31-119
Vanc.

Enochrus

21735. collinus Brown 31-118 Que.

Cercyon

19287. kulzeri Knisch 22-97,
fide Blackwelder 31-19
californicus Fall 24-251

LEIODIDÆ

Hydnobius

21736. simulator Brown 32-6 B.C.

Leiodes

21737. validus Brown 32-202 Que.
21738. impersonata Brown 32-203
Que.

Leiodes

21739. bradorata Brown 32-204
Que.

21740. potens Brown 32-205 Que.

* 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.

Arthmius

21745. *morbus*¹ Fletcher 32-33
 Ariz.

Reichenbachia

21746. *snowi*¹ Fletcher 32-31 Ariz.
 21747. *ignobilis*¹ Fletcher 32-32 Ariz.
 21748. *gentilis*¹ Fletcher 32-33
 Cal.

Hamotus

- (*Hamotoides*)
 21749. *opimus* Fletcher 32-34 Fla.
 21750. *elongatus* Brend. 90-239
 Ariz.

MELYRIDÆ

Endeodes

21751. *insularis* Blackwelder 32-134
 Cal.
 21752. *rugiceps* Blackwelder 32-135
 Cal.

Malachius

21753. *californicus* Barrett 31-102
 Cal.

Trichocheilus

21754. *blackwelderi* Blais. 31-323
 Cal.
 21755. *varipes* Blais. 31-180 Cal.

Menovectura Blais. 31-181

21756. *serrulata* Blais. 31-182 Cal.

Listrus

21757. *inyoensis* Blais. 31-178 Cal.

Eschatocrepis

21758. *desertus* Blais. 31-329 Cal.

Allonyx

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 Newm.
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. cribricollis 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

- S539 and S540 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.
fuscus Blatch. 25-163
According to VanD. 32:
S605 is syn. of S604
S608 is syn. of S607
(*Heteroderes* Latr. 34-155)
S606 belongs here. fide VanD. 32.

Limonium

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

Limonium

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.
S620a. seminudus VanD. 32-348
Cal. Wash.
Id.
21785. ursinus VanD. 32-349 Colo.-Alta.
21786. kuschei VanD. 32-349 Cal.
21787. lanei VanD. 32-350 Wash.-Alta.
21788. beutenmuelleri VanD. 32-351
N.C.
according to VanD. 32:
S623 = var. of S648,
S628 = S627,
S638 = var. of S630
S644 = var. S647.
S651 = var. of S630,
S655 = S647,
Nothodes = Limonium,
Pheletes is a subgenus in Limonium,
S652 belong in Athous

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

Leptoschema

8656a. elegans VanD. 32-357 Cal.

Elathous Reit. 90-3178657 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.

8660a. carmeli VanD. 32-374 Cal.

8660b. 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

Ludius21798. uliginosus VanD. 32-408
Cal.21799. silvaticus VanD. 32-409
Cal.21800. applastoides 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. pygmæus 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. brunripes 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 *Ectamenogonus*)

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. bimauculatus 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

Megapenthes21820. 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. olympiæ VanD. 32-431 Cal.

Eanus

21824. granicollis VanD. 32-435 Wash.

Hypnoidus

(*Cryptohypnus*)

21825. glacialis VanD. 32-326 Mont. B.C.
 8831a. hirsutus VanD. 32-327 Utah
 8824 is syn. of 8825,
 fide VanD. 32

Paroedostethus VanD. 32-327

21826. relictus¹ VanD. 32-328 Cal.

Melanactes

21827. agrypnoides¹ VanD. 32-446 Ariz.

Sericus

21828. rugosus VanD. 32-452 Cal.

Agriotes

21829. cylindricus VanD. 32-447 Cal.

21830. bivittatus VanD. 32-448

Or.

21831. eriddelei VanD. 32-448 Man.-Wyo.

21832. porosus¹ VanD. 32-449 N.C.

21833. blaisdelli VanD. 32-450 Cal.
 8889 and 8890 are subsp. of 8888,
 fide VanD. 32

Ischiodontus

9009 belongs here

Anchastus

21834. subopacus VanD. 32-321 Cal.

9006a. corvus VanD. 32-322 Cal.

21835. ventralis VanD. 32-322 Ariz.
 (? = 9011a)

21836. arizonicus VanD. 32-323 Ariz.

According to VanD. 32:

9003 = 9004,

9008 = 9012,

regularis Mots. = 9004,

recedens Lec. = 9004,

hirsutulus Mots. = 9004,

pilifer Mots. = 9004,

Melanotus

9017a. franciscanus VanD. 32-332 Cal.

9056 and 9057 = 9017

Cardiophorus

21837. aptopoides Cand. 65-40
 fide Benedict 31-156 Ariz.

Aptopus

21838. lateralis Mexico

21838a. spadiceus Er. 40-331

fide Benedict i. litt. Ariz.

Heristonotus

21839. umbilicatus VanD. 32-329 Ariz.

21840. lutzi VanD. 32-331 Ariz.

MELASIDÆ

Hypocœlus

21841. californicus VanD. 32-292 Cal.

THROSCIDÆ

Drapetes

21842. cylindricus Fall 32-61 Ariz.

BUPRESTIDÆ

Acmaeodera

21843. carlota Fall 31-81 Ariz.

21844. lineipicta Fall 31-81 Ariz.

Glyptoscelimorpha

21845. viridis Chamberlin 31-47 Cal.

Melanophila

21846. arcuata Fall 31-83 Ariz.

Agrilaxia

19651. arizonæ Obenb. 22-180

var. arizonæ Chamberlin 26-46
 and 32-836

huachucae n.n. Obenb. 30-551.

Agrilus

21847. nodicornis¹ Fall 31-82 Ariz.

arbuti Fisher 28 (= manzanita
 Chamb. 29)

populi Fisher 28 (= trichocarpæ
 Chamb. 29)

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**Temnochila**

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**Ischyryus**

10301a. alabamæ Schffr. 31-175
Ala.

LATHRIDIIDÆ

Lathridius

21858. *laevior*! Brown 32-208 Que.

ENDOMYCHIDÆ

Epipocus

21859. *subcostatus* Gorh. Ariz.
fide Benedict 31-156

COCCINELLIDÆ

Korschevsky 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. 66-34.

Arawana is suppressed in *Chilocorus*.

Brunus is recognized as valid genus.

The taxonomic changes proposed by Korschevsky 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 *postpinctus*.

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 *fuscilabris* Muls. (= *strenua* Csy.), and *medialis* Csy. 99-76, as aberrations.

Adonia

11160. is treated as palæarctic.

Hippodamia

Korschefsky makes aberrations of all the unnumbered names, and adds *praticola* Muls. 50-125 as an ab. of 11173, and *racemosa* Muls. as an ab. of 11165 together with 19761.

11162. *tibialis* Say is treated as a good species.

Coccinella

The following is the arrangement of Dobzshansky 31:

11181. *trifasciata* L.
 perplexa Muls.
11181a. *eugenii* Muls.
11181b. *juliana* Muls. (= *barda* Lec.)
11181c. *subversa* Lec.
11183. *hieroglyphica* subsp. *tricuspis* Kby.
11183a. *humboldtiensis* Nun.
11184. *novemnotata* Hbst.
 var. *conjuncta* Fitch
 var. *confluenta* Fitch
11184a. *degener* Csy.
11184b. *franciscana* Muls.
11184d. *oregona* Csy.
11185. *transversoguttata* Fald.
 var. *quinquenotata* Kby.
 var. *transversalis* Muls.
11185b. *nugatoria* Muls.
21862. *prolongata* Cr.
21862a. *sequoiae* Dobz. 31-10. Cal.
21862b. *bridwellii* Nun.
21863. *californica* Mann.
 var. *melanocollis* Joh.
 var. *nevadica* Csy.
21864. *johnsoni* Csy.
11187. *nicicola* subsp. *monticola*.
11187d. *alutacea* Csy.
21865. *difficilis* Cr. (= *vandykei* Nun.)
21866. *suturalis* Csy.
11188. *undecimpunctata* L.
Korschefsky's arrangement makes aberrations of the unnumbered names in our catalogue with little discrimination, and adds *zetterstedti* Mader (*Evidenz pal. Cocc.* 1926 (1930) p. 151, pl. 28, fig. 35, as an ab. of 11185, occurring in Lapland and Canada.

Neoharmonia

This is treated as a subgenus of *Coccinella*.
11178 (= 11179).

Cycloneda

11189 (= 11189a).
11191. spelling changed to *ater*

Olla

11192. *binotata* Say 26-302 is cited as a synonym (erroneously ? compare 10879).

Adalia

Our unnumbered names are treated generally as aberrations.

- 11193a. *schuetti* Park 29-429 is a syn. of *sesquipunctata* Haw. 12-272 fide Mader 31-476

Cleis

Mulsant used this name twice, on page 135 and again on page 208, but corrected the error on page 1023 and in his "Table Méthodique." The substitution of *Mulsantina* Ws. 06-34 therefore seems unnecessary.

11196. *impictipennis* Ws. 95-125 is added as an ab.

Anatis

11202. The following, each described from a single specimen, are added as aberrations:
caseyi Westcott, Ent. News, xxiii, 1912, 422.
signaticollis Muls. 50-135.

Chilocorus

11217. *stigma* Say 35-202 is preferred to *bivulnerus* Muls.
Say's description is doubtfully valid. 11220a and 11220b are treated as synonyms.

Arawana

This genus is erroneously suppressed.

21867. *scapularis* Gorh. 94-178

Ariz.

Brumus

This genus is correctly recognized.

Epilachna

juncta Joh. is treated as aberration.

ALLECULIDÆ

Knausia Fall 31-15

21868. *crassicornis* Fall 31-16 N.Mex.

Hymenorus

21869. *distinctus* Fall 31-179 Miss. Ala.
Fla.

21870. *molestus*¹ Fall 31-182 Pa.

21871. *arkansanus* Fall 31-183

Ark.

21872. *dubius* Fall 31-184 Miss. Ala.

21873. *caurinus*¹ Fall 31-185 B.C.

21874. *ulomoides*¹ Fall 31-187 So. Cal.

Hymenorus

21875. *sinuatus*¹ Fall 31-187 B.C.

21875a. *ebeninus*¹ Fall 31-188 Cal.

21876. *macilentus*¹ Fall 31-188 N.Mex.

21877. *atratus*¹ Fall 31-189 Ariz.

21878. *illusus* Fall 31-193 Ala.

21879. *bitumescens*¹ Fall 31-194

Ariz.

21880. *protibialis* Fall 31-196 So. Cal.

21881. *cassus* Fall 31-197 L. Cal.

21882. *irritus* Fall 31-199 Cal. Ariz.

21883. *conformis* Fall 31-199 Tex.

21884. *vigilax*¹ Fall 31-200 Ariz.

Hymenorus

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. oblivius 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.

Hymenorus

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
 Melsh.)
 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. barbarae 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 11961h.
 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 lævipunctatus from Cent. & So. Amer.

PTINIDÆ**Plinus**

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

ANOBIIDÆ

Ernobius

21931. schedli Brown 32-9 Ont.

BOSTRICHIDÆ

Tetrapriocera

12872. synonymy should be reversed,
fide VanDyke

SCARABÆIDÆ

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

Phanaeus

19944 and 19945 belong here.

Aegialia

21932. convexa Fall 32-183 So. Cal.
 13102a. nigrella Brown 31-47 Cal.
 13102b. punctata Brown 31-47 Cal.
 (*Leptaegialia* Brown 31-12)
 21933. humeralis Brown 31-13 (genotype)
 Ont. N.H.
 N.Y.
 21934. montana Brown 31-14 B.C. Wyo.
 Colo.
 (*Anomalaegialia* 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.

Micraegialia Brown 31-11

13101. pusilla Horn. genotype

Aphodius

21939. testaceiventris Fall 32-185
 Kan.
 21940. incommunis¹ Fall 32-186
 B.C.
 21941. fortunus¹ Fall 32-187 Ariz.
 21942. claudus Fall 32-188 Tex.
 21943. crenicollis¹ Fall 32-189 Cal.
 21944. ruficlarus¹ 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.

Atenius

13216b. exiguus Brown 32-10 Fla.

Psammobius

21947. armaticeps Fall 32-190
 Fla. Ga.

Psammobius

21948. blandus¹ 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
Amphicomia.
 fide Chapin i litt.

Serica

21950. imitans Chapin 31-5 N.Y.
 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.
 brunnea¹ Schffr. 31-176,
 fide Sim 32-381

Diplotaxis

21961. mus¹ Fall 32-192 Ariz.
 21962. protensa Fall 32-193 N. Mex.
 21963. villosipes¹ Fall 32-193 Cal.
 21964. futilis¹ 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. contaminata¹ Fall 32-197
 L. Cal.
 21970. extranea¹ Fall 32-198 L. Cal.

Listrochelus

21971. plenus Fall 32-199 Ariz.
 21972. juvenilis Fall 32-200 Ariz.

Thyce

21973. bidentata Fall 32-201 Cal.
 13633 to 13637 are 13645,
 fide Fall 32

Dichelonyx

21974. deserta R. Hopp. 31-236
 Cal.

Dichelonyx

21975. columbiana R.Hopp. 31-236
 B.C.

21976. vandykei Saylor 32-284

Cal.

Pocalta*

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

(Liasemum Csy.)

Fide R. Hopping 31 the species
 14118 and 14119 are valid but not
 generically distinct from Asemum.
 All the species under Asemum are
 synonyms of 14112.

Vandykea Linsley 32-118

21979. tuberculata Linsley 32-118
 Cal.

Haplidus

21980. palpalis¹ Linsley 32-114
 Ariz.
 21981. antennatus Linsley 32-115
 Cal.
 14150 (= 20017),
 fide Linsley 32-114

Oeme

21982. rotundicollis Linsley 32-116
 Tex.

Eucrossus

- 14145 (= 20011) fide Linsley 32

Idoemea

This genus not distinct
 from Styloxus,
 fide Linsley 32

Methia

21983. fragilis Linsley 32-121 Cal.

Romaleum

- 14199 (= 14200), fide Schffr. 32-152

Pidonia

21981. quadrata R.Hopp. 31-233
 B.C.Vanc.

Anoplodera

21286. rubra L. (= planata S. & H.),
 fide R.Hopp. 32-72

Necydalis

21985. diversicollis¹ Schffr. 32-152
 Utah

Moliorchus

21986. eburneus Linsley 31-37
 Cal.

Poecilobrium

21987. gibsoni R.Hopp. 31-234
 B.C.

Anacomis

- 14614b (= 14614d), fide R.Hopp. 31

Clytini, fide G. R. Hopping 32:

Megacyllene suppressed in Cyllene

- 14691 (= 14690, 14689,
 14686, 14687, and 14688)

- 14680 (= 14681, 14682)

- 14691c is a good sp. N.B. Me.,
 N.Y. Pa.

- 14699 (= 14700)

- 14726 (= 20110, 20111)

- 14711 (= 14711a, 14710)

- 14708 (= 14709)

- 14705 (= 14706)

- 14728 (= 14729), and goes in
 Clytus

- 14730 (= 14731, 14732)

- 14734 (= 14735)

- 14736 (= 14737, 14738)

Rhopalopachys suppressed in
 Neoclytus

Microclytus and Cyrtophorus
 excluded

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.

CHRYSOMELIDÆ

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

21991. apicedens¹ Fall 32-22 So. Cal.
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

21364c. 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. neoscotiæ 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. bacharidis is correct name,
fide Blake 31

Derospidea Blake 31-32

15725 (genotype) and 15739,
fide Blake 31

Coroia 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

Homophæta

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

Desonycha

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 Lec. Kan. W. St.
20204a. (= 20205)
21375. uniguttata Say (= 15895b)
22017. procera Csy. (= pallipes‡ Blake)

Haltica

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

Devocrepis Weise 86-730

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 *Chrysomea*, and *Chrysomea* 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, Amblygerinæ, Kytorhininæ (for 21418), and Eubaptinæ (not N. Am.).

PLATYSTOMIDÆ

(Anthribidæ) Jordan 31-281

Brachytarsus

22025. franseria Barrett 31-188
Cal.

CURCULIONIDÆ *

Auletes

22026. mariposæ Zimm. 32-181
Cal.

Rhynchites **

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

Coenorhinus 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
(*Psclaphorhynchites* **
Schilsky 03-H.)
16357 16360, 16361
micans 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

Steremnius Schon. 36-242

(*Pavaplithus* Faust).
22023. tuberosus Boh. 36-243,
fide Marshall 32-355 Alas.

Hylobius

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

Helipus (nec Heilipus)

16877. reverse synonymy.

Myrmex

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

Tachyptereilus

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

Curculio

17161 (= 21509), fide Col. Cat. 122
harokli is not N.Am.,
fide Col. Cat. 122
?. coccinæ 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 Eremninae includes 16499-16500; the subfamily Leptopinae includes 16501-16592; the subfamily Cylindrorrhinae includes 16772-16838; the subfamily Hylobiinae includes 16870-16880, 18908-18912 and 17441-17442.

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

The subfamily Hylobiinae is divided into the four tribes: Hylobiini, Liparini, Anthonini, 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 *Litodaetylus* Redt.,
 fide Brown 32-11
 (*Eubrychiopsis*)
 22035. *albertanus* Brown 32-11
 Alta.

SCOLYTIDÆ**Phæosinus**

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. *agrifoliæ* 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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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

Pterostichus Bon.	Carabites Heer	
fernquisti Wickh. 31-318	Wash. Mioc. russelli Ckll. 28-37	Dak. Cret.

DYTISCIDÆ

Dytiscus , L.	
latahensis Wickh. 31-318	Wash. Mioc.

GYRINIDÆ

Protogyrininus Hatch 27a-92	
confinis (Scudd.) 00a-80, nec. Lec.	
= sculpturatus (Mjöh.).	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 Wickh. 29-148	Tenn. Eoc.

TENEBRIONIDÆ

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

MELANDRYIDÆ

Siipha colorata Scudd. belongs here, according to Hatch 27b-369.
Compared with *Emmesa 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.

CHRYSOMELIDÆ**Donacia** Fab.

connelli Ckll. 27b-304 Vanc. Pleist.

CURCULIONIDÆ**Otiorhynchites** Fritsch

wilcoxianus 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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