











GOLIATHUS PRINCEPS, Hope.

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THE

COLEOPTERIST'S MANUAL,

CONTAINING THE

LAMELLICORN INSECTS

OF

LINNEUS AND FABRICIUS.

der BY THE

REV. F. W. HOPE, F.R.S. F.L.S. F.Z.S.

ETC. ETC.

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THE REV. WILLIAM KIRBY, M.A.

Monorary President

OF THE

ENTOMOLOGICAL SOCIETY,

F.R.S. F.L.S. F.G.S. ETC.

My DEAR SIR,

In an humble attempt to facilitate the acquirement of a knowledge of that interesting and important science which your philosophical and practical researches have so much tended to illustrate and dignify, not less to the glory of God, than to the benefit of man; I assure myself I shall at least secure your sympathy in my efforts, whatever opinion you may entertain of their possible success.

Trusting that many years may yet be vouchsafed to you, in further prolongation of so long and useful a life,

Believe me to be,

Your's, very sincerely,

F. W. HOPE.

Shortly will be published,

THE

FIRST FASCICULUS OF THE COLEOPTEROUS FAUNA OF NEW HOLLAND.

BY THE

REV. F. W. HOPE, F.R.S. F.L.S. F.Z.S. &c. &c.

PREFACE.

THE origin of this attempt at a Classification of the Lamellicorns, may probably be traced to my interleaved copies of the Systema Naturæ of Linneus, and the Systema Eleutheratorum of Fabricius, in which for some years past I have been in the habit of noting down any remarks which occurred to me, while grouping and arranging my collection. The suggestion of a friend, accompanied by a letter urging the request, induces me to give to the Public the results of these observations, and I trust that, however imperfect or even faulty this Manual may appear, it yet may be the means of enabling the Student to name the Linnean and Fabrician species of his collection with more facility and accuracy than can be derived from any Entomological work hitherto published. Entomology in Europe at the present day is making rapid progress, and it must be a source of regret to the real lover of science,

that few of the Elementary books already published are sufficiently simple and satisfactory; perhaps the best that has appeared is the Entomologia Edinensis, published by that elegant writer, James Wilson, of Edinburgh; throughout the work pedantry is avoided, while orismology is attended to, and what is of more consequence, the philosophy of science is steadily kept in view. It is, however, but a local Fauna, and therefore cannot be of general utility. The glowing pages of a Kirby and a Spence have no doubt induced many individuals to prosecute with ardour the study of Insects.—Alas! like the grammar of a language, the elements of science (particularly that of Entomology) have presented at the outset not only a stumbling block, but a very formidable barrier, nearly insuperable to human assiduity. To clear away these impediments, to render the tyro's first attempts at systematic Entomology more engaging than at present, is one object of the present Manual; a second is, that the writings of Linneus and Fabricius may no longer be as a sealed book or dead letter; a third is, to exhibit the state of Entomological science at the present day, and thereby enable others to direct attention to those points which have been most neglected. Let us enquire how it happens that the writings of the

above authors are nearly useless to the tyro in Entomology. The student having lately acquired the rudiments of science, naturally applies to the Systema Naturæ of Linneus for further information. He is surprised at the extreme brevity of the generic characters, and can depend little on the sections or sub-divisions of the genera described generally in a few words. He next has recourse to the Entomologica Systematica of Fabricius, where he is at once overwhelmed by the barbarous terms of the latter writer, and sighs for the classic elegance of the former. After much study and loss of time both are abandoned in despair, and if he still continues a desire to prosecute the study of Insects, he is compelled to seek information in the more voluminous writers of Sweden, Germany, and France. Should the student be a Linguist all is well; if not, further pursuit is altogether hopeless; consequently, the study of some of the most beautiful and varied forms of the Creation becomes abandoned, and the science of Entomology is deprived of the assistance of many who might have contributed to its renown. With the scientific the united works of Linneus and Fabricius must ever be considered as essential to the study of Entomology, and I know of no better means of rendering their labours acceptable to the young

beginner than by examining in detail the various Orders, Families, Genera and Species into which different authors have sub-divided the class Insecta. I commence this Manual with the Order of the Coleoptera, placing in a tabular arrangement the Lamellicorns described by Linneus. The first column will give the Linnean species—the second the country they inhabit, which in the Systema Naturæ is exceedingly faulty, as the Geographical distribution of Insects in those days was little attended to-the third column will contain an arrangement of the species under the several genera which modern Entomologists have adopted. Next to the Linnean Lamellicorns, will appear a tabular arrangement of those of Fabricius, divided into four columns. The first containing his genera, the second his recorded species, the third the countries they inhabit (often as faulty as the former), and the last will present a generic arrangement of authors similar to the preceding, and exhibiting as far as possible the state of modern science. It may be necessary here to give my reasons why I have in several cases changed the generic names, such as are in common use on the Continent. My friend, Mr. William Sharpe MacLeay, has very properly restricted the name Scarabæus to the genus of Beetles denominated Ateuchus by Illiger, some of the species being esteemed sacred by the antients. The celebrated Latreille unfortunately applies the same term Scarabæus to those insects allied to Dynastes Hercules, M. L.; and here I cannot help stating, I consider it rather remarkable that these giants of the New World should receive from the Prince of Entomologists an appellation derived from the Old World, when the typical Lamellicorns of the Western hemisphere differ materially in form and appearance from any species yet discovered in the Eastern.

Merely mentioning this, which may be regarded as a slight inadvertency, I pass onwards to the examination of other generic names in use among authors. Fabricius, it appears, has applied the term Geotrupes to what Latreille has denominated Scarabæus. Now as both authors, according to my views, are in error, particularly the former, the derivation of the word Geotrupes, or Earth-borer, being given to a group of Tree-borers, I suggest the adoption of a new one, which will better express the habits of the Latreillean Scarabæus, namely Xylotrupes, or Wood-borer, from $\Xi \nu \lambda o \nu$ lignum, and $\tau \rho \nu \pi \alpha \varphi$ perforo—this simple alteration will not be thought, I trust, inapplicable. Among the remaining genera few will be changed, and nowhere will any alteration be attempted where

the name is significant, or has not already been used by a prior writer. I have always been averse to changing generic names, as it creates confusion. Synonomy is at all times a perplexing study, and the enormous increase of new terms tends greatly to impede the progress of science. I am aware that there are Naturalists who revel with delight while disentangling Synonyms. I give them great credit for perseverance, and can fully appreciate their labours; but let me ask what is the reward of many anxious hours passed in endeavouring to clear up a difficulty? anything indeed but what is satisfactory. The soundest views and opinions are often disputed, mistaken, or misrepresented. A paper war ensues to the utter detriment of science; and to amity, too often succeeds the unrelenting hatred of the conflicting parties. It may here be asked, perhaps, why I have not given the various Synonyms of the species alluded to in Linneus and Fabricius; my answer is, because it has already been admirably executed by the illustrious Schönherr, whose work is, or ought to be, in the hand of every person who calls himself an Entomologist. Next to the tabular arrangement above mentioned, the present Manual will contain the character of several new unpublished genera, illustrated by outline drawings, the

major part of them described and originally rudely sketched with a pen by Mr. Kirby's own hand. Mr. Westwood has carefully inspected the outlines, and with some few necessary additions they are now submitted to the public. Here I cannot resist expressing the pleasure I feel in acknowledging Mr. Kirby's extreme liberality in offering to me the use of his manuscripts and sketches relating to the Lamellicorns of his collection, a group which doubtless he esteemed not only as one of the most numerous in genera and species among the families of Insects, but also, I imagine, of first rate importance, whether we regard the havor they occasion in reducing to mere powder the mightiest monarchs of the forest, as well as in checking the over luxuriance of tropical vegetation, or whether we contemplate the fertility occasioned by the burrowing of the Copridæ in the earth, which drill the soil for depositing their ova, and carry with them to the roots of vegetation the richest of manures.

Mr. Kirby appears, from the manuscripts before me, to have bestowed much time and attention on the Scarabæidæ. He is too well known as a writer of eminence to require anything like praise from any individual for his profound entomological views. Considering it a great gain to science if his manu-

scripts could be published, I solicited his consent; and feel happy in being enabled to mingle his materials with mine. The remaining part of this Brochure will contain some observations on the Linnean and Fabrician genera cited in the above Tables, and occasional remarks relating to the more remarkable species. The Writer will not presume to say that many faults and inaccuracies will not be discovered; particularly as he has been obliged to depend sometimes merely on a concise Latin description taken from the above quoted authors. Any Entomologist indifferently acquainted with their writings, has reason to regret the brevity of their descriptions; which in some cases will apply to many species of a genus. There is a chance, however, of rectifying in future any material mistakes which may appear; an extensive correspondence with the leading Scavans of Europe will enable him to correct his errors. Having visited many of the Continental collections, he can speak decidedly on most of the Fabrician species; where he is in doubt, he hopes that satisfactory information will yet be gleaned from the authentic cabinets of Copenhagen and Kiel; and at a future time he will have no objection to reprint the present publication should it be thought necessary.

In concluding these observations the Writer adds his opinion, that in case the present attempt be successful in rendering the Linnean and Fabrician writings better known and more practically useful, an important end will be gained. Should those individuals who are capable of forming an opinion of the want of such a work sanction it with their approbation, and think it worthy even of the term of Manual, or indeed in any way useful to the Student, the author's chief object will be realised, namely, the furtherance of science. And if such should eventually prove the result, hereafter he may be induced to illustrate the remaining pages of Linneus and Fabricius which are devoted by them to the Coleoptera, and probably also the remaining orders of insects.

F. W. H.



THE LAMELLICORN BEETLES,

DESCRIBED BY LINNEUS.

GENUS. SCARABÆUS of LINNEUS.

PETALOCERA of MacLeay.

LAMELLICORNS of Latreille.

Linnean Species.	Country.	Arrangement of Authors
1. Hercules	S. America	Dynastes, Mac Leay.
2. Gideon	E. Indies	Xylotrupes, Hope.
3. Actæon	S. America	Megasoma, Kirby.
4. Simson	S. America	Megasoma, Kirby.
5. Tityus	N. America	Dynastes, Mac Leay.
6. Atlas	E. Indies	Chalcosoma, Hope.
7. Alœus	N. and S. America	Strategus, Kirby.
8. Molossus	China	Catharsius, Hope.
9. Typhœus	Europe	Typhœus, Leach.
10. Lunaris	England	Copris, Fabricius.
 Cylindricus 	England	Sinodendron, Fabricius.
12. Bilobus	S. America	Xylotrupes, Hope?
13. Lancifer	S. America	Phanæus, Mac Leay.
14. Rhinoceros	Asia	Oryctes, Illiger.
15. Nasicornis	Europe	Oryctes, Illiger.
76. Carolinus	N. America	Copris, Fabricius.
17. Mimas	S. America	Phanæus, Mac Leay.
18. Sacer	Europe and Africa	Scarabæus, Mac Leay.
19. Didymus	S. America	Phileurus, Latreille.
20. Valgus	N. America	Phileurus, Latreille.
21. Hispanus	Spain	Copris, Fabricius.
22. Carnifex	N. America	Phanæus, Mac Leay.
23. Granarius	Europe	Aphodius, Fabricius.
24. Nuchicornis	England	Onthophagus, Latreille.
25. Vacca	England	Onthophagus, Latreille.
26. Taurus	Europe	Onthophagus, Latreille.
27. Bison	Italy	Bubas, Megerle.
28. Subterraneus	England	Aphodius, Fabricius.
29. Erraticus	Europe	
30. Maurus	Mauritania	Glaphyrus, Latreille.
31. Fossor	England	Aphodius, Fabricius.
32. Fimetarius	Scotland	

Linnean Species.	Country.	Arrangement of Authors.
33. Hæmorrhoidales	Germany	Aphodius, Fabricius.
34. Conspurcatus	France	
35. Marianus	Carolina	Dynastes Q, Mac Leay.
36. Gigas	Egypt	Heliocopris, Hope.
37. Scaber	N. America	Dynastes, Mac Leay.
38. Laticollis	S. Europe	Scarabæus, Mac Leay.
39. Longimanus	Asia	Eucheirus, Kirby.
40. Pilularius	Europe	Gymnopleurus, Illiger.
41. Schæfferi	Germany	Sisyphus, Latreille.
42. Stercorarius	England	Geotrupes, Latreille,
43. Vernalis	Austria	
14. Calcaratus	Egypt	Dichelus? Serville.
45. Schreberi	Germany	Onthophagus, Latreille.
46. Ovatus	England	
47. Amazonus	Surinam	Cyclocephala, Latreille.
48. Sabulosus	Europe	Trox, Fabricius.
49. Chrysis	S. America	Macraspis, Mac Leay.
50. Surinamus	Surinam	Rutela, Latreille.
51. Nitidus	Carolina	Gymnetis, Mac Leay.
52. Festivus	N. America	Phanæus, Mac Leay.
53. Lineola	S. America	Rutela, Latreille.
54. Sticticus	Barbary	Cetonia, Fabricius.
55. Sepicola	E. Indies?	Anisoplia?
56. Syriacus	E. Indies	Anisoplia?
57. Fullo	England	Melolontha, Fabricius.
58. Agricola	France	Anisoplia, Megerle.
59. Horticola	England	
60. Melolontha	France	Melolontha, F. sp. vulgaris
61. Solstitialis	England	Zantheumia, Leach.
62. Occidentalis	Carolina	Rhisotrogus, Latreille.
63. Hemipterus	France	Valgus Scriba.
64. Farinosus	Europe	Hoplia, Illiger.
65. Aulicus	Africa	Hoplia?
66. Longipes	P. B. S.	Monochelus? Illiger.
67. Lanigerus	N. America	Areoda, Leach.
68. Squalidus	Germany	Cetonia, Fabricius.
69. Hirtellus	France	
70. Fasciatus	England	Trichius, Fabricius.
71. Indus	N. America	Cetonia, Fabricius.
72. Brunnus	Europe	Serica, MacLeay, sp. brunn
73. Capensis	P. B. S.	Cetonia, Fabricius.
74. Eremita	Europe	Osmoderma, Encyclopedie

Linnean Species.	Country.	Arrangement of Authors.
75. Fascicularis	P. B. S.	Cetonia, Fabricius.
76. Punctatus	Carolina	Pelidnota, Mac Leay.
77. Lanius	N. America	Gymnetis, Mac Leay.
78. Auratus	Europe	Cetonia, Fabricius.
79. Variabilis	England	Gnorimus, Encyclopedie.
80. Œruginosa	S. America	Pelidnota, Mac Leay.
81. Nobilis	England	Gnorimus, Serville.
82. Æneus	Unknown	Serica, Mac Leay?
83. Quisquilius	England	Cercyon, Leach.
84. 4-maculatus	England	Aphodius, Fabricius.
85. Plagiatus	Upsal	
86. Rufipes	England	
87. Ceratoniæ	Egypt	Genus doubtful.

GENUS. LUCANUS OF LINNEUS.

THALEROPHAGOUS RECTOCERA of Mac Leay. LAMELLICORNS of Latreille.

1. Cervus	Europe	Lucanus, Linneus.
2. Capreolus	N. America	
3. Tridentatus	Œlandia	
4. Interruptus	N. & S. America	Passalus, Fabricius.
5. Carinatus	Indies	Lucanus, Linneus.
6. Parallelipipedus	England	Dorcus, Megerle.
7. Caraboides	Europe	Platycerus, Latreille.

REMARKS AND ANNOTATIONS

ON THE

LINNEAN LAMELLICORNS.

Species 1. Scarabæus Hercules, (Linn.)—This is the type of the genus Dynastes, MacLeay; associated with it are the following species: viz. Alcides, Perseus, and Tityus of Fabricius, and Neptunus of Schönherr. By some writers Alcides and Perseus are considered only as varieties of Hercules. Sc. Marianus, Linn. is only the female of Tityus. Sc. Glaucus, Jablonsky, is also a synonym of Sc. Marianus. The generic characters of Dynastes, MacLeay, are given at length in the 14th volume of the Linnean Transactions by Mr. Kirby, vide part 3, p. 567.

Sp. 2. Gideon. — Now a Xylotrupes. In the Preface the reader will find my reasons stated for substituting the above term for Geotrupes of Fabricius. This latter name is applied in England and France at the present day to those species of Lamellicorns which are allied to Sc. Stercorarius, Linn.

With respect to Gideon, and the following species denominated Oromedon, it is probable they are but varieties of the same insect. In my cabinet are various intermediate specimens connecting them.

Sp. 3. Actaon.—To the genus Megasoma K. also belong G. Simson, Elephas, Typhon of Fabricius, and also Scarabæus Hector of Gory, lately published in the Annals of the Entomological Society of France. The details of the genus Megasoma Kirby, will be found in the 14th volume of the Linnean Transactions, part 3, p. 566.

Sp. 6. Atlas.—Of the genus Chalcosoma Hope. By a communication received from my friend De Haan of Leyden, I am informed that S. Chiron, Oliv. is considered as the female of Atlas. If such is the case, both sexes have the thorax cornuted. The species which I described under the names of Dynastes Hardwickii, Childrenii & Kirbii, form then a subgenus, as the females have the thorax smooth and rounded. To the genus Chalcosoma belong G. Caucasus, Fab., Dyn. Hesperus, Erichson, and I have little doubt that there are in the English and Continental collections three if not four undescribed species.

Sp. 8. Molossus.—I am here inclined to form a new genus, comprehending those Copridæ which are

allied to Copris Molossus, Fab. The following short characters may probably be deemed sufficient, as the type is well known. "Clypeus integer, seu subemarginatus, cornutus, thorace retuso dentato punctatissimo, fovea laterali magna lævi nec punctata, elytrisque minutissime rugulosis." I suggest the adoption of the term Catharsius, $\kappa\alpha\theta\alpha\rho\sigma\iota\sigma s$, "purgandi vim habens," or purifier, for this subgenus, which well expresses the benefit derived from these scavengers of warm and tropical regions. To it belong Copris Ursus of Fabricius, Achates of Olivier, Sagax of Schönherr and Cop. Olivieri, and Asrael of Kirby.

Sp. 9. Typhæus.—Dr. Leach in the Edinburgh Encyclopædia (1812) gave to this section of Copridæ the term Typhæus as a generic name, and to the species the name of Vulgaris. Dr. Fischer more recently published it under the name of Ceratophyus. G. dispar and Momus of Fabricius, as well as Monoceros of Dahl, inermis of Marsham, and subarmatus of De Jean, belong to this genus. The latter species is probably only a variety of inermis.

Sp. 12. Bilobus.—In the Continental cabinets two species closely allied to Bilobus are not unfrequently met with.

Sp. 17. Mimas.—This splendid insect belongs to Mr. W. Sharpe MacLeay's genus Phanæus. In the Horæ Entomologicæ will be found about twenty species described, several of them are apparently unknown to the French writers, as the Baron De Jean only mentions two species to which Mr. MacLeay's names are attached.

Sp. 18. Sacer.—Now the type of Mr. MacLeay's genus Scarabæus, and subgenus Heliocantharus. It is singular that the same remark which has been made respecting the species of Phanæus may also be applied to those of Scarabæus, two of Mr. MacLeay's names only being cited, and these being sunk down into synonyms. Whence arises this omission? purposely or not? does it proceed from a national jealousy? I trust not. Does it arise from a want of individual exertion and industry? if so, it is to be hoped that some Entomologist will yet arise and undertake an interesting monograph, embodying in it Mr. MacLeay's observations, and inform the Continent what has been done since that writer quitted England, now a period of nine years.

Sp. 24. Nuchicornis.—Now of the genus Onthophagus, which requires however to be divided into several subgenera. I am acquainted with more than three hundred species, the major part of

which are in my possession. The species received from New Holland appear to differ from any of those which inhabit the New or Old World. The reason I do not here attempt a new arrangement is, that the forms are varied, and require a very careful and minute investigation.

Sp. 35. Marianus.—This is only the female of Dynastes Tityus; the former name must therefore be considered only as a synonym.

Sp. 36. Gigas.—Now an Heliocopris. This gigantic insect is closely allied to Copris Isidis of Savigny, and may justly be ranked among those beetles which antiquity esteemed as sacred. It frequently occurs engraved on the obelisks of Egypt, and on the tombs of the kings, and is met with in collections sculptured of various sizes. As it very commonly occurs engraved at the temples of Osiris or the Sun, I suggest the adoption of the term Heliocopris to include all those species of Copris allied to C. Gigas, Linn. The following insects range with it: viz. C. Midas, Bucephalus, Antenor, Isidis; and to these may be added from my own collection those which are mentioned in Mr. Pettigrew's work on Egyptian Antiquities, namely, C. Osiris, Apis, Memnon, Sesostris, Mæris,

and Shishack, and to these may probably be attached also C. Tmolus of Fischer.

Sp. 37. Scaber.—On reference to the insects of the Museum of Queen Ulrica of Sweden, described by Linneus, this species would by Entomologists generally be ranked as an Oryctes. The Synonymia Insectorum of Schönherr gives it as the female of Dynastes Hercules.

Sp. 39. Longimanus.—Messrs. Kirby and Spence, in their invaluable Introduction to Entomology, some years back, gave the name of Eucheirus as a generic appellation to the above insect. The Baron De Jean, in his last Catalogue, also applied the same term to a Brazilian Lamellicorn; the latter insect is a pigmy compared with the above species, and scarcely deserves the appellation. I retain, therefore, Mr. Kirby's name, particularly as no doubt could exist as to the species intended. the Entomological Magazine a genus denominated Propomacrus by Mr. Newman has been published. which closely resembles Eucheirus, and of which the typical species (Arbaces Newm.) has been long figured by Pallas under the name of Scarabæus bimucronatus.

Sp. 44. Calcaratus.—No ticketed specimen of the

above insect is visible at present in the Linnean cabinet. It is probable it might belong to the genus Dichelus of Serville, as there are some unlabelled specimens in the collection belonging to that genus.

Sp. 47. Amazonus.—This insect appears to be only a variety of Cyclocephala signata, Fab. vid. Schon. Syn. Insect, p. 1. page 188, 122^a.

Sp. 55. Sepicola.—I conclude that this insect is an Anisoplia, merely from Linneus's short description, "habitus Sc. horticolæ sed triplo minor." It is not to be found in his cabinet.

Sp. 56. Syriacus.—This species, like the former, is described from the Queen of Sweden's collection; it is probably an Anisoplia.

Sp. 57. Solstitialis.—Dr. Leach some years back gave the name of Zantheumia to those species of Melolonthidæ allied to M. Solstitialis, Linn. Rhisotrogus of Latreille is the name now commonly adopted on the Continent; the name Amphimalla (still retained by Stephens) having been expunged by Latreille himself. (Règne An. 4. p. 561.)

Sp. 66. Longipes.—In the account of the museum of the Queen of Sweden the description of this insect will be found (vide page 20). Tulbagh gives the Cape of Good Hope as its true locality.

In magnitude he describes this species as approaching that of Sc. horticola, now an Anisoplia of Megerle. From the detailed description it appears to be a Monochelus, or Lepitrix.

Sp. 69. *Hirtellus*.—It seems probable that this species can only be considered as a variety of Cetonia Squalida of Fabricius.

Sp. 72. Brunnus.—Probably a misprint for Brunneus. This is now the type of Mr. MacLeay's genus Serica. The specific name must be changed to Brunnea to accord with the generic one.

Sp. 78. Auratus. —This insect I consider the type of Cetonia Fab. Perhaps no family of insects evinces the rapid growth of Entomology more than the Cetoniadæ. Messrs. Gory and Perchéron in their late Monograph mention more than four hundred species; more than seventy species, which have fallen under my inspection, are not noticed in it; Mr. W. Sharpe MacLeay is also acquainted at least with two hundred species which are not designated, making in the whole six hundred species; and it is not saying too much that the above amount is probably far short of what will yet be discovered.

Sp. 82. Æneus.—I am at a loss to decide with what genus this Linnean insect is to be ranged; in size it approaches Serica brunnea, MacLeay; and

from the general description it appears that it may belong to it. There is no specimen of it remaining at present in the Linnean cabinet.

Sp. 87. Ceratoniæ.—The reference in the Systema Naturæ of Linneus is to Hasselquist's Iter Palæstinum, 409, n. 99, where it is called a Scarabæus, and compared to a small Coccinella. Longitudo, lin. 1½. On turning to the work entitled Museum Ludovicæ Ulricæ Reginæ, published in 1764 by Linnè, the following remarks are made on this species: "Corporis habitus, magnitudo et structura Dermestidis typographi." It would therefore be rashness to decide to which genus this insect belongs at present.

In concluding my observations upon the Linnean Lamellicorns, it may here be noted that whenever the collection of Queen Ulrica is mentioned and referred to in the Systema Naturæ, there is seldom any specimen of those species preserved in the Linnean cabinet. At different times various insects have been presented to the Linnean cabinet by various individuals, yet, as a collection, it is not extensive and not arranged as it ought to be; and it is solely with a view to the increase of the Linnean Society's collection that I now state that it will, in all probability, receive considerable additions

by the liberality of its members, if its arrangement be undertaken, being aware of several persons who are willing to contribute to it, and most gladly would I give a quantity of duplicates, should increased attention be bestowed on the Entomological department of that Society.

THE LAMELLICORN BEETLES,

DESCRIBED BY FABRICIUS.

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
1. LETHRUS.	1. Cephalotes	S. Europe	Lethrus, Fabricius.
	2. Æneus	N. Holland	Lamprima, Latreille.
2. GEOTRUPES.	1. Hercules	S. America	Dynastes, MacLeay.
	2. Alcides	S. America	Dynastes, MacLeay.
	3. Gideon	E. Indies	Xylotrupes, Hope.
	4. Oromedon	E. Indies	Xylotrupes, Hope.
	5. Centaurus	Africa	Xylotrupes, Hope.
	6. Ganymedes	Guinea	Xylotrupes, Hope.
	7. Jephtha	Guinea	Xylotrupes, Hope.
	8. Ægeon	S. America	Golopha, Hope.
•	9. Chorinæus	Brazils	Megaceras, Kirby.
	10. Dichotomus	Japan	Xylotrupes, Hope.
	11. Claviger.	S. America	Golopha, Hope.
	12. Hastatus	S. America	Golopha, Hope.
	13. Enema	Brazils	Enema, Kirby, Type
	14. Pan	Brazils	Enema, Kirby.
	15. Bilobus	Cayenne	Xylotrupes, Hope.
	16. Crœsus	Java	Xylotrupes?
	17. Dædalus	S. America	Xylotrupes?
	18. Truncatus	New Holland	Cheiroplatys, Kirby.
	19. Zoilus	Cayenne	Xylotrupes, Hope.
	20. Actæon	S. America	Megasoma, Kirby.
	21. Simson	S. America	Megasoma, Kirby.
	22. Elephas	S. America	Megasoma, Kirby.
	23. Boas	P. B. S:	Oryctes, Illiger.
	24. Janus	Guinea	Xylotrupes, Hope.
	25. Bicornis	S. America	Xylotrupes, Hope?
	26. Orion	Senegal	Oryctes, Illiger.
	27. Bicolor	E. Indies	Orphnus, MacLeay.
	28. Tityus	N. & S. America	Dynastes, MacLeay.
	29. Atlas	E. Indies	Chalcosoma, Hope.
	30. Caucasus	E. Indies	Chalcosoma, Hope.
	31. Geryon	E. Indies	Xylotrupes, Hope.
	32. Alæus	Cayenne	Strategus, Kirby.
	33. Typhon	Bahia	Megasoma, Kirby.
	34. Vulcanus	Guadaloupe	Xylotrupes, Hope?

	Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
2.	2. GEOTRUPES.	35. Semiramis	S. America	Strategus, Kirby.
		36. Antæus	S. America	Strategus, Kirby.
		37. Syphax	American Isles	Strategus, Kirby.
		38. Maimon	America	Strategus, Kirby.
		39. Titanus	S. America	Strategus, Kirby.
		40. Ænobarbus	Cuba	Strategus, Kirby.
		41. Nasicornis	Europe	Oryctes, Illiger.
		42. Sylvanus	Brazils	Cœlosis, Kirby.
		43. 4-spinosus	Brazils	Enema, Kirby.
		44. Milon	Brazils	Magaceras, Kirby?
		45. Ajax	Java	Oryctes, Illiger?
		46. Rhinoceros	Asia	Oryctes, Illiger.
		47. Barbarossa	New Holland	Oryctes, Illiger.
		48. Stentor	Mauritius	Oryctes, Illiger.
		49. Satyrus	N. America	Xyloryctes, Hope.
		50. Jamaciensis	Jamaica	Xyloryctes, Hope.
		51. Silenus	Europe	Oryctes, Illiger.
		52. Syrichtus	P. B. S.	Syrichtus, Kirby, (Type.)
		53. Hylax	P. B. S.	Monochelus, Illiger?
		54. Aries	P. B. S.	Syrichtus, Kirby.
		55. Monodon	Europe	Xylotrupes, Hope.
		56. Coronatus	Java	Temnorhynchus, Hope.
		57. Dionysius	E. Indies	Oryctes, Illiger?
		58. Melibœus	N. America	Bolboceras, Kirby.
		59. Didymus	Cayenne	Phileurus, Latreille.
		60. Valgus	S. America	I meurus, Lativette.
		61. Depressus	S. America	
		62. Hircus	E. Indies	Oryctes, Illiger.
		63. Punctatus	Europe	Pentodon, Kirby.
		64. Farctus	Pennsylvania	Bolboceras, Kirby.
		65. Retusus	P. B. S.	Temnorhynchus, Hope.
		66. Piceus	E. Indies	Syrichtus, Kirby.
		67. Excavatus	Naples	Pachypus, Latreille.
		68. Dentatus	Sumatra	Xylotrupes, Hope.
		69. Talpa	West India Isles	Xylotrupes, Hope?
		70. Cuniculus	American Isles	Bothynus, Kirby.
		71. Juvencus	N. America	Xylotrupes, Hope.
		72. Veter	E. Indies	Xylotrupes, Hope?
		73. Laborator	Brazils	Chalepus, MacLeay.
		73. Laborator 74. Morator	E. Indies	Syrichtus, Kirby.
		74. Morator 75. Arator	P. B. S.	
		1		Hybosorus, MacLeay.
		76. Globator	P. B. S.	Melolontha, Fabricius.

Fabrician Genera	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
S. Scarabæus	1. Dispar	Russia	Typhæus, Leach.
	2. Coryphæus	P. B. S.	Bolboceras, Kirby.
	3. Typhæus	Europe	Typhæus, Leach.
	4. Momus	Sicily	Typhæus, Leach.
	5. Lazarus	N. America	Bolboceras, Kirby.
	6. Quadridens	E. Indies	
	7. Mobilicornis	England	
	8. Cyclops	America?	
	9. Longimanus	E. Indies	Eucheirus, Kirby.
	10. Stercorarius	England	Geotrupes, Latreille.
	11. Sylvaticus	Germany	
	12. Vernalis	England	
	13. Lævigatus	Tangier	
	14. Cordatus	Guadaloupe	Geotrupes ??
	15. Splendidus	N. America	Geotrupes, Latreille.
	16. Blackburnii	Pennsylvania	
•	17. Testaceus	England	Bolboceras, Kirby.
. ONITIS.	1. Inuus	S. Leone	Onitis, Fabricius.
	2. Aygulus	P. B. S.	
	3. Lophus	Barbary	
	4. Clinias	Hungary	
	5. Vandelli	Portugal	
•	6. Apelles	P. B. S.	
	7. Bison	Spain	Bubas, Megerle.
	8. Jasius	S. America	Phanæus, MacLeay.
	9. Sphinx	E. Indies	Onitis, Fabricius.
	10. Belial	P. B. S.	Anachalcos, Hope.
	11. Unguiculatus	Senegal	Onitis, Fabricius.
	12. Nicanor	America	Copris, Fabricius.
	13. Menalcas	S. Russia	Onitis, Fabricius.
	14. Philemon	East Indies	
6. Copris.	1. Œdipus	P. B. S.	Copris, Fabricius.
	2. Rhadamistus	Calcutta	Oniticellus, Ziegler.
	3. Nemestrinus	P. B. S.	Copris, Fabricius.
	4. Jacchus	P. B. S.	
	5. Hastator	N. America	Onthophagus?
	6. Sabæus	Coromandel	Copris, Fabricius.
	7. Nanus	Tranquebar	
	8. Splendidulus	S. America	Phanæus, MacLeay.
	9. Conspicillatus	Brazils	Sternaspis, Hope.
	10. Festivus.	Cayenne	Sternaspis, Hope.
	11. Harpax	Guinea	Onthophagus, Latreille.

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
5. Copris.	12. Pactolus 13. Aurata	Bengal Guinea	Onthophagus, Latreille.
	14. Pithecius	Asia and Africa	Copris, Fabricius.
	15. Seniculus	Madras	Onthophagus, Latreille.
	16. Javana	Java	Onthophagus, Latreille.
	17. Metallica	E. Indies	Onthophagus, Laurence.
	18. Guineensis	Guinea	
	19. Canadensis	Canada	
	20. Latebrosus	N. America	
	21. Pygmæa	Tranquebar	
	22. Pardalis	E. Indies	
	23. Catta	Coromandel	
	24. Rosalius	America	Onthophagus?
	25. Ammon	N. America	Copris, Fabricius.
	26. Eryx	Guinea	Copris?
	27. Midas	Calcutta	Heliocopris, Hope.
	28. Hamadryas	P. B. S.	
	29. Lunaris	England	Copris, Fabricius.
	30. Emarginatus	France	
	31. Cœlata	P. B. S.	
	32. Belzebub	N. America	Phanæus, Mac Leay.
	33. Bifasciata	Coromandel	Onthophagus, Latreille.
	34. Dromedarius	East Indies	Onthophagus?
	35. Sinon	Goree	Copris, Fabricius.
	36. Faunus	Cayenne	Phanæus, MacLeay.
	37. Pirmal	E. Indies	Copris, Fabricius?
	38. Tarandus	E. Indies	Onthophagus, Latreille.
	39. Capucinus	E. Indies	Copris, Fabricius.
	40. Carmelita	Guinea	
	41. Lucida	Europe	Onthophagus, Latreille.
	42. Lemur	Germany	
	43. Camelus	Austria	
	44. Vertagus	China	
	45. Melitæus	Tangier	Onthophagus?
	46. Unifasciatus	Tranquebar	Onthophagus?
	47. Æson	E. Indies	Athyreus, MacLeay.
	48. Antenor	Senegal	Heliocopris, Hope.
	49. Bonasus	E. Indies	Onthophagus, Latreille.
	50. Sagittarius	China	
	51. Nimrod	Guinea	Onthophagus?
	52. Venator	Java	Onthophagus?
	53. Vulcanus	Tranquebar	Onthophagus, Latreille.

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
5. Copris.	54. Bucephalus	China	Heliocopris, Hope.
	55. Gigas	Africa	Heliocopris, Hope.
	56. Molossus	China	Copris, Fabricius.
	57. Ursus	Bengal	
	58. Lancifer	S. America	Phanæus, MacLeay.
	59. Paniscus	Barbary	Copris, Fabricius.
	60. Carolina	N. America	
	61. Nisus	Cayenne?	Copris, Fabricius.
	62. Meleager	Cayenne	Copris, Fabricius.
	63. Orientalis	E. Indies	Copris, Fabricius.
	64. Dorcas	Mauritania	Onthophagus?
	65. Tullius	E. Indies	Copris, Fabricius.
	66. Plutus	E. Indies	Copris, Fabricius.
	67. Fricator	E. Indies	Copris, Fabricius.
	68. Mimas	S. America	Phanæus, Mac Leay.
	69. Taurus	England	Onthophagus, Latreille.
	70. Vacca	England	1
	71. Medea	Austria	
	72. Capra	Saxony	
	73. Cervus	E. Indies	
	74. Ibex	E. Indies	
	75. Alces	Hungary	
	76. Gazella	E. Indies?	
	77. Femorata	Sumatra	Oniticellus, Zeigler.
	78. Oryx	China	Onthophagus, Latreille.
	79. Nuchidens	Tranquebar	
	80. Tragus	China	Onthophagus?
	81. Antilope	East Indies	
	82. Dama	E. Indies	
	83. Vitulus	E. Indies	
	84. Carnifex	N. America	Phanæus, MacLeay.
	85. Tridens	Africa?	Phanæus, MacLeay.
	86. Hispanus	Spain	Copris, Fabricius.
	87. Mopsus	E. Indies	Onthophagus, Latreille.
	88. Spinifex	Coromandel	Onthophagus, Lattette,
	89. Cœnobita	Europe	
	90. Nuchicornis	England	
	91. Fracticornis	Germany	
	92. Xiphias	England	
	93. Nutans	England	
	94. Ciconia	Guinea	Onthonhagus
	95. Ænea	Tranquebar	Onthophagus! Onthophagus, Latreille.

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
. Copris.	96. Hyæna	P. B. S.	Onthophagus, Latreille.
	97. Thoracicus	Senegal	-
	98. Centricornis	E. Indies	
	99. Unicornis	E. Indies	
	100. Scabrosa	Surinam	Onitis, Fabricius.
	101. Furcula	E. Indies	Onthophagus?
	102. Furcatus	France	Onthophagus, Latreille.
	103. Verticicornis	England	Onticellus, Ziegler.
	104. Sulcator	Cayenne	Copris, Fabricius.
	105. 4-pustulatus	N. Holland	Onthophagus, Latreille.
	106. Reflexus	China	Copris, Fabricius.
	107. Hybneri	Germany	Onthophagus, Latreille.
	108. Quadricornis	Tranquebar	Onthophagus?
	109. 4-dentatus	E. Indies	Bolboceras, Kirby.
	110. Cristatus	Egypt	Scarabæus, MacLeay.
ATEUCHUS.	1. Sacer	Europe	Scarabæus, MacLeay.
	2. Laticollis	Gallia	
	3. Semipunctatus	Barbary	
	4. Variolosus	S. Europe	
	5. Miliaris	E. Indies	Gymnopleurus, Illiger.
	6. Sanctus	Bengal	Scarabæus, MacLeay.
	7. Morbillosus	Guinea	
	8. Intricatus	P. B. S.	
	9. Profanus	Guinea	Gymnopleurus, Illiger.
	10. Cyaneus	Bombay	
	11. Minutus	E. Indies	Sisyphus, Latreille.
	12. Bacchus	P. B. S.	Cercellium, Latreille.
	13. Gibbosus	N. America	Hyboma, Serville.
	14. Azureus	Guinea	Gymnopleurus, Illiger.
	15. Hollandiæ	N. Holland	Anisodon, Hope.
	16. Leei	E. Indies	Gymnopleurus, Illiger.
	17. Smaragdulus	S. America	Coprobius, Latreille.
	18. Muricatus	Africa?	Sisyphus, Latreille.
	19. Kœnigii	Madras	Gymnopleurus, Illiger.
	20. Granulatus	Tranquebar	
	21. Cupreus	Africa	Anachalcos, Hope.
	22. Flagellatus	Barbary	Gymnopleurus, Illiger.
	23. Scabratus	P. B. S.	Epirinus, D. J.
	24. Schæfferi	Germany	Sisyphus, Latreille.
	25. Helwigii	Tranquebar	Gymnopleurus?
	26. Volvens	N. America	Coprobius, Latreille.
	27. Pillularius	S. Europe	Gymnopleurus, Illiger.

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
. ATEUCHUS.	28. Sinuatus	China	Gymnopleurus, Illiger.
	29. Obliquus	Senegal	Onthophagus, Lat.
	30. Squalidus	Brazils	Coprobius, Hope?
	31. Planus	Java	Onthophagus ?
	32. Schreberi	Germany	Onthophagus, Lat.
	33. Bidens	S. America	Coprobius?
	34. Glabratus	Barbary	Scarabæus, MacLeay.
	35. Lævigatus	E. Indies	Onthophagus, Lat.
	36. Capistratus	Carolina	Chæridium, Serville.
	37. 2-pustulatus	N. Holland	Onthophagus, Hope?
	38. Pallipes	Coromandel	Oniticellus, Ziegler.
	39. Flavipes	Germany	
	40. Pallens	Morocco	
	41. Cinetus	China	
	42. 3-angularis	Surinam	Coprobius, Lat.
	43. Affinis	S. America	
	44. Melanocephalus	American Isles	Chæridium, Serville.
	45. Maculatus	Guinea	Gymnopleurus.
	46. Politus	Tranquebar	Onthophagus?
	47. 6-punctatus	Cayenne	Coprobius, Lat.
	48. Violaceus	St. Domingo	
	49. 2-tuberculatus	S. America	Onthophagus, Lat.
	50. Discoideus	Africa	Onthophagus.
	51. Aterrimus	E. Indies	Onthophagus.
	52. Ovatus	Europe	Onthophagus, Lat.
	53. Chrysis	S. America	Onthophagus?
	54. Pusillus	E. Indies	Onthophagus.
	55. Variegatus	E. Indies	
	56. Parvulus	E. Indies	
	57. Fuscopunctatus	E. Indies	
	58. Femoratus	S. America	
. *APHODIUS.	48. Marginellus	Coromandel	Oxyomus, Eschscholtz.
	56. Sabuleti	Switzerland	Oxyomus, Eschscholtz. Psammodius, Gyllenhali
	57. Porcatus	Saxony	Psammodius, Gyllenhall.
	58. Stercorator	S. America	Oxyomus, Eschscholtz.
	61. Asper	Paris	Psammodius, Gyllenhall.
	65. Cæsus	Germany	

^{*} The Fabrician species of Aphodius are for the most part still retained under that generic name, although the genus must at some future time be divided into various subgenera; I have, therefore, only stated those which have already been separated from it.

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
8. HEXODON.	1. Reticulatum	Madagascar	Hexodon, Fab.
	2. Unicolor	Madagascar	
9. TRICHIUS.	1. Eremita	Europe	Osmoderma, Serville.
	2. Nobilis	England	Gnorimus, Serville.
	3. 8-punctatus	England	Gnorimus, Serville.
	4. Fasciatus	Europe	Trichius, Fab.
	5. Succinctus	England	Trichius, Fab.
	6. Indus	N. America	Cetonia, Gory.
	7. 2-punctatus	P. B. S.	Popillia, Leach.
	8. Bidens	N. America	Trichius, Fab.
	9. Hemipterus	France	Valgus, Scriba.
	10. Canaliculatus	N. America	Valgus, Scriba.
	11. Lunulatus	Carolina	Trichius, Fab.
	12. Viridulus	N. America	
	13. Piger	Maryland	And the second second second
	14. Delta	N. America	desamblescusses/beautosistus
	15. Lineatus	P. B. S.	Lepitrix, Serville.
	16. Retusus	S. America	Cnemida, Kirby
	17. Nigripes	P. B. S.	Lepitrix, Serville.
	18. Maculatus	P. B. S.	Monochelus, Illiger.
	19. Hirtus	P. B. S.	Trichius?
	20. Pilosus	P. B. S.	Monochelus?
	21. Minutus	S. America	Trichius?
10. CETONIA.	1. Goliata	Africa	Goliathus, Lamarck.
	2. Cacicus	Guinea	Goliathus, Lamarck.
	3. Bifrons	S. America	Ynca, Serville.
	4. Polyphemus	Africa	Mecynorhina, Hope.
	5. Ynca	Peru	Ynca, Serville, Type.
	6. Micans	Africa	Mecynorhina, Hope.
	7. Chinensis	China	Agestrata, Eschscholtz.
	8. Nigrita	Ceylon	Agestrata, Eschscholtz.
	9. Aurata	England	Cetonia, Fab.
	10. Fastuosa	Austria	
	11. Marmorata	Europe	
	12. Viridis	Italy	g-internal property and the second
	13. Recurva	Guinea	Cetonia?
	14. Metallica	Italy	Cetonia, Fab.
	15. Pubescens	P. B. S.	
	16. Opaca	Africa	
	17. Morio	Europe	
	18. Cuspidata	P. B. S.	Ichnestoma, Gory.
	19. Cordata	P. B. S.	Cetonia, Fab.

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
10. CETONIA.	20. 4-punctata	Italy	Cetonia, Fabricius.
	21. Rufipes	E. Indies	Popillia, Leach.
	22. Holosericea	Surinam	Gymnetis, MacLeay.
	23. Strigosa	S. America	-
	24. Nitida	N. America	
	25. Lobata	S. America	
	26. Carmelita	Africa	Cetonia, Fab.
	27. Sulcata	Madagascar	
	28. Chrysis	S. America	Macraspis, MacLeay.
	29. Virens	S. America	
	30. Splendida	S. America	Macraspis, MacLeay.
	31. Lucida	Guadaloupe	
	32. Francisca	E. Indies?	Rutela?
	33. Capucina	E. Indies?	Macraspis?
	34. Lanius	S. America	Gymnetis, MacLeay.
	35. Bajula	S. America	
	36. Flaveola	S. America	
	37. Graculus	America	
	38. Liturata	S. America	
	39. Carnifex	S. America	Diplognatha, Gory.
	40. Glabrata	E. Indies?	Rutela, Hope?
	41. Rauca	P. B. S.	Cetonia?
	42. Cornuta	P. B. S.	Novum Genus.
	43. Tristis	S. America	Gymnetis, MacLeay.
	44. Smaragdula	America	Macraspis, MacLeay.
	45. Fascicularis	Africa	Cetonia, Fab.
	46. Aulica	P. B. S.	
	47. Purpurascens	Senegal	
	48. Capensis	P. B. S.	
	49. Signata	P. B. S.	
	50. Marginata	Guinea	
	51. Ornata	Guinea	
	52. Marginella	S. Leone	
	53. Lineola	S. America	Rutela, Latreille.
	54. Scutellata	Guinea	Macroma, Gory.
	55. Striata	Guadaloupe	Rutela?
	56. Flavomaculata	P. B. S.	Gnathocera, Kirby.
	57. Sinuata	P. B. S.	Cetonia, Fab.
	58. Fasciata	Alexandria	Cetonia?
	59. Olivacea	S. Leone	Cetonia, Fab.
	60. Interrupta	Senegal	
	61. Picta	E. Indies	Macronata? Hoffmansegg.

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
10. CETONIA.	62. 3-lineata	P. B. S.	Macronata? Hoffmansegg.
	63. Elata	Guinea	Amphistoros, Gory.
	64. Semipunctata	P. B. S.	Cetonia, Fab.
	65. 5-lineata	E. Indies	Macronata, Hoffmansegg.
	66. Atromaculata	Poona	Cetonia, Fab.
	67. Limbata	Egypt	Agenius, Serville.
	68. Trigona	S. America	Chasmodia, MacLeay.
	69. Elegans	Madras	Gnathocera, Kirby.
	70. 4-maculata	Africa	Mecynorhina, Hope?
	71. 6-maculata	Sumatra	Gnathocera, Kirby.
	72. Cuprea	Surinam	Cetonia, Fab.?
	73. Africana	S. Leone	Gnathocera, Kirby.
	74. Læta	E. Indies	
	75. Suturalis	Senegal	
	76. Vittata	Africa	Trichius, Fab.
	77. Fulgida	Pennsylvania	Cetonia, Fab.
	78. Iris	Surinam	Cetonia?
	79. Gagates	S. Leone	Diplognatha, Gory.
	80. Tetradactyla	S. America	Macraspis, MacLeay.
	81. Clavata	S. America	
	82. Fucata	S. America	
	83. Lurida	Brazils	Cetonia, Fab.
	84. Mixta	Sumatra	
	85. Lunulata	S. America?	Rutela? Hope?
	86. Aurichalcea	Surat	Cetonia, Fab.
	87. Nitidula	Africa	
	88. Philippensis	China	
	89. Stolata	Senegal	
	90. Atomaria	China	
	91. Festiva	Tranquebar	
	92. Abbreviata	Senegal	Cetonia?
	93. Maculata	Coromandel	Cetonia, Fab.
	94. Difformis	Madras	
	95. Acuminata	P. B. S.	
	96. Marmorata	Sumatra	
	97. Hæmorrhoidalis	P. B. S.	
	98. Adspersa	P. B. S.	
	99. Areata	Virginia	
	100. Hirta	Spain	
	101. Funesta	Italy	
	102. Stictica	France	
		1	1

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
10. CETONIA.	104. Cinerascens	P. B. S.	Cetonia, Fab.
	105. Irrorata	P. B. S.	Cetonia, Fab.
	106. Furvata	P. B. S.	
	107. Sepulchralis	Carolina	
	108. Punctulata	Senegal	
	109. Floralis	Africa	Cetonia?
	110. 14-maculata	E. Indies	Gymnetis, MacLeay.
	111. Versicolor	Egypt	Cetonia, Fab.
	112. Variegata	Tranquebar	
	113. Torquata	Africa?	
	114. Æquinoctialis	Senegal	
	115. Sanguinolenta	1	
	116. Discoidea	Senegal Caffraria	
	117. Lugubris	P. B. S.	
	118. Histrio		
	119. Modesta	Egypt	
	120. Gloriosa	Tranquebar	Dutale Tatasilla
	121. Maura	St. Domingo	Rutela, Latreille.
		Guinea	Cremastocheilus, Gory.
	122. Hottentottus	P. B. S.	Genuchus, MacLeay.
	123. Regia	Sumatra	Macronata, Hoffmansegg.
1. MELOLONTHA.	124. Cruenta	P. B. S.	Genuchus, MacLeay.
	1. Stigma	Java	Lepidiota, Kirby.
	2. Alba	Sumatra	
	3. Fullo	England	Melolontha, Type.
	4. Rorida	Sumatra	Lepidiota, Kirby.
	5. Serrata	E. Indies	Holotrichia, Kirby.
	6. Vulgaris	England	Melolontha, Fab.
	7. Hippocastani	Italy	
	8. Villosa	Austria	
	9. Pilosa	Hungary	
	10. Occidentalis	Austria	
	11. Fervida	N. America	Holotrichia, Kirby?
	12. Transversa	Austria	Aplidia, Kirby.
	13. Reflexa	P. B. S.?	Holotrichia, Kirby?
	14. Alopex	P. B. S.	Cephalotrichia, Kirby.
	15. Tomentosa	E. Indies	Lepidiota, Kirby.
	16. Solstitialis	England	Rhisotrogus, Lat.
	17. Bidens	Carolina	Holotrichia, Kirby.
	18. Candida	E. Indies	Lepidiota, Kirby.
	19. Atra	S. Europe	Rhisotrogus, Lat.
	20. Æquinoctialis	Hungary	Microdonta, Kirby.
	21. Pini	Barbary	Microdonta, Kirby.

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
11. MELOLONTHA.	22. 2-maculata	China	Cyclocephala?
	23. Atriplicis	Barbary	Hoplopus, Laporte.
	24. Oblonga	Bavaria	Anomala, Megerle.
	25. Ruficornis	Germany	Rhisotrogus, Lat.
	26. Lanigera	N. America	Areoda, Leach.
	27. Longicornis	P. B. S.	Macrophyllus, Hope.
	27. Longicornis 28. Punctata	N. America	Pelidnota, MacLeay.
	29. Viridis	China	Euchlora, MacLeay.
	30. Ænea	N. Holland	Repsimus, Leach.
		N. Zealand	Stethaspis, Hope.
	31. Suturalis	Madras	Euchlora, MacLeay.
	32. Bicolor	S. America	Chalepus, MacLeay.
	33. Geminata	W. Indies	Charepus, macheag.
	34. Barbata	E. Indies	Chalana 2
	35. Morio	S. America	Chalepus?
	36. Castanea		Cyclocephala, Lat.
	37. Rufipennis	S. America	Cyclocephala?
	38. Elata	Tranquebar	Anomala, Megerle.
	39. Dorsalis	Tranquebar	35
	40. Glacialis	Terra del Fuego	Macrosoma, Hope.
	41. Lurida	Unknown	Unknown.
	42. Striata	Terra del Fuego	Macrosoma, Hope.
	43. Tristis	N. America	Unknown.
	44. Testacea	Terra del Fuego	Macrosoma, Hope.
	45. Hirticollis	Africa	Unknown.
	46. Pallida	P. B. S.	Anomala, Megerle.
	47. Ruficollis	Coromandel	Schizonycha, D. J.
	48. Quadridens	E. Indies	Melolontha?
	49. Variolosa	P. B. S.	Schizonycha, D. J.
	50. Lanata	Mauritius	Adoretus, Eschsch.
	51. Signata	Jamaica	Cyclocephala, Lat.
	52. Marginata	S. America	Cyclocephala?
	53. Cyanocephala	Europe?	Anomala?
	54. Brunnea	England	Serica, MacLeay.
	55. Melanocephala	Brazils	Cyclocephala, Lat.
	56. Ferruginea	Cayenne	
	57. Pallens	Cayenne	
	58. Erythrocephala	Coromandel	Apogonia, Kirby.
	59. Tridentata	Guadaloupe	Cyclocephala?
	60. Mixta	Guinea?	Anomala, Megerle.
	61. Obscura	Æquin. Africa	Adoretus, Eschscholtz.
	62. Rufa	P. B. S.	Novum Genus.
	63. Festiva	N. Zealand	Calonota, Hope.

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
11. MELOLONTHA	64. Lœta	N. Zealand	Calonota, Hope.
	65. Holosericea	S. Russia	Rhombonyx, Kirby.
	66. Julii	France	Anomala, Megerle.
	67. Nigrita	America	Anomala?
	68. Frischii	Germany	Anomala, Megerle.
	69. Vitis	France	
	70. Aurata	Carniola	
	71. Cardui	Africa	Glaphyrus, Lat.
	72. Serratulæ	Barbary	Glaphyrus?
	73. Fastuosa	East Indies	Mimela, Kirby.
	74. Errans	N. America	Anomala, Megerle.
	75. Varians	S. America	
	76. Umbrosa	Guinea	Serica, MacLeay.
	77. Rupicola	P. B. S.	Lepisia, Serville.
	78. Innuba	Rio Janeiro	Anomala, Megerle.
	79. Elongata	N. America	Philochlænia, D. J.
	80. Rauca	Coromandel	Apogonia, Kirby.
	81. Ferruginea	Bombay	
	82. Mærens	N. America	Unknown.
	83. Splendida	P. B. S.	Serica, MacLeay?
	84. Aulicola	Equin. Africa	Novum Genus.
	85. Lucicola	N. America	Anomala, Megerle.
	86. Atrata	N. America	-
	87. Arboricola	America	Anisoplia?
	88. Horticola	England	Anisoplia, Megerle.
	89. Nitidula	N. America	Anisoplia?
	90. Abdominalis	Italy	Anthipna, Eschsch.
	91. Floricola	Austria	Anisoplia, Megerle.
	92. Arvicola	S. Russia	
	93. Praticola	Siberia	Hoplia, Illiger.
	94. Fruticola	Italy	Anisoplia, Megerle.
	95. Agricola	Germany	
	96. Lineata	Africa	Lepitrix, Serville.
	97. Ruricola	Saxony	Serica, MacLeay.
	98. Atomaria	P. B. S.	Gymnoloma, D. J.
	99. Farinosa	France	Hoplia, Illiger.
	100. Squamosa	Switzerland	Carlos Valletinasconsis.
	101. Bilineata	Tangiers	Hoplia, Illiger.
	102. Regia	Algiers	
	103. Glabrata	S. America	Hoplia?
	104. Ridens	N. America?	Hoplia?
	105. Argentea	England	Hoplia, Illiger.

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
11. MELOLONTHA.	106. Graminicola	Germany	Hoplia, Illiger.
	107. Pygmæa	Carolina	Anisoplia, Megerle.
	108. Chrysomelina	Austria	Ochodæus, Megerle.
	109. Capicola	P. B. S.	Lepitrix, Serville.
	110. Cineta	Guadaloupe	Anisoplia, Megerle.
	111. Proboscidea	E. Indies	Anisoplia?
	112. Spinipes	P. B. S.	Dichelus, Serville.
	113. Dentipes	P. B. S.	
	114. Podagrica	P. B. S.	Monochelus, Illiger.
	115. Arthritica	P. B. S.	
	116. Gonagra	P. B. S.	Monochelus?
	117. Crassipes	P. B. S.	Monochelus, Illiger.
	118. Calcarata	P. B. S.	Dichelus ?
	119. Cancroides	P. B. S.	Pachycnema, Serville.
	120. Marginella	P. B. S.	Pachycnema?
	121. Pulverulenta	Germany	Hoplia, Illiger.
	122. Morio	Barbary	Anisoplia?
	123. Sylvicola	N. Holland	Liparetra, Kirby.
	124. Subspinosa	W. Indian Isles	Macrodactylus, Latreille.
	125. Longipes	P. B. S.	Dichelus, Serville.
	126. Abbreviata	P. B. S.	Lepitrix, Serville.
	127. Minuta	P. B. S.	Dichelus, Serville.
	128. Mutabilis	Tranquebar	Serica, MacLeay.
	129. Variabilis	Germany	
	130. Versicolor	Sierra Leone	
	131. Splendidula	Sumatra	
	132. Micans	Amboyna	Serica?
	133. Picea	P. B. S.	Trochalus, Laporte.
	134. Discoidea	Guinea	Trochalus?
	135. Araneoides	P. B. S.	Lepitrix?
	136. 4-lineata	Sierra Leone	Trochalus, Laporte.
	137. Gibba	P. B. S.	
	138. Monticola	N. Holland	Liparetra, Kirby.
	139. Humeralis	England	Serica, MacLeay.
	140. Ursus	P. B. S.	Anisonyx, Latreille.
	141. Bombyliformis	Siberia	Amphicoma, Latreille.
	142. Lynx	P. B. S.	Anisonyx, Latreille.
	143. Crinita	P. B. S.	
	144. Cyanipennis	Tangiers	Amphicoma, Latreille.
	145. Hirta	Siberia	,
	146. Vulpes	Siberia	
	147. Meles	Barbary	

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
11. MELOLONTHA.	148. Bombylius	Africa	Amphicoma, Latreille.
	149. Vittata	Persia	Glaphyrus, Latreille.
12. Lucanus.	1. Alces	East Indies	Lucanus, Linnè.
	2. Giraffa	East Indies	
	3. Cervus	England	
	4. Elaphus	Virginia	
	5. Capreolus	Germany	
	6. Dama	Virginia	
	7. Femoratus	Cayenne	
	8. Bison	S. America	
	9. Gazella	Siam	
	10. Lama	East Indies	
	11. Suturalis	Japan?	
	12. Saiga	S. America	
	13. Taurus	Sumatra	
	14. Acuminatus	Java	Ægus, MacLeay.
	15. Barbarossa	Tangiers	Dorcus, MacLeay?
	16. Parallelipipedus	England	Dorcus, MacLeay.
	17. Inermis	Sumatra	Ægus, MacLeay.
	18. Cancroides	N. Holland	
	19. Lunatus	Sumatra	
	20. Piceus	America	Ceruchus, MacLeay.
	21. Tenebrioides	N. Europe	Ceruchus, (Type.)
	22. Striatus	E. Indies	Figulus, MacLeay.
	23. Caraboides	England	Platycerus, Lat.
	24. Rufipes	Switzerland	
	25. Punctatus	Sumatra	Figulus, MacLeay.
13. Æsalus.	1. Scarabæoides	Austria	Æsalus, Fab.
14. Passalus.*	1. Interruptus	S. America	Passalus, Fabricius.

^{*} In the Systema Eleutheratorum of Fabricius, seven species of Passalus are mentioned; as none of them have been separated from that genus by later writers, there is no necessity of adding them to the present Tables.



REMARKS AND OBSERVATIONS

ON THE

LAMELLICORNS OF FABRICIUS.

1. Lethrus.

Species 2. Æneus, now the type of Latreille's genus Lamprima. The student who wishes for information respecting the several species forming this Genus must consult the Horæ Entomologicæ of Mr. MacLeay, and for the true Lethrus, the Entomographie de la Russie, par Gotthelf Fischer, tome 1. p. 133. I have lately received two new species of Lamprima which apparently are not described, one from Melville Island, and the other from the new settlement at the Swan River in New Holland.

2. GEOTRUPES.

Sp. 5, 6, 7.—It is probable that these three species of Xylotrupes may be formed at a future time into a sub-genus; they are of rare occurrence, and

I am not inclined to dissect the only specimens I possess.

Sp. 8. Ægeon.—The details of the new genus Golofa, will be found in a paper in the second volume of the Transactions of the Entomological Society of London, where all the species are enumerated which have fallen under my inspection.

Sp. 17. Dædalus.—It has been asserted that the female of Dædalus is the Melolontha diadema Olivier. I confess I can scarcely believe it. There seems a doubt respecting the country where it was taken, according to Sehestedt it is from the East Indies, and in various collections of the Continent it is labelled from South America; probably two distinct species are included under the above name.

Sp. 20. Actaon.—The characters of the Genus Megasoma, Kirby, are amply detailed in the four-teenth volume of the Linnean Transactions, to which the reader is referred. Sc. Hector, Gory, undoubtedly belongs to it.

Sp. 27. Bicolor.—This insect is the type of Mr. W. Sharpe MacLeay's genus Orphnus; it occurs in the East Indies, where there are several species, and, according to De Jean, also inhabits Africa. Oryctes and Orphnus are evidently closely allied.

- Sp. 33. Typhon.—The locality of this species is not recorded by Fabricius. I have received it from Bahia. It occurs also in other parts of South America. Most of these gigantic Beetles are figured in the old writers on Entomology. This species is subject to vary considerably. Laniger of Olivier, Goliathus of Voet, and Esau of Jablonsky, are only varieties of the same species.
- Sp. 44. *Milon*.—This insect ought to form the type of a distinct genus, at present I range it with Megaceras of Kirby, which it evidently approaches; a second specimen from the island of Java will be found in the Kirbyan collection so generously presented by that individual to the Entomological Society of London.
- Sp. 47. Barbarossa.—This insect diverges from the type of Oryctes; apparently there are two other insects confounded in various collections with it, one from the new settlement at Swan River, and the other from Melville Island.
- Sp. 65. Retusus.—The Baron De Jean has given the generic name of Coptorhinus to this species, a name which was published by me some years since in the Zoological Transactions, it must therefore be changed; as it is significant of the genus, I substitute for it the term Temnorhynchus.

Sp. 75. Arator.—The type of the genus Hybosorus, MacLeay. The generic characters were first published by the celebrated author of the Horæ Entomologicæ; the opinion therein expressed of the wide range of this insect appears to be substantiated; from late discoveries it seems to inhabit the New as well as the Old World.

Sp. 76. Globator Fab.—This insect, with several others closely allied to it, appears to form a distinct genus. The Baron de Jean has thrown together several species under the term Schizonycha. Now, as that generic name is applicable to many of the Melolonthidæ I merely range globator under Melolontha, till such time as the generic characters are detailed. Generic names without published characters, and specifying a type, ought not at the present day to be admitted by any person calling himself an Entomologist.

3. Scarabæus.

Sp. 2. Coryphæus.—Now of the genus Bolboceras Kirby. The singular forms of these Insects are well worthy of attention. It is to be hoped that some individual will undertake a Monograph of them. I am acquainted with more than 30 species,

the major part are from New Holland and the East Indies.

Sp. 10. Stercorarius.—Latreille has asserted that the genus Geotrupes, to which this species belongs, is not found in the East Indies. I have received a singular and beautiful species from Madras; a second is found on the Himalaya, and the most magnificent of all the species inhabits Japan. If I am not mistaken there are two, if not three species in the Leyden cabinet from the latter locality.

Sp. 14. Cordatus.—I have ranged this insect for the present as a Geotrupes—it has never fallen under my inspection. It is not unlikely that as Guadaloupe is the extreme range to which Geotrupes extends, Cordatus will be found to diverge from the type of the Genus.

4. Onitis.

- Sp. 6. Apelles.—This Insect appears to recede from the true type of Onitis. The female of this species has the anterior tibiæ provided with tarsi; the tibiæ of the male are armed internally with a spine, and between the spine and the apex there are denticulations.
- Sp. 8. Jasius.—According to Mr. MacLeay the insects denominated Jasius, by Olivier and Fabri-

cius, are distinct; the former retains the original name, while that of Dardanus has been given to the Fabrician species. The species of Phanæus are liable to vary considerably.

Sp. 10. Belial.—This insect appears to be the same as Ateuchus Cupreus of Fabricius and Olivier. I have in my MSS. given the name of Anachalcos, from ανω, ανα supra, and χαλκος æneus, for a generic name to this insect. The following characters may probably be considered sufficiently comprehensive to denote an insect which is tolerably well known. "Corpus supra vålde convexum, clypeo emarginato thoraco gibboso subangulato. Femoribus anterioribus valde dilatatis compressis, pedibus mediis longioribus, posticis longissimis, tibiis subarcuatis seu incurvis." A second species allied to the above is in my collection, received from Sierra Leone; a third also has fallen under my inspection. cius gives Cayenne as its native country, which is an error, from confounding a species of Hyboma of South America with this insect, which is typical only of an African locality.

5. Copris.

- Sp. 1 & 4. Œdipus & Iacchus.—These two species of Copris appear to belong to a sub-genus. Copris Syphax of Kirby may also be united with them.
- Sp. 2. Rhadamisthus.—This insect cannot be considered as a true Oniticellus with which the Baron De Jean has ranged it, as both sexes appear to possess anterior tarsi. Several, indeed, of the subscutellated Onitidæ (with the exception of Onitis Apelles) have the males only provided with them. I propose the term Scaptodera, from $\sigma \kappa \alpha \pi \tau \omega$ fodeo et $\delta\epsilon\rho\eta$ collum, as a generic term, to include this insect and its allied species. The following are the details:-" Genus forsitan inter Onitim et Oniticellum ponendum. Exscutellatum. Clypeus rotundatus, capite inermi, Thorax late foveolatus antice cornutus. Tibiæ anteriores in utroque sexu tarsis instructæ. In reliquis Oniticello convenit." A second species of Scaptodera I have received from Captain Smee, from near Salsette, and by my journal I find a third is in the Leyden collection; all are from the East Indies.
- Sp. 9. Conspicillatus.—Mr. MacLeay, in his Horæ Entomologicæ gives five types of form belonging to Phanæus; the fourth affords a sufficient

character for forming it into a new genus, which I propose to call Sternaspis from the sternum being produced into a strong spine. To this sub-genus belong Ph. Festivus, hilaris, lautus, and several others; the details are given by the above author.

Sp. 26. Eryx.—From the Fabrician description (as it is compared with Cop. Hamadryas in stature and magnitude) I was inclined to think this insect an Heliocopris, but from the clypeus being divided in the middle, and from the locality of Guinea being mentioned, I am in doubt where to place it, and leave it for the present as a Copris.

Sp. 31. Calata.—From a reference to Voet's figure, plate 23, fig. 6. this insect is a true Copris.

Sp. 37. Pirmal. — This species was described from the cabinets of Daldorff and Schestedt; in the Copenhagen collection we may still find it deposited, and ascertain if it be really a Copris.

Sp. 45. Melitæus.—Mentioned as in the collections of D. Schousboe and Sehestedt. I cannot give any information respecting this species.

Sp. 47. Æson.—According to Mr. MacLeay this insect probably belongs to his genus Athyreus; it has never fallen under my inspection, nor can I state in what collection on the Continent it is deposited, unless it is in the Copenhagen collection.

Sp. 60. Carolina.—This species of Copris approaches Phanæus, and appears to form an intermediate sub-genus connecting them; it is remarkable for its robust and gibbous form; another peculiarity seems to be the deeply excavated character of the striæ of the elytra. To it are nearly allied Cop. Monacha, Fab. Cop. Eridanus, Olivier, and also several undescribed species.

Sp. 66. Plutus.—The specimens of this insect in my collection were named by Fabricius, and were purchased by me at Lee's sale: the labels state them to have been received from the East Indies. The Baron De Jean gives (in his Catalogue) the Cape of Good Hope as its true locality. I am yet inclined, however, to adopt the statement of Fabricius, that it was received from the East.

Sp. 85. Tridens.—This insect is evidently allied to Phanæus. Olivier gives the East Indies and Cape of Good Hope as its true locality, in the former case he is probably wrong, and if right in the latter, Tridens should be the type of another genus. Ph. Tridens De Jean from Mexico is certainly another insect.

Sp. 100. Scabrosa.—It is with some doubt that I place this insect as an Onitis, but if it belong to that genus, there is evidently some mistake respect-

ing the country: it has never fallen under my notice. The reader is referred to Illiger's Magazine for his remarks on this species.

Sp. 104. Sulcator.—Schönherr in the Synonymia Insectorum, gives the name of Sulcata instead of the former. Is this Sulcata the other sex of Copris Nisus Fab.? if so, both the above names must be abandoned.

Sp. 106. Reflexus.—This Copris appears to be originally from China, although some Entomologists believe it to be a Brazilian insect. It will probably form the type of a sub-genus. There are several species allied to it in the London cabinets, from North as well as South America. It resembles an Aphodius in form, but evidently belongs to the Copridæ. C. Nitidula Klug, and various other South American species may be classed together.

Sp. 110. Cristatus. — From the description of Fabricius I am inclined to regard this insect as a species of Scarabæus MacLeay; it has never fallen under my notice, and probably was unknown to the author of the Horæ Entomologicæ, as no mention is made of it.

6. Ateuchus.

- Sp. 6. Sanctus.—This insect is liable to vary considerably in colour; the green and blue varieties are abundant in various parts of India; the copper coloured variety may be considered rare. It is a question well worth inquiry what is the real cause of the above variations of colours.
- Sp. 12. Bacchus.—This is the type of Cercellium, according to Latreille. Mr. MacLeay, however, informs me that Bacchus was considered by Illiger as the true type of Canthon; a second species allied to it has been figured from my collection, and published under the name of Cercellium Lyæus, by Mr. Westwood, it was received from Sierra Leone.
- Sp. 15. Hollandiæ.—The insect which is met with in the French cabinets bearing the above name, is not the same as that in the Fabrician cabinet; there are three or four undescribed species in different collections, and as it appears to offer characters sufficient to form a sub-genus, I suggest the adoption of the term Tesserodon, expressing the dentation of the Clypeus, which differs from all the other Scarabæidæ.
- Sp. 21. Cupreus.—This appears to be the same insect as the Onitis Belial, Fab. which in a former

page I have given as the type of the genus Anachalcos.

Sp. 24. Schæfferi.—The reader is referred to Monsieur Gory's excellent Monograph on Sisyphus, where all the species are admirably figured.

Sp. 25. Helwigii. — I think there can be little doubt that this insect may be considered as a Gymnopleurus. The name is omitted by Mr. MacLeay in his Synoptical Table of the Species of Scarabæidæ, probably he considered it as a variety only of one of those described in the Synonymia Insectorum of Schönherr where it is recorded as an Ateuchus.

Sp. 30. Squalidus.—There must be some mistake respecting this insect, as none of the Scarabæi of the Old World have yet been discovered in the New. I am unacquainted with the insect, and range it with Coprobius for the present. The genus Megathopa of Eschscholtz represents in America the Scarabæus of the Old Continent, and is the nearest approximation to it in form. In my cabinet I thave three species, and three other additional nondescripts I find noted in my journal as occurring in the German and French collections.

Sp. 37. Bipustulatus.—It is possible that this insect may belong to the genus Onthophagus; but, as the specimen in the Banksian cabinet is not in a

very good state, I defer speaking decidedly till others fall under my notice.

Sp. 55, 6, 7, & 8. With none of these insects am I acquainted; the three former are probably Onthophagi, the latter may be a Chæridium.

8. Hexodon.

Sp. 1. Reticulatum.—I lately purchased a box of insects from the Island of Mauritius, containing two specimens of this anomalous genus; as it appears an undescribed species, I name it in honour of the venerable patriarch of Entomology, the Rev. William Kirby, of Barham, and add the description.

Hexodon Kirbii.—Long. lin. 10 lat. lin. $6\frac{1}{2}$. Obscurum, thorace nigricanti, elytris cinereis lineis tuberculisque quatuor variegatis.

Caput nigrum, antennis piceis articulo primo piloso, reliquis glabris. Thorax niger opacus utrinque tuberculo lævi variegatus. Elytra cinerea, lineis subelevatis postice reticulatis, fuscis, tuberculisque quatuor lævibus insignita. Corpus infra nigro-piceum nitidum, femoribus concoloribus tibiis tarsisque castaneis. Hæc species celeberrimo Domino Kirby, acutissimo observatori Naturæ dicatur.

9. Trichius.

Sp. 2-punctatus.—This insect is the type of Dr. Leach's genus Popillia.—I am acquainted with more than forty species belonging to it; apparently those of the New World will form a sub-genus. I strongly recommend these beautiful insects to the attention of Entomologists, as likely to form an elegant and interesting Monograph.

Sp. 8. *Bidens*.—In some writers it is called Bibens, which is an error of the press.

Sp. 16. Retusus.—This is the type of Mr. Kirby's genus Cnemida. (vide Zool. Journal, No. 10, p. 145). The Baron De Jean is probably unacquainted with the other species described and figured in that work by the above author, as mention is scarcely made of them in his various Catalogues.

Sp. 19. Hirtus.—Probably a Trichius? A Monograph ought to contain a notice of all the described species of authors up to the time of its publication. The Monograph of Messrs. Perchéron and Gory however good in some points, is exceedingly deficient in this respect. With regard to Synonyms they occasionally mention the most common. The omission of several Fabrician species renders their work anything but perfect and satisfactory. It is

generally expected that a Supplement to it will shortly make its appearance, when, in all probability, these objections will be remedied.

10. CETONIA.

Sp. 1. Goliata.—The type of the genus Goliathus De Lamarck. Mr. Kirby has applied the specific name of giganteus to it, which has been retained by Mr. Westwood in the new edition of Drury's Illustrations. I think the Goliathidæ will bear dividing into two groups, the former including those genera which have the anterior and posterior angles of the thorax rounded, and the latter where the thorax is of a trapezoidal form; at the close of the Fabrician Lamellicorns I shall add some additional remarks on Goliathidæ, and therefore only allude at present to an insect which Professor Klug of Berlin has named Goliathus Regius; I lately received a specimen allied to the last named species from Guinea, and was convinced that it was a female, and I think probably it is the female of Goliathus giganteus K.; that it was a female I am enabled to speak positively, as on dissecting it many ova were discovered in the abdomen.

Sp. 2. Cacicus.—A specimen of this insect is in my possession, it was received from the same loca-

lity as Gol. regius of Klug.—Vid. Reise um die Erde, by Adolph Erman, published at Berlin in 1835, plate 15, fig. 7,

Sp. 3. *Bifrons*.—This insect belongs to Monsieur Serville's genus Inca, and seems confined to the New World; there are several recorded species known.

Sp. 4. Polyphemus.—This insect for many years was considered unique, and was the chief ornament of the Banksian cabinet: it has been stolen from thence by some individual unworthy of the name of naturalist. I regret to state also that a box containing some rare and singular insects (from Sierra Leone and New Holland) has disappeared from my own collection; should a similar occurrence take place I shall be forced to close my cabinet, which it has ever been my wish to render easy of access to the Entomolo-As the insect here above alluded to belongs to a section which has the thorax trapezoidal, I suggest the adoption of the generic term Mecynorhina from the Greek words $\mu\eta\kappa\nu\nu\omega$ and $\rho\iota\nu$, from the clypeus being prolonged into a horn. The following characters will designate the type of form. Mecvnorhina Hope: "Corpus ovatum, thorax trapeziodalis, caput tricorne, medio mergaformi porrecto, bifido, lateralibus minoribus subarcuatis, apice acutis.

Pedes anteriores quatuor posticis longiores, tibiis dentibus armatis, sternoque obtuso producto." this genus apparently the following species belong, viz. G. Micans, Fab. & G. Daphnis & Grallii, both of them in the collection of Monsieur Buquet at Paris. The second genus belonging to this section has for its type Goliathus Hæpfneri of De Jean, and represents in the New World the group having Polyphemus as its type in the Old. I have little hesitation in suggesting this insect as the type of a new genus, and it is to be hoped that the Baron de Jean will shortly publish the characters and name generically, one of the most interesting insects figured in the Monograph above alluded to. The remaining species of Goliathus, which have been described by Messieurs Perchéron and Gory as such, belong, according to my views, to Cetonia, and approach Gnathocera of Kirby, I allude to those which are named G. Heros, Mellii, and Opalinus. The third insect which belongs to this section is the type of a new genus, named Jumnos Ruckeri, Saunders, it will appear figured in the next part of the Entomological Transactions. We have then three distinct genera; viz. Goliathus, Dicronocephalus, and Inca, the respective representatives of Africa, Asia, and America, forming the first section, and three others, viz. Mecynorhina Polyphemus, Jumnos Ruckeri, and Goliathus Hæpfneri, forming the second section, each of them forming the characteristic type of the quarter of the globe to which they belong.

- Sp. 6. Micans.—I formerly gave the name of Trigonophorus to this and some other species of Cetoniadæ from General Hardwicke's collection, which appeared to me to afford sufficient characters for a sub-genus; and I still think that Micans may be the type of another genus, as the anterior tibiæ of the male are only internally serrated, but in Mecynorhina in both sexes they are internally serrated.
- Sp. 8. Nigrita.—By many Entomologists this insect has been regarded only as a variety of Cet. Chinensis Fab.; having received it lately from Darpouillie, and examined it thoroughly, I give it as a distinct species. The species of Agestrata named Splendens by Messrs. Perchéron and Gory, has long been in the Linnean cabinet, where it is unnamed. Ten species belonging to this genus have fallen under my inspection. Three undescribed are in the possession of Colonel Whithill.
- Sp. 13. Recurva.—This species is omitted in the Monograph of Cetoniadæ; it was originally described from Lund's cabinet.
- Sp. 22. Holosericea, now a Gymnetis. The Oriental species of Gymnetidæ apparently belong to a sub-genus, they are few in number compared with

those found in the New World. Only eight out of seventy-five described by Monsieur Gory inhabit the Old World; this number may be doubled; five were lately brought to this country by the indefatigable Colonel Whithill above mentioned, whose collection of Coleoptera, as far as relates to the insects of Bombay, the Concan and Ceylon, is certainly unrivalled.

Sp. 32 & 33.—These insects probably belong to the Rutelidæ, and perhaps to the genus Macraspis, if so the locality of the East Indies must be changed to that of South America.

Sp. 40. Glabrata.—This insect I have ranged at present as a Rutela; it was named by Fabricius from Lee's cabinet: I believe it to be unique, and have some doubts if Oriental India is its true locality.

Sp. 42. Cornuta.—This singular insect ought to have been made the type of a new genus by Messrs. Gory and Perchéron, it unites apparently the Cetoniadæ and the genus Syrichtus of Kirby. A second species, closely allied to Cet. Cornuta Fab., and considerably larger, I lately received from China.

Sp. 54. Scutellata.—In the monograph of Cetoniadæ repeatedly alluded to, this Fabrician species is made the type of Macroma. My friend, Mr.

Kirby, originally gave this name to two species of Cetonia from New Holland, allied to Schizorhina, the name of one was Scutellare, and the similarity of the signification of Scutellatum probably led to the mistake.

Sp. 58. Fasciata. — This insect is certainly a Cetonia, and is the same species as Sc. Alexandrinus Linn.

Sp. 61. Picta.—Now a Macronata of Hoffman-segg. It is generally supposed that Wiedemann founded this genus, but erroneously so, as Count Hoffmansegg first published it in the Zoologisches Magazin of Wiedemann, and hence the cause of the error; among the recorded species of Macronata two, namely, Rhinophyllus and Inscripta, appear to afford sufficient characters to allow of being formed into sub-genera.

Sp. 70. 4-maculata.—If Mecynorhina is adopted as a sub-genus of Goliathidæ, there can be little doubt that Gnathocera 4-maculata Oliv. belongs to the same genus, and must therefore be detached from Gnathocera, as some other species ought to be.

Sp. 72. Cuprea.—No mention is made of this species, and indeed, I may add, of several other Fabrician insects in the Monograph of Cetoniadæ

by Messieurs Perchéron and Gory; it has not yet fallen under my inspection, and I therefore range it with a doubt as a Cetonia. Gmelin gives Sc. venereus of Linneus as a Synonym.

Sp. 80. Tetradactyla.—The organs of manducation belonging to this insect are accurately described by Mr. Kirby in his invaluable Century of Insects, published in the 12th volume of the Linnean Transactions. Vid. tab. 21, fig. 10, a, b, c, d. By some mistake (Mr. Kirby informed me,) the generic characters which properly belong to Macraspis tetradactyla were attributed to Rutela pulchella. The various species of this genus belong exclusively to the New World. Thirty-five species have fallen under my notice.

Sp. 85. Lunulata.—This insect has all the appearance of a Rutela, and if so, is certainly not a native of Sumatra, but of South America. I am only acquainted with Olivier's figure, (vid. Cetonia, 6, 12, 112,) never having seen a specimen in any collection.

Sp. 88. *Philippensis*.—This insect is as abundant in China, as C. aurata is in Europe; other Asiatic species closely resemble our northern specimens. An interesting example of this occurs in Cetonia

marmorata from Japan, sent to me lately by M. De Haan of Leyden; after a rigid examination I feel convinced it is a distinct species; I propose, therefore, to name it in honor of the celebrated Siebold, a very able Naturalist, through whose exertions much light has been thrown on the insects of that country. His Fauna Japonica, now in the course of publication, merits a conspicuous place in the libraries of all Zoologists.

Sp. 89. Stolata.—By Fabricius this insect is described erroneously as inhabiting New Holland. I believe it to be a native of Africa. My valued friend, Mr. Burchell the traveller, possesses some specimens from Africa (probably from Caffraria) collected by himself.

Sp. 92. Abbreviata.—This insect is probably a Cetonia; no mention is made of it by Monsieur Gory, although it is described by Fabricius from the cabinet of Monsieur Geoffroy of Paris.

Sp. 96. Marmorata.—According to Illiger this insect is only a variety of C. mandarina, in which opinion I concur. Cetonia marmorata of Europe is a distinct species, and has been described by various other names.

Sp. 99. Areata.—In Olivier's work discoïdo is placed before the Latin term areata, hence it has

been confounded with C. discoidea of Fabricius, quite a different species.

Sp. 103. Albopunctata.—This species occurs in Africa as well as India.

Sp. 110. 14-maculata.—This is Cetonia cœrulea Oliv. and Gymnetis cœrulea Gory. It is no uncommon occurrence to find the same insect described by Fabricius and Olivier, under different names. Few individuals are perhaps aware of the cause; the former, in his various visits to this country, had access to the Banksian cabinet, and described all the new species which were found in that collection. He next took up his abode with Mr. Lee, of Hammersmith, and also described the novelties of his cabinet. To every insect labels were attached by Fabricius, frequently in his own hand-writing; which was not always the case in the Banksian collection. Olivier on his arrival in London directed his attention to the drawers containing the last arrivals of insects, and figured and described for his grand work many which had previously been designated by Fabricius. It is singular that this insect which came into my possession at Mr. Lee's sale, has the specific name of C. 14-maculata attached to it, while a variety of it with the thorax blue, is denominated C. cœrulea. The locality of the former

is Eastern India, and of the latter the island of Mauritius, from whence I have received it. Another species from Travancore is closely allied to the above, and in the collections of the Continent other allied species appear confounded under the same name.

Sp. 120. Gloriosa.—This insect is another example of a species described by Olivier as well as Fabricius; the latter writer has given it the name of Melolontha Dorcyi.

Sp. 121. Maura.—Now a Cremastocheilus according to Messrs. Gory and Perchéron. The true type of that genus is C. Castaneæ Knoch, an American insect. Perhaps of all the genera of the Cetoniadæ, less attention has been paid to this genus by the above writers, than might have been expected. Mr. MacLeay some years back gave the name of Genuchus to an African insect described by Fabricius as Cetonia cruenta, and Mr. Kirby, in the 14th volume of the Linnean Transactions, sometime afterwards detailed the characters. Genuchus, as a genus, is closely allied to Cremastocheilus, but is evidently distinct; it represents in Africa the Cremastocheili of North America. There is also a very marked form which connects in my opinion Cetonia and Genuchus; I allude to two species

published by M. Gory, viz. Crem. Maculatus and Brahma, both from the East Indies. Mr. Kirby published in 1826 his remarks on the C. Castaneæ of Knoch, and added a new species named Variolosus. In 1828 were added also in the Zoological Journal, two more species, viz. Crem. canaliculatus and Harrisii, all four belonging exclusively to North America; it is probable that eventually in South America there will yet be discovered a subgenus allied to Cremastocheilus; at present, however, there appear but three sub-generic forms known, which may be regarded as representing the genus in the different parts of the globe, viz. Crem. Castaneæ of North America, Genuchus cruentus of Africa, and Crem. maculatus of the East Indies. To the future investigator of these most interesting insects I leave the nomination of the sub-genera.

Sp. 124. Cruenta.—The type of the genus Genuchus, M. L. Vid. the generic details in the Linnean Transactions, Vol. 14, page 569.

11. MELOLONTHA.

Sp. 4. Rorida — This appears to be the same insect which Olivier has denominated Mel. Commersonii.

- Sp. 5. Serrata.—Now an Holotrichia of Mr. Kirby's manuscripts. There are in the Banksian cabinet two insects labelled with this name; one has the thorax serrated, the other not. Is it a sexual distinction?
- Sp. 14. Alopex.—This insect is the type of Mr. Kirby's genus Cephalotrichia; I am acquainted with two other species from the Cape of Good Hope, Ceph. vicina mihi, and amplexa Klug.
- Sp. 23. Atriplicis.—The Baron De Jean in his last Catalogue ranges it under the term Anisonchus. In Guerin's Magasin de Zoologie, pl. 20, however, it is described and figured under the name of Hoplopus Laporte, from $o\pi\lambda os$ and πovs ; as the characters are detailed, I consequently retain the latter name.
- Sp. 26. Lanigera.—This insect belongs to the genus Areoda Leach; there are about twelve species in the different Continental collections with which I am acquainted.
- Sp. 27. Longicornis.—This species will form the type of a new genus allied to Mr. Kirby's Cephalotrichia. In my collection there are four species, which I have named, Robusta, Boei, and Klugii; there are others in the collection of Mr. Burchell, all of which inhabit Africa.

Sp. 28. Punctata.—Belonging to Mr. W. Sharpe MacLeay's genus Pelidnota. About ten species are mentioned in De Jean's Catalogue, but double that number will be found in different collections. The genus Chrysina Kirby, published in the Zoological Journal appears to unite Pelidnota with Scarabæus Macropus Francillon.

Sp. 29. Viridis. – The type of Euchlora MacLeay. In my collection there are twenty species. The French writers seem to confound Mimela Kirby with Euchlora M.L. Chrysea of Kollar, which is mentioned by De Jean, belongs to the former genus.

Sp. 30. Æneus.—Type of Dr. Leach's genus Repsimus; there are four species known.

Sp. 31. Suturalis.—Now the type of a new genus, which I have named Stethaspis.

Sp. 32. Bicolor.—The native country of this insect is stated by Fabricius to be the Cape of Good Hope; this is erroneous, as it is only met with in the East Indies. The species of Euchlora are more numerous than in the allied genus Mimela.

Sp. 35. Morio.—I have added a mark of interrogation to this species, being doubtful if it really belongs to the genus Chalepus; according to Illiger, Melolontha Hottentotta is the same insect.

Sp. 37. Rufipennis.—This insect is unknown to

me; I have ranged it as a Cyclocephala, merely from the description.

Sp. 40. Glacialis.—This species I propose as the type of the genus Macrosoma; to it belong most probably Mel. lurida in the Tunstall cabinet, as well as M. striata and testacea of Fabricius. Mr. Tunstall's collection at his death went into the possession of Mr. Allan, and was the nucleus of the Entomological Cabinet of the present Newcastle museum.

Sp. 43. Tristis.—This insect was received from North America, and described from Mr. Blackburn's cabinet at Warrington. I have not been able to ascertain in what state of preservation that collection is at present. It has not yet been dispersed; and as at is an authentic cabinet, and was named in early days, it may be the means of making us acquainted with several unknown Fabrician insects.

Sp. 45. *Hirticollis*.—This insect is unknown to me, although described from Vahl's cabinet. The Gmelin edition of the Systema of Linneus, page 1569, sp. 300, merely adds, that in size it approaches Sc. fuscus.

Sp. 47. Ruficollis.—There are two species in the Banksian collection ticketed with this name. Schönherr in a note attached to this species, seems

in doubt to what family of Melolontha to refer it; of course to attempt to assign the right genus would on my part be presumption.

Sp. 48. Quadridens.—This insect was described from Hybner's cabinet; no notice is made of it in Illiger's Magazine.

Sp. 49. Variolosa.—This insect is in my collection, and was purchased at Lee's sale. It appears to belong to the Baron De Jean's magazine genus Schizonycha, which comprehends under it various forms of Melolonthidæ. The characters are not yet published, and the name will therefore not stand. Schiz. Brasiliana appears to be the type of the genus Rhinaspis of Spix and Martius. Vide Delect. Anim. Art. Bras. pl. 10, fig. 1, Rhinaspis Schrankii.

Sp. 54. Brunnea.—The type of Mr. MacLeay's genus Serica; as there are several subgenera belonging to this genus, I consider the Sericidæ a distinct family. Monsieur Laporte, in Guérin's Magasin de Zoologie, has detached various species from Serica, and formed from them a new genus, denominated Trochalus. He possesses four species, all from Senegal. In my collection there are nine, and many others will be found in our metropolitan cabinets. They appear to belong exclusively to

Africa and its adjacent islands; some few species are met within Madagascar. Mel. gibba, lineata, and picea described by Fabricius belong to this genus Trochalus.

Sp. 58 Erythrocephala.—Belonging to the genus Apogonia, Kirby. The founder of this well characterized genus doubts the country to which the type belongs. I give my opinion that it inhabits the East Indies, as there are several species allied to it in my collection from Madras and Singapore. Three were described by me from General Hardwicke's collection, viz. Apogonia nigricans, ænescens, and brunnea. Vide page 23, of the Zoological Miscellany.

Sp. 62. Rufa.—This singular insect appears to be a form well worthy of being made the type of a new genus. It is in the Banksian cabinet.

Sp. 63 & 64. Festiva.—Mr. MacLeay in the Appendix to Captain King's Narrative of a Survey of the Coasts of Australia, justly considers this insect as the type of a new genus allied to Serica. I suggest the adoption of the term Calonota, to include all the Hydrobiiform Sericidæ. They seem to be peculiar to New Holland. Vide the details of the genus in the concluding part of this Fasciculus among the new genera.

Sp. 65. *Holosericea*.—Type of the genus Rhombonyx Kirby, a second species allied to the above I have lately received from Macao in China.

Sp. 69. Vitis.—Fabricius seems to think that in America this species is the same as that which is found on the European vine. It is scarcely possible that the larvæ could have been transported thither in the cuttings or plants imported into that country. A question then arises as to the identity of species; some Entomologists of the present day assert that all American insects differ from those of Europe. My observations lead me to think that this is not always the case; leaving the question still open for future discussion, I merely remark that it matters little in which way the question is eventually determined. In both cases we shall have to look to a higher and more interesting subject of enquiry, viz. the functions committed to the several types of form by an allwise and provident Creator. In both instances, whether we consider these insects as distinct or the reverse, that is, as species or varieties of species, we must still regard them as the representatives of their respective countries.

Sp. 71. Cardui.—Now of the genus Glaphyrus Lat. which has very properly been formed into a

family by Mr. MacLeay: the genera composing it require a thorough investigation.

Sp. 73. Fastuosa.—Now of the genus Mimela Kirby; for the species of this genus the reader is referred to a Monograph in the first volume of the Entomological Transactions, page 116, where fourteen are enumerated. I have lately received from the Nilgherry mountains an undescribed species, which I have named Mimela Xanthorhina. Vide the description at the end of the newly indicated genera.

Sp. 82. Mærens.—This insect was described from the cabinet of Dom. Rohr, which, if I am not mistaken, along with Sehestedt's and Lund's, are added to the Royal Copenhagen collection. I am unable to give any information respecting this species.

Sp. 84. Aulicola.—This singular insect will probably form the type of a new genus. The clypeus is remarkable, and differs from any of the published genera of my acquaintance.

Sp. 37. Arboricola.—Probably an Anisoplia. Melolontha nitidula Oliv. appears to be the same species as the above. It is questionable, however, if M. nitidula Fab. is the same as M. nitidula of Olivier.

Sp. 98. Atomaria.—Now the type of the genus

Gymnoloma De Jean. I am not aware of its characters being published; it appears to afford sufficient grounds for the establishment of a new genus.

Sp. 98. Chrysomelina.—Now the type of Megerle's genus Ochodæus.

Sp. 110. Cincta.—Melolontha marginata of Olivier is apparently the same as that insect described as Cincta by Fabricius.

Sp. 122. Morio.—It is with doubt that I add the generic name of Anisoplia to this species. Can this insect be Anisoplia atra of Count Jenisson's Cabinet?

Sp. 129. Variabilis.—Probably under this name more than one species is confounded. The Sericidæ of North America are certainly different from our European species, although they greatly resemble them.

Sp. 147. Meles.—The specific name is usually printed Melis, probably a typographical error.

12. Lucanus.

Sp. 7. Femoratus.—Several species allied to Lucanus femoratus from South America are remarkable for their form, the head being large and nearly square, with the sides straight. The body is much depressed, having the base of the elytra considerably wider than at the apex. This form

appears to be peculiar to the New World. The clava of the antennæ has only three lamellæ.

Sp. 14. Acuminatus.—Now an Ægus of Mr. MacLeay. The reader is referred to the Horæ Entomologicæ for the generic characters of this group, the species belonging to it are numerous. It is singular that the Baron de Jean still considers this insect as a Dorcas, although he has adopted other genera from the above writer. He appears to have omitted noting this well defined form; all the species known at present belong to Asia or New Holland.

Sp. 18. Cancroides.—Now a Dorcas, according to Megerle; this singular insect will, however, at some future time, be the type of a distinct genus.

Sp. 19. *Lunatus*.—From the description given by Fabricius, I rank this species as an Ægus. It has never fallen under my inspection.

Sp. 20. Piceus.—Now a Ceruchus MacLeay; Megerle gave the Plinyan name of Tarandus, as a generic one, to include the European species named Tenebrioides and Silesiacus. I prefer, however, that of Ceruchus M.L., as the former is only a catalogue name, and the details of the genus having also been first published by Mr. MacLeay, is the reason I retain it. Lucanus Quercus Knoch apparently belongs to this genus.

Sp. 22. Striatus.—This insect forms the type of Mr. W. Sharpe MacLeay's genus Figulus; he states that it occurs in the East Indies and in the Island of Bourbon. It may here be remarked, that Madagascar and the Islands of Mauritius and Bourbon (which, geographically, may be considered as connected more intimately with Africa than Asia) appear in the entomological character of their genera to unite the insects of the two continents. They possess, however, types of form, which seem (as far as I have yet had an opportunity of judging) peculiar to these islands. I am exceedingly anxious to ascertain, if any traces of deviation from typical forms of the insects of the African continent have been observed in the smaller islands on the coast of the Red Sea. It is probable that a slight deviation in these localities may be observed. To this genus belong Fig. ebenus of Klug from Madagascar, F. Ovis D. J. from Senegal, and also F. regularis of Westwood from New Holland. The genus appears to be confined in its range to Africa, Asia, and Australia.

Sp. 23. Caraboides.—The type of the genus Platycerus of Latreille, Lucanus rufipes Fab. is perhaps only a variety of Pl. caraboides. I possess a second species from North America, which belongs

to the same genus, and appears to agree with the description of Lucanus virescens Fab., a species omitted in the later works of Fabricius, being first described in the Appendix to the Systema Entomologicæ, p. 817. From a manuscript reference made by Dr. Latham to Francillon's drawings, I was led to infer this, as he states the size of the insect as nearly three-quarters of an inch.

Sp. 25. Punctatus.—Now a Figulus MacLeay. The Baron De Jean includes under this term Lucanus cylindricus of De Haan, which insect is the type of Mr. Westwood's genus Cardanus.

13. ÆSALUS.

Sp. 1. Scarabæoides.—The only species known of the genus. The remarkable insect named Codocera by Eschscholtz (which is the same as Stomphax of Fischer) seems to connect Æsalus with Ceruchus and Sinodendron. For a better acquaintance with the genera of Lucanidæ, the student is referred to Mr. Westwood's Synoptical Tables of the Lucanidæ, published in the Annales des Sciences Nat. 2 series, Zool. tome 1, pl. 7, as well as Mr. MacLeay's observations on this magnificent family in the Horæ Entomologicæ.

14. Passalus.

Sp. 7. Minutus.—Monsieur Perchéron in his valuable Monograph has apparently omitted to notice Passalus minutus of Fabricius. A dissertation on the genus Passalus will also be found in the Mem. de la Soc. Imp. des Nat. de Moscou, t. 7, ou Nouv. Mem. t. 1, p. 13—18, by the celebrated Eschscholtz.

Family. DYNASTIDÆ, MacLeay.

Genus. Megaceras, Kirby.

Type of the Genus. Geotrupes Chorinæus, Fab.

Caput in mare unicorne, cornu simplici, apice bifido, antice convexo, postice canaliculato.

Mandibulæ validæ apice bilobæ, basi dilatatæ intus subciliatæ.

Maxillæ ungulatæ, interne inermes.

 $Palpi\ maxillares\ 4$ -articulati articulo 1^{mo} brevi, 2^{do} longiori suboblongo, 3^{tio} obconico, extimo elongato-ovato subtruncato.

*Mentum** subtrigonum apice truncato basi paullo angustiori.

Labium obsoletum vel internum.

Palpi labiales 3-articulati articulis duobus primis obconicis, ultimo longiori apice attenuato.

Antennæ 10-articulatæ, articulo 1^{mo} basi angusto, apice crassiori, sequentibus sex fere moniliformibus, clava subovata trilamellata.

Corpus oblongum.

Thorax postice abdominis latitudine, e basi antice

^{*} Labium, Kirby, in Linnean Transactions.

valde elevatus, apice late emarginato, seu in cornua bina porrecta producto. Fœmina adhuc latet.

To this genus also belongs an undescribed species, which Mr. Kirby has named Meg. Chorinellus. It will be found in the cabinet of the Entomological Society of London.

GENUS. ENEMA, Kirby.

Type of the Genus. Geotrupes Enema, Fab.

Caput in utroque sexu unicorne, apice bifido seu simplici, cornu antrorsum et retrorsum convexo.

Mandibulæ bilobæ basi dilatatæ, apice fortiter bifido.

Maxillæ apice 3-unguiculatæ dente extimo longiori.

Palpi maxillares 4-articulati 1^{mo} articulo trigono 2^{do} fere triplo longiori 3^{tio} cylindrico, ultimo duobus præcedentibus vix longitudine æquali, elongato-ovato, apice attenuato ovato et truncato.

Mentum subtrigonum vel conicum apice simplici.

Palpi labiales 3-articulati articulis duobus primis obconicis, tertio longiori ovato.

Antennæ fere ut in Megacerate, Kirby.

Thorax in utroque sexu unicornis, aut bifidus,

cornu e medio disci surgente, curvato et apice deflexo.

Corpus oblongum, elytris in medio thorace parum latioribus.

Mr. Kirby takes the Fabrician specific name of Enema as a generic one, and applies to the type of the genus that of Infundibulum. To Enema belong the following species, viz. Geot. Pan and Quadrispinosus of Fabricius, Sc. Æneas of Kirby, and an insect which in my collection has attached to it the manuscript name of Monachus, D. J.? According to Monsieur Lacordaire both sexes of this genus have the thorax armed with horns.

GENUS. CHEIROPLATYS,* Kirby.

Type of the Genus. Geotrupes Truncatus, Fab.

 ${\it Caput}$ triangulare clypeo antice truncato reflexo.

Mandibulæ robustæ antice conicæ, hirsutæ.

 ${\it Maxille}$ apice 3-dentatæ, dente extimo truncato.†

Palpi Maxillares 4-articulati articulo 1^{mo} angusto

^{*} From χειρ, manus, and πλατυς, latus.

[†] In some specimens dissected the external tooth was as large as the two others, and of similar form.

minuto, 2^{do} suboblongo, 3^{tio} obconico, ultimo scalpiformi.

Mentum elongato-conicum apice rotundatum.

Palpi labiales articulo ultimo majori scalpiformi.

Corpus fere oblongum elytris thorace parum latioribus.

Thorax maris retusus, cornutus, cornu breve in ipso margine antico, feminæ convexus, inermis.

Pedes breves validissimi, tibiis anticis & externe bidentatis, quatuor posticis femoribus incrassatis, tibiis fere ut in Temmorhyncho Hope, binis foliaceis uncis instructis.

This remarkable form seems peculiar to New Holland, where it appears to be the representative of the African genus Temnorhynchus. It is worthy of remark, that the males have only two calcaria on the tibiæ, while the females have three. Cheiroplatys De Jeanii, and Gibbosus of Hope, and Ch. Juvencus of Mr. Kirby's cabinet, belong to this genus. They are all from New Holland. The figures of the Trophi of this genus were made from Mr. Kirby's dissection of a specimen of Ch. Juvencus in the collection of the Entomological Society.

GENUS. CHALCOSOMA, Hope.

Type of the Genus. Geotrupes Atlas, Fab.

Caput unicorne cornu reflexo postice dentato clypeo bifido.

Mendibulæ basi dilatatæ apice falcatæ acutæ.

Maxillæ elongatæ lobo tenui subacuto, valde hirsutæ.

 $Palpi\ maxillares\ 4$ -articulati, $1^{mo}\ brevi\ minimo,\ 2^{do}\ crassiori\ oblongo\ 3^{tio}\ obconico\ ultimo\ ovato$ producto, duobus præcedentibus longiori.

Mentum elongatum sensim attenuatum apice paullo angulariter dilatatum et subemarginatum.

Palpi labiales 3-articulati duobus primis articulis obconicis, extimo elongato ovato apice subtruncato.

Corpus crassissimum, abdomine thorace latiori.

Thorax tricornis cornu medio brevissimo, cornubus lateralibus elongatis porrectis.

Femora antica unidentata.

I am inclined to think from the examination of many specimens that both sexes may have the thorax cornuted; the species therefore which I described from the collection of General Hardwicke, form a subgenus closely allied to Chalcosoma; the femora of the latter are without the prominent tooth so

conspicuous in Atlas, Hesperus, Caucasus and Chiron.

GENUS. STRATEGUS, Kirby.

Type of the Genus. Geotrupes Alœus, Fab.

Caput fere trigonum apice truncatum vix emarginatum fronte antice tuberculis seu dentibus armato.

Mandibulæ validissimæ, apice truncatæ 2-dentatæ dente interno minori, externo obtuso.

Maxillæ ♀ apice 8-spinosæ et ♂ 5-spinosæ subtus hirsutæ.

 $Palpi\ maxillares\ 4$ -articulati, 1^{mo} oblongo, 2^{do} fere triplo longiori, 3^{tio} obconico, 4^{to} tribus præcedentibus æquali, elongato, apice truncato.

Mentum subtrigonum antice dilatatum apice rotundatum.

Palpi labiales 3-articulati, articulo 1^{mo} sequenti longiore, 2^{do} minori obconico, ultimo elongato-ovato apice attenuato.

Corpus crassum.

Thorax tricornis, cornu intermedio longiori, lateralibus compressis.

Strategus differs from the genus Megaceras, which has both sexes cornuted, there is however an

approximation to the latter in several species of Strategus, which are armed with a short horn or tooth on the anterior part of the thorax, as well as with lateral tubercles. Both sexes have the front of the forehead bituberculate. There are several species belonging to this genus, viz. Sc. Semiramis of Palisot Beauvois, and probably also Sc. 4-foveatus and oblongus of the same author. Sc. Recticornis Kirby, may be added, as well as Geot. Antæus Fab. Geot. Ænobarbus, Syphax and Titanus of Fabricius, Massinissa of Kirby, and Ajax of Olivier, belong to the same genus; they have the intermediate thoracic horn furcate and deeply emarginate at the apex. In two remarkable insects in my collection, which I have named Montesuma and Pizarro, closely approaching Strategus, the lateral horns are furcate, the intermediate one is nearly evanescent, it is probable that the former belongs to a subgenus as the mouth is different, and the anterior tarsi quite anomalous.

Genus. Cælosis, Kirby.

Type of the Genus. Geotrupes Sylvanus, Fab.

Caput triangulare, cornu recurvo clypeo emarginato.

Mandibulæ in utroque sexu validissimæ, quadratæ apice 3-dentatæ, dentibus subæqualibus.

Maxillæ graciles apice acutæ dentibus duobus minutis sub apice armatæ, margine externo versus basin tuberculo conico, (in mare majori) instructæ.

Palpi maxillares 4-articulati, articulo 1^{mo} minuto breve, duobus proximis brevibus obconicis, extimo valde elongato-ovato apice truncato.

Mentum conicum apice truncatum vix emarginatum.

 ${\it Palpi\ labiales}$ 3-articulati et fere ut in Stratego Kirby.

Corpus oblongum, elytris thorace parum latioribus.

Thorax retusus prominentia variabili insignitus.

Pedes mediocres calcaribus acutis.

To this genus belong Geot. bilobus Fab. and C. Vesputius Hope. Monsieur Serville seems to attach much importance to the sutural striæ as marking some of the genera of Dynastidæ; the striation in the above genus is certainly remarkable. As a generic distinction, however, much weight cannot be given to it.

GENUS. XYLORYCTES, Hope.

Type of the Genus. Geotrupes Satyrus, Fab. &

Caput unicorne, cornu simplici recurvo, clypeo dentibus acutis armato.

Mandibulæ apice oblique truncatæ, seu margine interno obliquo, membrana setosa interne instructæ.

Maxillæ 3-unguiculatæ dentibus internis minoribus, apicali acuto.

 $Palpi\ maxillares\ 4$ -articulati articulo primo cylindrico, $2^{ ext{do}}$ crassiori suboblongo, $3^{ ext{tio}}$ obconico, ultimo elongato truncato.

Mentum subtrigonum basi angustiori lateribus rotundatis, apice truncatum.

Palpi labiales brevissimi 3-articulati duobus primis subtrigonis, tertio longiori ovato.

Corpus oblongum crassum.

Thorax inermis trunctatus et declivis.

Femina thorace antice convexo, capite postice corniculo armato.

This genus is closely allied to Oryctes of Illiger. An insect sent to me from the United States, by Monsieur Leconte, under the name of Satyrus, differs from the species in the Fabrician Cabinet. I propose, therefore, to give to this second species the

name of that indefatigable and zealous entomologist. Geot. Jamaciensis Fab. belongs to the same genus, and there are several others from South America and the West India Isles, which might be added, the greater part of which are undescribed. Mr. Kirby in his manuscripts proposed the name of Orycter to include the above species, but as the name is very similar to that of Oryctes, I have substituted that of Xyloryctes, from $\Xi \nu \lambda o \nu$ lignum et $o \rho \nu \sigma \sigma \omega$ fodio.

GENUS. SYRICHTUS, Kirby.

Type of the Genus. Geotrupes Syrichtus, Fab.

Trophi fere ut in genere Phileuro, palporum articulo extimo minus cylindrico.

Caput unicorne, cornu simplici recurvo, clypeo retuso.

Mandibulæ validæ extus in lobum rotundatum productæ apice subtruncato margine interno sub apice inciso, subtus lanuginoso.

Maxillæ elongatæ, lobo apicali dentibus tribus magnis acutis subæqualibus armato, dente infimo plano 3-denticulato.

 $Palpi\ maxillares\ elongati\ articulo\ basali\ minimo,$ tertio obconico. \mathcal{Q}^{do} et 4^{to} longitudine fere æqualibus.

Mentum suboblongum lateribus convexis apice valde emarginato.

 $Palpi\ labiales$ minuti articulis duobus basalibus brevissimis, $3^{ ext{tio}}$ longiore.

Corpus oblongum subtus pilosissimum.

Thorax fere semicircularis, inermis.

Tibiæ quatuor posticæ pectinatæ.

Tarsi quatuor postici haud articulo 1^{mo} producto.

Pedes anteriores unguibus inæqualibus.

Mr. Kirby has given the term Syrichtus as a generic name, to include those insects allied to this very remarkable form. The genus Heteronychus, De Jean, (of which I possess a species named Het. Licas, from Professor Klug of Berlin) in its general appearance seems evidently distinct.

To this genus the following species may be added, viz. G. Aries, Fab. as well as a new undescribed species from the island of Mauritius, which may, therefore, be named from that locality Mauritianus.

Genus. Pentodon, Kirby.

Type of the Genus. Geotrupes punctatus, Fab.

Caput trigonum tuberculatum.

Mandibulæ validæ 3-lobatæ, lobis latis obtusorotundatis, externe hirsutæ, interne lanuginosæ.

Maxillæ apice quinque-dentatæ, dente medio minori.

Mentum 3-angulare apud palpos constrictum, apice truncatum antrorsum subconvexum.

 $Palpi\ maxillares\ 4$ -articulati, articulo 1^{mo} brevi, 2^{do} fere oblongo, 3^{tio} obconico, extimo elongato ovato.

Palpi labiales fere ut in Syrichto, Kirby.

Corpus crassum valde convexum elytris thorace latioribus.

Thorax in utroque sexu muticus.

Pedes antici 6-denticulati, dentibus ternis prominentibus ternisque aliis minoribus obtusis.

This genus seems confined to Europe, as far as I am able to ascertain at present; Geot. Monodon, Fab. pertains to it. Scarabæus Monodon of De Haan from the island of Java evidently belongs to another genus, although in external appearance it closely resembles the Fabrician species.

Genus. Temnorhynchus, Hope.

Type of the Genus. Geotrupes retusus, Fab.

Caput retusum antice elevatum apice subemarginatum facie recte truncata.

Mandibulæ subtrigonæ apice conicæ edentatæ.

Maxillæ 2-dentatæ dente exteriori subobtuso interiori bifido subtus hirsutæ.

Palpi~maxillares 4-articulati articulo 1^{mo} brevissimo, 2^{do} triplo longiori cylindrico, 3^{tio} obconico, extimo elongato ovato.

Mentum suboblongum antice paullo angustius emarginatum.

 $Palpi\ labiales$ 3-articulati duobus primis articulis subtrigonis, 3^{60} ovato apice conico.

Corpus crassum.

Thorax muticus antice parum retusus.

Femora bina antica complanata, posteriora quatuor multo incrassata inflata.

Tibiæ posticæ latæ 2-carinatæ, apice calcaribus duobus foliaceis instructæ.

Tarsi breves hirsuti, 1^{mo.} articulo reliquis latiori.

This singular insect was originally named G. retusus by Fabricius; it was re-described by Palisot Beauvois under the name of Scarabæus Diana, from the kingdom of Oware in Africa. He appears to have confounded it with Geotrupes Coronatus Fab. which occurs in Java, and is a distinct species, although belonging to the same genus. Callicnemis Latreillii of Laporte seems to be distantly related to Temnorhynchus. I am enabled to add two un-

described species to the above remarkable type—one, viz. Temnorhynchus Isidis Hope, from the Cape of Good Hope, and Tem. Ritchii, collected in the Soudan, and sent to this country by the unfortunate traveller. Ritchie. Mr. Kirby in his MSS. gave it the generic name of Pachypus, and the Baron de Jean in his Catalogue adopts the term Coptorhinus; both names however must be changed, as they are previously used by other writers, for other genera of Lamellicorn beetles.

GENUS. BOTHYNUS, Kirby.

Type of the Genus. Geotrupes Cuniculus, Fab.

Caput mediocre, inerme clypeo triangulari apice bifido.

Mandibulæ subquadratæ dentibus tribus validissimis acutis armatæ, intermedio majori dorso rotundatæ, intus ciliatæ.

Maxillæ elongatæ apice edentulo, setigero, palpi maxillares mediocres, articulo 1^{mo} brevi basi angusto, 2^{do} crassiori et paullo longiori, 3^{tio} minori conico, 4^{to} reliquis fere longiori subcylindrico.

Mentum subtrigono-conicum basi angustius.

Palpi labiales brevissimi 3-articulati articulis duobus basalibus obconicis, 3^{tio} ovato.

Corpus oblongum subconvexum, thorace elytris vix augustiori.

Thorax transversus lateribus rotundatis, disco antice valde impresso, denteque tuberculiformi in medio marginis antici armatus.

Elytra striato-punctata striis e sutura 3, 4, et 5, 6, approximatis ad apicem elytrorum haud extensis.

Pedes breves, incrassati, tibiæ anticæ extus 3-dentatæ. Tarsi antici ungue interno majori angulato bifido.

To this genus belongs also Bothynus Ascanius Kirby, from Brazil, which appears to be related to Geotrupes Zoilus Fabr.

GENUS. ISODON, Hope.

Type of the Genus. G. Australasiæ, Kirby.

Corpus ovatum convexum elytris præsertim pone medium thorace latioribus.

Caput parvum, transversum, inerme clypeo acuminato acumine truncato subreflexo.

Mandibulæ triquetro-trigonæ incurvæ intus dente parvo obtuso armatæ.

Maxillæ breves apice oblique truncatæ dentibus

4 acutis armatæ; palpi maxillares articulo extimo ovato precedentibus duobus longitudine subæquali.

Mentum subacuminatum basi angustius valdo setosum.

Palpi labiales brevissimi articulo ultimo maximo inflato-ovato.

Thorax inermis elytris angustior, postice latior.

Elytra brevia valde convexa, punctato-striata.

Pedes mediocres. Tarsi postici graciles.

Tibiæ anticæ tridentatæ dente extimo longiori.

Isodon Australasiæ. Piceo-niger, nitidus, thorace punctatus, elytris piceo-castaneis, rugoso punctato-striatis, corpore subtus pilis fulvis obsito pedibusque castaneis. Long. corp. lin. 7. Habitat in Australasia, In Mus. Soc. Ent. London. (olim Kirbii.)

Family. MELOLONTHIDÆ, MacLeay.

GENUS. LEPIDIOTA, Kirby.

Type of the Genus. Melolontha Stigma, Fab.

Caput cum oculis transversum, clypeo rotundato subemarginato reflexo.

Antennæ 10-articulatæ, articulo primo crasso, barbato, reliquis articulis sicut in Eucirro, 7- $^{\text{mo}}$ pateræformi.

Palpi maxillares 4-articulati, articulo extimo semiovato.

Mentum in medio excavatum utrinque gibbum.

Prosternum verticale trigonum intus ad basin pedum anticorum extensum.

Mesosternum inter pedes intermedios prominens.

 $Unguiculi\ {
m medio\ dente\ armati}.$

Corpus oblongo-ovatum cinereo squamosum.

Cubitus 2-dentatus dente externo elongato.

This genus appears to differ from Eucirrus chiefly in the following points: In the number of the teeth of the interior tibiæ, in the shortness of the maxillary palpi, in being entirely covered with a squamous clothing, which is absent in the former, and in other minor points. The species are numerous, and seem confined to Asia and Africa, with their adjacent Isles. Mel. Rorida and Tomentosa of Fabricius, and Mel. Calanus and Rafflesii of Hope, all from the East Indies, belong to this sub-genus.

HOLOTRICHIA, Kirby.

Type of the Genus. Melolontha serrata, Fab.

Caput transverso-oblongum, postice prominens, clypeo apice elevato emarginato.

Antennæ 10-articulatæ capitulo triphyllo articulis intermediis subarcuatis, 6 et 7 pateræ-formibus.

Palpi maxillares articulo externo oblongo.

Cubitus 3-dentatus.

Calcaria dilatata arcuata vel falciformia.

Corpus postice dilatatum supra molliter villosum subtus villosissimum.

Thorax (in uno sexu?) lateribus crenulatus.

Pedes villosi.

To the above type belong various oriental species, viz. Mel. Polysticta and Obtusa of De Haan, Mel. Serricollis, Picicollis and Coriacea of Hope, as well as Pruinosa of Wiedemann, and at least a dozen other nondescripts in my collection. In the Banksian Cabinet there are two specimens named Mel. Serrata; one with the thorax serrated, the other not; and as in other respects the insects perfectly resemble each other, probably it is only a sexual distinction.

LACHNOSTERNA, Hope.

Type of the Genus. Melolontha Fervida, Fab.

Caput antice rotundatum clypeo emarginato reflexo.

Antennæ 10-articulatæ, articulo 1^{mo} clavato 2^{do} oblongo, tribus sequentibus subturbinatis 6^{to} et 7^{mo} subpateræ-formibus, clava 3-phylla.

Labrum transversum carinatum, carina arcuata.

Mandibulæ triangulares supra concavæ latæ.

Palpi maxillares 4-articulati articulo externo semiovato.

Prosternum breve elevatum utrinque subcornutum.

Corpus elongato-ovatum, elytris a basi ad apicem sensim magnitudine crescentibus.

Abdomen infra et supra glabrum, pectus villosum.

Cubitus 3-dentatus.

Ungues profunde bifidi laciniis divergentibus.

To the above genus belong Mel. Quercina, Quercicola and hirticula of Knoch. M. pilosicollis, however, of the same author, belongs to a different subgenus.

GENUS. APLIDIA, Kirby.

Type of the Genus. Melolontha transversa, Fab.

Corpus cylindricum.

Clypeus supra reflexus subemarginatus.

Labrum 2-lobum vel medio excavatum.

Antennæ 10-articulatæ, 7^{mo} pateræformi.

Palpi maxillares articulo extimo lanceolato supra excavato.

Cubitus subtridentatus dente superiori fere obsoleto.

Tarsi filiformes, unguiculis longuisculis apice fissis.

If Melolontha Solstitialis Fab. is considered as the type of Rhisotrogus, it is evident at one glance that Mel. transversa differs from it materially in form, as in various other minor points. The species seem peculiar to the South of Europe and Asia Minor.

GENUS. CEPHALOTRICHIA, Kirby.

Type of the Genus. Melolontha Alopex, Fab.

Caput clypeo reflexo emarginato.

Antennæ 10-articulatæ caule 4-articulato, clava hexaphylla.

 ${\it Palpi\ maxillares}$ articulo extimo lanceolato-ovato supra excavato.

Labrum sinu profundo excavatum.

Occiput hirsutum.

Caput, thorax et corpus infra pilis densissimis hirta.

Elytra glabra.

Cubitus 3-dentatus.

Unguiculi dentati.

This singular insect inhabits the Cape of Good Hope; other species allied to it are spread over the warmer parts of those regions. It might naturally be supposed that insects in warm climates would have less clothing than those of northern ones. It will be found, however, on examination, that this is very far from being a general rule, as many genera sufficiently attest. Mel. Crinicollis, Hope, and 2-fasciata, Hope, belong to this genus.

GENUS. MACROPHYLLA, Hope.

Type of the Genus. Melolontha longicornis, Hope.

Caput rotundatum clypeo reflexo haud emarginato.

Antennæ 10-articulatæ caule 5-articulato, articula 5^{10} clavæ dimidii longitudine, clava pentaphylla elongata.

Palpi maxillares articulo extimo lanceolato, seu elongato-ovato apice acuto, supra excavato.

Labrum 2-lobum seu medio fortiter excavatum.

Corpus subcylindricum ovatum.

Thorax subtus pilosus.

Abdomen glabrum pectore hirsutissimo.

Cubitus 3-dentatus.

Tarsorum Unques denticulo basali.

To this genus belongs Melolontha robusta of Klug.

GENUS. STETHASPIS, Hope.

Type of the Genus. Melolontha suturalis, Fab.

Caput clypeo integro reflexo.

Antennæ caule quinque-articulato clavâque pentaphylla.

Palpi maxillares articulo ultimo longissimo subtruncato.

Corpus fere oblongo-ovatum elytris a basi thoracis ad apicem magnitudine increscentibus.

Thorax postice obtuse angulatus.

Pectus sterno porrecto acuto armatum, et pilosum.

 ${\it Pedes}$ anteriores cubitis unidentatis dente fere obsoleto.

This Fabrician species differing in its form from any group that I am acquainted with, I have thought proper to consider as the type of a new genus. A second species will be found in my collection from the same country as the type, viz. New Holland.

GENUS. MICRODONTA, Kirby.

Type of the Genus. Melolontha Pini, Fab.

Antennæ 9-articulatæ articulis intermediis filiformibus, 5 et 6 pateræformibus, clava oblonga trilamellata.

Palpi maxillares articulo externo semiovato.

Cubitus 3-dentatus.

Nasus rotundatus emarginatus reflexus. Unguiculi basi obsolete dentati.

The above insect affords sufficient characters for separating it from Monsieur Latreille's genus Rhisotrogus, under which name (according to the Baron De Jean's Catalogues) various species are thrown together which require further subdivision. To this genus belong Mel. æstiva, aprilina and rufescens with many others.

Genus. Rhombonyx, Kirby.

Type of the Genus. Melolontha Holosericea, Fab.

Nasus apice truncatus reflexus.

Labium inflexum.

Antennæ 9-articulatæ.

Palpi maxillares articulo extimo ovato.

Cubitus subbidentatus.

Unguiculi inæquales, simplices, altero longiore majori, anteriori rhombiformi.

Corpus ovatum.

Thorax abdomine angustior.

Elytra e basi ad apicem sensim increscentia abdomine breviora, lineisque elevatis insignita.

Podex magnus triangularis deflexus.

Mr. Kirby has very properly separated this genus from Anomala, from which it differs in many respects. It is allied to Euchlora of Mr. MacLeay. All the species of Rhombonyx are glabrous and rarely if ever have the elytra with elevated lines. This form seems peculiar to Siberia, Japan, and China.

FAMILY. SERICIDÆ, Hope.

GENUS. CALONOTA, Hope.

Type of the Genus. Melolontha Festiva, Fab.

Corpus hydrobiiforme.

Clypeus rotundatus subemarginatus parum reflexus,

Antennæ clava trilamellata.

Cubitus 3-dentatus dente interno fere obsoleto.

Palpi maxillares ultimo articulo ovato-conico.

Mesosternum inter pedes anticos porrectum subcornutum. Quatuor pedes antici æquales femoribus compressis, postici femoribus incrassatis.

I am unable at present to give the full details of this genus, as the single specimen of the type in my possession (originally in Mr. Lee's cabinet) is in too mutilated a state to describe. It, however, affords ample characters for generic distinction. I am inclined to think that the antennæ of the sexes differ, and that the club in one sex has five lamellæ, while in the other only three. To this genus belong Mel. læta, Fab., and other species all from New Holland. The name Calonota is derived from καλος, pulcher, and νοτος, tergum. Some insects are remarkable for their pearly and silky lustre; others again for

the delicate bloom, like that which ornaments the plum, to which Mr. Kirby has appropriately given the term pruinosus. The insects belonging to Calonota resemble the opalescence of minerals, at one time imitating the fire-stone or Lumachelli marble, at another the beauty of the Labrador Feldspars. It is an object well worthy of enquiry what causes these variations of colour, a subject scarcely investigated and little understood.

GENUS. LIPARETRA, Kirby.

Type of the Genus. Melolontha Sylvicola, Fab.

Nasus apice truncatus.

Antennæ 9-articulatæ.

Palpi articulo extimo obovato.

Corpus crassum podice magno.

Elytra abdomine breviora.

Unguiculi simplices.

Cubitus 3-dentatus dentibus obtusis.

To this genus may be added Melolontha Monticola, Fab., and about twenty undescribed species in my collection. It is possible that the Clypeus varies in the sexes of the species belonging to this genus; should such be the case, the characters can be changed when the point is ascertained.

GENUS. MACROSOMA, Hope.

Type of the Genus. Melolontha glacialis, Fab.

Labrum rotundatum subemarginatum.

Antennæ clavâ elongato-ovata.

Thorax antice angustus postice parum latior.

Corpus elongatum, elytris thorace quadruplo longioribus.

Cubitus 3-dentatus.

To this genus may be added Mel. lurida striata and testacea of Fabricius. Two of the species described by him have the posterior margin of the thorax sinuated, particularly opposite the scutellum. Mel. Areata differs slightly from the other species in this respect. My zealous entomological friend, Mr. Charles Darwin, of Shrewsbury, (among various Zoological treasures obtained during his interesting voyage, now on the eve of publication) has brought with him from Terra del Fuego, a valuable collection of insects, among which are some species of Macrosoma, and I hope, at a future time, to detail the generic characters more fully than I have been able to do from the specimens in the Banksian collection, which probably reached this country in a mutilated state.



APPENDIX.

LAMELLICORN BEETLES OF LINNEUS.

Linneus, in the Mantissa Plantarum, (published in 1771) has, in an appendix to that work, noticed, among various other insects, four species of Lamellicorns, viz. Scarabæus Dichotomus, Claviger, Goliathus, and Tetradactylus. As they are all incorporated in the Systema Eleutheratorum of Fabricius, I did not think it necessary to attach them to the list of Linnean species, although they were originally described by him.

Sp. 44. Calcaratus.—In a note relating to this insect I expressed an opinion that it might probably be a Dichelus. In a letter lately received from Monsieur Guérin, of Paris, he states his belief that it is a Sisyphus or an Onitis, leaving the question still undecided.

Sp. 47. Amazonus.—Monsieur Guérin feels confident that this insect is a Coprobius, I am yet inclined to attach it to the genus Cyclocephala. The Scarabæus Amazonus? of Drury is given by

Mr. Westwood in the new edition of the work of that author as the Cyclocephala signata, Fabr.

Sp. 55. Sepicola.—A note from M. Guérin seems to confirm my opinion of Sepicola being an Anisoplia. The mark of interrogation attached to this species therefore may be omitted.

Sp. 56. Syriacus.—Monsieur Guérin asserts that this species is not an Anisoplia but an Amphicoma, in which opinion he is probably correct.

Sp. 82. Æneus.—The French Entomologists think that this species is probably a Dichelus from the Cape of Good Hope, more satisfactory intelligence may yet be expected concerning it from the Swedish writers.

LAMELLICORN BEETLES OF FABRICIUS.

Sp. 20. Latebrosus.—The reader is referred to Mr. Kirby's late work, The Fauna Boreali-Americana, for various interesting remarks on the Lamellicorns contained therein, and as it will render the student some important service, by combining the latest published account of the species mentioned by Linneus and Fabricius, I shall briefly state the more important points alluded to in that publication, taking them in the order in which they are mentioned.

Type of the Genus. Pelidnota, MacLeay.

Sp. 76. Punctata.—Mr. Kirby remarks, in a note respecting the Rutelidæ, to which the above insect belongs, "That the Rutelidæ exhibit the vertical præsternum of the Dynastidæ, which is wanting in the Anoplognathidæ." He therefore considers them, with Latreille, as more immediately connected with the former family, and has placed them accordingly. (Vid. Linnean Tables, Sp. 76.)

Sp. 72. Brunnea.—Now of the family Sericidæ. The establishment of the family Sericidæ is quite in accordance with my views. The description of a new genus belonging to it named Camptorhina by Mr. Kirby, is published with its details, to which also some valuable remarks on Serica M. L. are appended at page 128. (Vid. Linnean Tables, Sp. 72.)

Sp. 77. Fulgida.—Mr. Kirby has given a full and ample description of this insect in English, and it is to be hoped that other entomologists, will adopt the plan of publishing English descriptions, taking care also to give a concise Latin one, that foreigners, as well as ourselves, may be able to derive benefit from what is published in this country. (Vide Fabrician Tables, Sp. 77.)

Sp. 13. Trichius piger, Fab.—Mr. Kirby, some time since, in the Zoological Journal, published his remarks on the Trichiidæ, and made piger, Fab. the type of a subgenus. The name of Trichinus too closely resembles Trichius. The reader is referred to the North American Fauna, page 136, for an account of several new species, and copious observations respecting this interesting family. In the last mentioned work a new family of the Lamellicorns named Diplotaxidæ has been instituted by Mr. Kirby, and a new genus, bearing the name of Dichelonycha has been separated from Macrodactylus, from which it is distinguished by having its maxillæ armed only with two teeth, the last joint of its palpi of a different shape, and its labium approaching to a square form; whereas in the latter genus the maxillæ are more conspicuous, and armed with three teeth, the last joint of the palpi is subovate, and the labium is oblong and channelled. The species seem confined to the northern parts of the New World. Three are described, the type being Melolontha linearis, Herbst.

Lucanus 12.

Sp. 20. *Piceus*.—Mr. Kirby has given the generic name of Platycerus to the above insect, not aware, perhaps, that Mr. William Sharpe MacLeay has published it under the title of Ceruchus.

Passalus 14.

Sp. 1. Interruptus.—This species, I am inclined to think, belongs peculiarly to South America, and never enters the United States, apparently the Interruptus of Linneus and Fabricius are distinct insects. On turning to Monsieur Perchéron's monograph of Passalus, his remarks relating to the country it inhabits are as follows: This species is common to Cayenne and intertropical America. I have observed in the collections which I have examined, some small individuals under the name of P. Ambegicus, it is impossible, however, to discover any specific difference in them. They are all from Colombia. He adds, "Je crois que cette espèce fait partie de la masse déjà trop nombreuse de celles qui ne doivent leur existence qu'au désir de multiplier les espèces nouvelles, pour augmenter ses moyens d'échange, et dont on doit faire prompte et briève justice." (Vid. Perchéron's Monographie des Passales, p. 45.)

With respect to the Goliathidæ, I shall now attempt to draw up a few observations upon this interesting family, which I was precluded from doing when the former sheets were going through the press, as I was absent from the metropolis, and unable to have access to my cabinet.

GOLIATHIDÆ.

Country.	Thorace trapezoidali.
Africa	Mecynorhina. Dicronorhina
Asia	Rhomborhina.
East India	Jumnos
Brazil	N. G. (Hæfneri Dej
	Africa Asia East India

Sect. 1.—" Thorax antice et postice angulis rotundatis."

Genus. Goliathus.—Tibiæ anticæ & inermes, ç extus tridentatæ, 4-posticæ & inermes, ç dente medio armatæ maxillæ lobo apicali corneo dentato.

The following species belong to this genus:

- 1 Goliathus giganteus, Kirby.
- 2 Drurii, Westwood.
- 3 ———— Cacicus, Olivier.
- 4 --- Regius, Klug.
- 5 ——— Princeps, Hope.

GOLIATHUS PRINCEPS, Hope.

Long. Unc. 3. Lat. elytr. Unc. 1. lin. 7.

Nigro-piceus capite 2-maculato, thorace vittato, scutello lateribus subalbidis, elytris late nigro-piceis lateribus et apicibus albis, tuberculis apicalibus nigris.

Habitat in Guinea. In museo nostro.

Caput antice subsinuatum, supra planum marginibus reflexis, nigrum punctatissimum maculis duabus fere mediis fulvis.

Antennæ nigræ articulo basali rufo-hirto.

Mandibulæ subquadratæ angulo antico externo in dentem parvum planum producto, lobo interno hirsuto.

Maxillæ corneæ, lobo apicali corneo curvato acuto, extus pilosissimo, dentibus duobus internis armatæ.

Palpi maxillares breves articulis 2 et 3 æqualibus 4^{to} longiori apice subacuto.

Mentum magnum ad basin angustius antice valde emarginatum, lobo singulo valde transverse impresso.

Palpi labiales brevissimi, articulo extimo longiori foveis menti anticis recepti.

Thorax piceo-niger punctatissimus punctis posticis majoribus sensim distantibus; margine antico, in medio tuberculo acuto armatus, disco ante medium sub excavato, nitidus, vittis 7 albido-ochraceis, media abbreviata.

Scutellum læve lateribus albidis.

Elytra nigro-picea subrugosa, irregulariter subpunctata, lateribus apiceque lato iridescenti-margaritaceis, tuberculo in singulo fere apicali nigro.

Corpus infra et pedes nigro-picea.

Tibiæ anticæ extus 3-dentatæ, 4 posticæ in medio unidentatæ, externe fulvo plosæ.

I have given the name of Goliathus Princeps to the above species, as it differs in many points from G. Regius figured by Professor Klug in Erman's Voyage. In the present state of our knowledge it is difficult to decide with certainty whether the above described insect be the female of any of the already described, or of a still unknown, species. It is better therefore to give it a provisional name, although the insect is evidently a female, than let it remain undescribed. At a future time it can be changed when more accurate information is obtained. It is almost impossible to convey, in Latin, an idea of the iridescent colour of some of these Goliath Beetles, the appearance of mother-of-pearl exactly corresponds with the pale portion of the elytra of the insect above described. The nature and causes of the colouring

matter with which so many of these insects are adorned, would form a very interesting subject of inquiry.

Sect. 2.—Thorax trapezoidalis.

MECYNORHINA, Hope.

Tibiæ anticæ dentibus utrinque armatæ.Tibiæ intermediæ dente parvo medio armatæ.

Type of the Genus. Gol. Polyphemus, Fab.

A second species of this genus is in the possession of Mr. Joseph Hooker, of Glasgow. At present it is undescribed.

DICRONORHINA, Hope.

- ¿ Tibiæ anticæ interne dentibus armatæ, 4-posticæ inermes.
- § Tibiæ anticæ externe dentibus tribus, 4-posticæ unico medio armatæ.

Type of the Genus. Cetonia Micans, Fab.

To this genus belong also Cet. 4-maculata, Oliv. (which is evidently the same as Gol. Daphnis Buquet,) and also Goliathus Grallii of the same author.

RHOMBORHINA, Hope.

- 3 Tibiæ anticæ inermes, quatuor posticæ dente minutissimo medio.
- ? Tibiæ anticæ 2-dentatæ, 4-posticæ dente majori unico, medio, armatæ.

Type of the Genus. Goliathus Heros, Latreille.

To this genus belong the following species, namely, 2. Gol. Mellii (Melly Gory) 3. Gol. Opalina, Hope, which seems to be the same as Cet. Japonica, Siebold; 4. Gol. Hardwickii, Hope; 5. Gol. Roylii, Hope; 6. Cetonia Cincta of the Zoological Journal.

MIMELA XANTHORHINA, Hope

(Vide page 76.)

M. viridis, nitida capite antice, thoracis elytrorumque lateribus luteo-tinctis, corpore subtus cum pedibus fusco-testaceis.

Long. Corp. lin. 7.

Habitat in montibus Indiæ Neilgherry dictis. Madras. In mus. nostr. Species parva, magnitudine Mem. Blumei æqualis. Supra viridis nitida, capite thoraceque sub lente punctatissimis, elytris punctis majoribus irregulariter dispositis, et in singulo elytro lineas 9 punctorum longitudinales, per paria digestas (1^{mo} saturali.) Clypeus et margines thoracis et elytrorum luteo-tincti. Antennæ, palpi, pedes et corpus subtus totum, fusco-lutea, femoribus basi pallidioribus. Podex viridis apice luteo.

Postscript.—It was not until after the preceding observations upon the Goliathidæ were printed that I obtained a knowledge of the genus Narycius of Dupont, published in one of the recent numbers of Guérin's Magasin de Zoologie, which is the cause of its omission.

FINIS.

G. NORMAN, PRINTER, MAIDEN LANE, COVENT GARDEN.



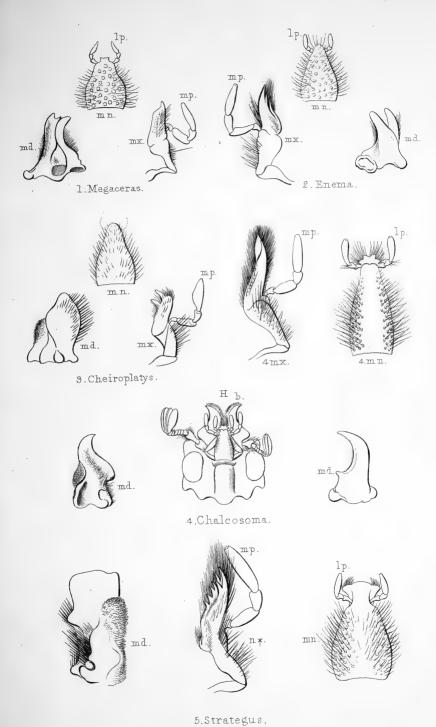
ERRATA.

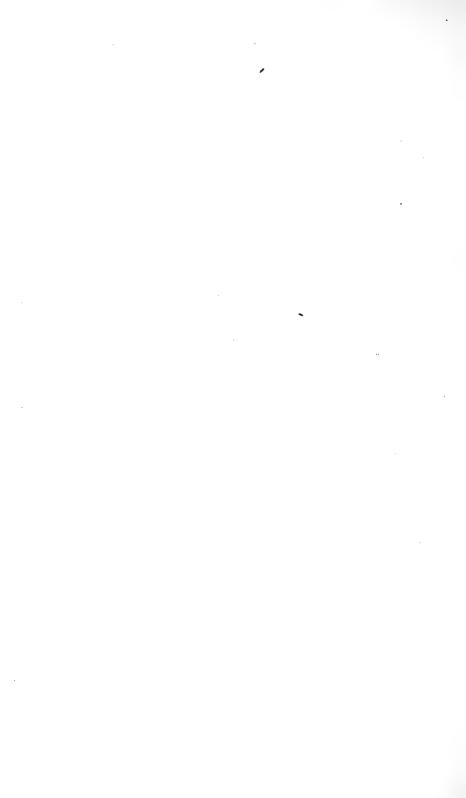
Page 16. Hæmorrhoidales, read Hæmorrhoidalis.

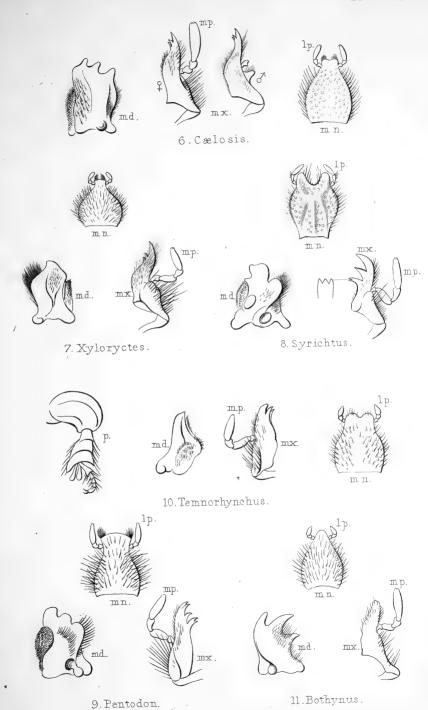
- ,, 33. (71) Medea, read Media.
- ,, 34. Anisodon, read Tessarodon.
- ,, 57. (line 14) after cinereis add a comma.
- " 66. Discoïdo, read discoïde.
- ,, 74. Within, read with in.
- ,, 74. Hydrobiiform, read Hydrobiform.
- ,, 106. Rhombonyx, read Euchlora.
- ,, 121. (line 1) Mem. Blumei, read Mim. Blumei.

Plate 3. Tesserodon, read Tessarodon.







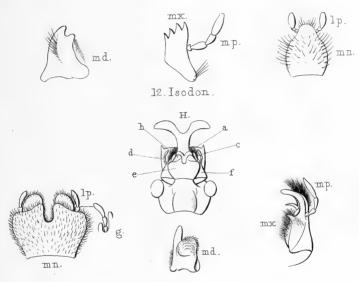


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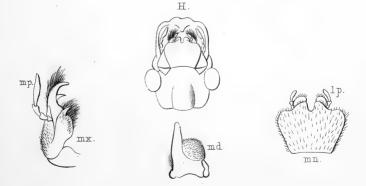




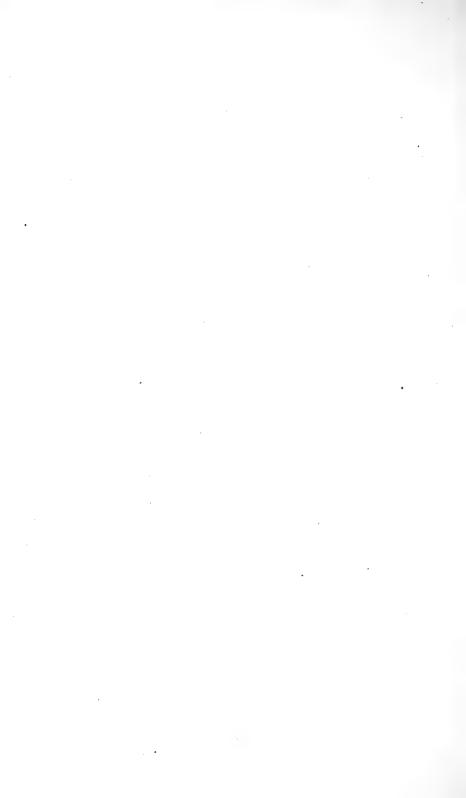
15. Tefserodon Novæ Hollandiæ.



13. Goliathus Cacicus o.



14. Goliathus Princeps x^0 .





Manticora!



Satificanis Waterhouse.

COLEOPTERIST'S MANUAL,

PART THE SECOND,

CONTAINING THE

PREDACEOUS LAND AND WATER

BEETLES

LINNEUS AND FABRICIUS.

BY THE

REV. F. W. HOPE, M.A. F.R.S. F.L.S. F.Z.S.

LONDON:

HENRY G. BOHN, YORK STREET, COVENT GARDEN.

MDCCCXXXVIII.



DESCRIPTION OF THE PLATES.

FRONTISPIECE. -- Manticora latipennis, Waterhouse.

TAB. I.

- Fig. 1.—Apteroessa (Hope) grossa, Fabr. 1 a, labrum; 1 b, mandible;
 1 c, maxilla; 1 d, labium.
- Fig. 2.—Calochroa crucigera, Hope.
- Fig. 3.—Oxycheila bisignata, Guérin. (O. binotata, Laporte, nec Gray.)
- Fig. 4.—Eurymorpha cyanipes, Hope. 4 a, labrum; 4 b, maxilla; 4 c, labium.
- Fig. 5.—Macrocheilus Bensoni, Kirby. 5 a, underside of the head.
- Fig. 6.—Plochionus Bonsfilsii. 6 a, labrum and mandibles; 6 b, maxilla; 6 c, labium; 6 d, anterior tarsus.

TAB. II.

- Comprising Carabideous genera, described in the Annulosa Javanica.
- Fig. 1.—Dirotus subiridescens, MacLeay. 1 a, front of head above; 1 b, maxilla; 1 c, labium; 1 d, trochanter and femur; 1 e, extremity of tarsi.
- Fig. 2.—Gnathaphanus vulneripennis, MacLeay. 2 a, front of head above;
 2 b, maxillary palpus; 2 c, mentum; 2 d, labial palpus.
- Fig. 3.—Hypharpax lateralis, MacLeay. 3 a, labrum and mandibles; 3 b, maxilla; 3 c, mentum; 3 d, labial palpus; 3 e, one of the four anterior tarsi.
- Fig. 4.—Dioryche torta, MacLeay. 4 a, labrum and mandibles; 4 b, maxilla; 4 c, labium; 4 d, basal joints of anterior tarsi beneath.
- Fig. 5.—Hyphæreon reflexus, MacLeay. 5 a, head above; 5 b, maxillary palpus: 5 c, mentum and labial palpus.
- Fig. 6.—Cælostomus picipes, MacLeay. 6 a, head above; 6 b, maxilla; 6 c, mentum; 6 d, anterior tarsus.

TAB. III.

- Fig. 1.—Craspedophorus (Hope) reflexus, Fabricius. 1 a, labrum and mandibles; 1 b, mentum and labium.
- Fig. 2.—Catascopus Withillii, Hope. 2 a, labrum; 2 b, mandible; 2 c, maxilla; 2 d, labium.
- Fig. 3.—Platysma striatulus, Fabricius. 3 a, labrum; 3 b, mandibles; 3 c, maxilla; 3 d, labium.
- Fig. 4.—Pachymorpha orientalis. Hope.
- Fig. 5.—Hyderodes Shuckardi, *Hope*. 5 a, anterior tarsus; 5 b, intermediate tarsus; 5 c, posterior tarsus.
- Fig. 6.—Globaria Leachii, Latreille. 6 a, Insect seen sideways; 6 b, labrum; 6 c, mandible; 6 d, maxilla; 6 e, labium; 6 f, antenna; 6 g, fore leg; 6 h, anterior tarsus; 6 i, posterior tarsus.



PREFACE.

From the unexpectedly rapid sale of the first part of the Manual, I am induced to attempt a second; and should the same good fortune attend the present number as the former, provided health is given me, I shall be able to complete the remainder of the work at intervals of six months; five Fasciculi forming the volume. An application from my bookseller for a second edition is the cause of the early appearance of the present part. I have not acceded to his request, being desirous of proceeding with the main work. If, however, when the whole is finished there is still a demand for a second edition, I shall be disposed to attend to it. The delay will undoubtedly enhance its value, as an extensive correspondence with the leading Entomologists of Europe has already afforded me valuable information on some Fabrician species which are imperfectly known; and I have still reason to expect further communications from Berlin, Copenhagen, and Paris. From my friend

Dr. Erichson of Berlin, I have lately received the offer of the loan of his Manuscripts on Fabrician Insects, in which are noted down many observations made during a careful examination of the Copenhagen Collections; for the liberal offers of the above individual I cannot feel sufficiently thankful, as the value of the annotations will be appreciated by all those who happen to know the accuracy of the work entitled, "Die Kafer der Mark Brandenburg, beschrieben von Wilh. Fred. Erichson." Before entering on any remarks relating to the present number, I think it right to mention two objections brought against the Manual by some of my correspondents. They are as follows: first, "that there are no systematic tables of the family and genera given;" and secondly, "too much importance has been given to the Lamellicorns as a group." With regard to the first objection, I admit it; the only cause of the omission was a thorough conviction that it was utterly impossible to combine satisfactorily the views of different writers, unless I created several new genera, and formed almost an entire new arrangement. Now as such an arrangement will be attempted by me at a future period, when more leisure can be bestowed on the ecessary investigation, I pass to the second objec-

tion, viz. that "too much importance is attributed to the Lamellicorns as a group." Against this charge I must beg leave to enter my dissent; and in replying to it, I feel compelled, partly in self-defence, to obtrude my opinions on the modern arrangement of insects, "if rightly viewed they may probably be adopted, if wrongly let them fall." Linneus, Fabricius, and Olivier placed at the head of insects the Lamellicorns; most modern writers commence with the Cicindelidæ, or Tiger Beetles, (Euptera of Differing from the latter systematists, neither am I inclined to side entirely with the former; for after a rigid examination into the principles of modern classification, I candidly confess I agree with no one author, as the nervous system, according to my views, does not appear to have been sufficiently attended to. If a system of circular distribution be admitted, we may as well commence with the Lamellicorns as any other group. But there are sufficient reasons why the Lamellicorns should precede Cicindela or Carabus. It is not merely the simple structure of the stomach, it is not their vast bulk or strength, (on which little stress can be laid,) but it is in the important functions they perform, it is in relation to the economical purposes of the human race, that they ought

to take precedence. They are of greater utility to man than nearly all other groups, in checking the over-luxuriance of tropical vegetation; in reducing to powder the mightiest monarchs of the forest; in purifying the air by burying all that is noxious and disgusting; and at the same time they give fertility to the land, by carrying to the roots of vegetation the richest of manures. As to numbers, both of genera and species, they greatly surpass the Cicindelidæ, or even the Carabidæ; and in the number of individuals of species, they appear among the most prolific of insects. As examples of utility of the group in warm climates, we have only to mention the genera Xylotrupes, Copris, Onthophagus, Melolontha, Euchlora, and Mimela; while in colder regions we may mention Geotrupes and Aphodius. But other writers hold different views; and it may be worth while to state their opinions. The following are the chief reasons assigned for placing the Cicindelidæ first: "There are beetles of vast bulk and strength, (elephants in the class of insects,) which are distinguished neither by the swiftness of their motion, nor by the elegance of their forms; others there are, less clumsy indeed and gigantic, but remarkable for the perfection and symmetry of their structure, the lightness and velocity of their motions, both on the earth and in the air, and for the splendour and brilliancy of their colours; such, with only one or two exceptions, are the Euptera, or tiger beetles. Among the higher animals the lion, chief of the predaceous quadrupeds, is usually accounted the king of beasts; a similar reason will justify modern Entomologists for regarding the Cicindelidæ as the typical and most perfect form amongst insects (especially Coleoptera), instead of the Lamellicorns which Linneus has elevated to that rank."

It will be seen from the above extract, derived from an able and learned work of the present day, that the arguments are chiefly drawn from the external organization of insects, viz. the superior development either of the manducatory organs, or from the symmetry and agility of the species, or from the form as well as the carnivorous habits of the insects, evincing as it does an approximation to the classification of the vertebrated classes of creation. The precedence therefore assigned to the Cicindelidæ in modern arrangements, would appear to arise from the adoption of the same principles which it is asserted induce Naturalists to place the Feline and Accipitrine tribes at the head of their respective classes. Had general internal

organization been added to the above claims in favour of precedence, I should certainly have been disposed to allow more weight to the arguments adduced. Burmeister, Dufour, and others, have certainly paid some attention to the internal anatomy of insects; but their selection has been of a particular organ for classification, and not the general anatomy. The organ selected was the alimentary canal; and accordingly as its length varied, being short in the carnivorous species, and long in the herbivorous, so they have partly allowed these facts to operate on classification. The length of the alimentary canal, however, cannot be decisive of the habits of an animal, or a vegetable feeder in the class Insecta; nor do I think that the alimentary canal is a proper criterion on which to found a scientific arrangement, either in the vertebrated or invertebrated animals; since, although the characters derived from it may hold good in many instances, the exceptions with regard to Insecta are far too numerous to justify any reliance upon it. If the alimentary canal be taken as a leading character, it will place those with the shortest canal, the true carnivorous animals, above the omnivorous; indeed man himself, if the rule is strictly followed out, will be placed below the feline

tribes; at all events some of the Quadrumana (that are entirely vegetable feeders) will be placed below the lions and tigers. Such an arrangement is not natural. As to the arguments in favour of the precedence of Cicindelidæ from symmetry of structure and agility, if any weight could be attached to them, we should have the antelope and light gazelle taking precedence of all the vertebrata. Having thus briefly stated my objections, it will probably be asked what new system I have to propose.* Without attempting a new one, I recom-

^{*} In corroboration of the above opinion, I subjoin an extract from a letter received from the author of the Paper on Sphinx Ligustri. Vid. Philosophical Transactions.

[&]quot; It has long struck me that the principle on which modern Entomologists have founded their arrangements are quite assumed and arbitrary, and by no means natural or in accordance with those great principles upon which comparative anatomists have attempted to arrange the vertebrated classes of creation. In all the arrangements of Insects there have appeared to me some true and some false principles intermixed, and no one great principle has been entirely followed out when commenced with, but has been interfered with by the introduction of other principles of secondary or minor importance. This appears to have arisen from the generality of Entomologists being little acquainted with the internal structure of Insects and other Invertebrata, and in consequence they have taken nearly all the characters employed in their arrangements from the exterior of the animals; indeed, in almost all instances, external form has been regarded in the arrangement, and no uniform physiological principle or reference to internal anatomy has been followed. The nervous system indeed is almost entirely disregarded."-Newport in litteris.

mend recurring to one that has been in many instances departed from. We ought in every division of the animal kingdom to look for one great principle, or basis of arrangement, in a structure which exists throughout nearly the whole of the animal creation; and which structure, both as regards its anatomical and physiological developement, becomes gradually of more and more importance, as we trace it upwards from the lowest beings in which it exists to the highest. This structure, I need scarcely remark, is the nervous system; but although it constituted the chief character, or principle followed by Naturalists in the arrangement of the vertebrated animals, it has very singularly been much deviated from by them, and is rendered of scarcely more than secondary consideration in their arrangements of the Invertebrata.

It is with reference, then, to the comparative development of the nervous system that I would attempt to arrange insects, since I have no doubt, that when we have become better acquainted with the forms of their nervous system, the characters will be found as marked in them as in the Vertebrata. In following this mode of arrangement it will be seen, that some of the vegetable feeders will stand before the carnivorous. Thus the Lamelli-

corns may very properly be placed at the head of the Coleoptera, from which there will be traced a transition through the Hydradephaga, to the Necrophaga, &c. &c. to the Geodephaga and other classes. It may be objected by some persons, that Insects are too minute for such investigations, and that few will have the courage to undertake the task of examination. To this objection I reply, that much has already been done, and much more may confidently be expected. If we look abroad, and examine the writings of the Continental authors on the Invertebrata, we shall find much to admire, in the elaborate investigations of an Herold and a Straus Durckheim, much to glean from the works of a Treviranus, of a Chabrier, a Dufour, and an Audouin. If we look at home, we cannot but appreciate the labours of an Owen, a Grant, a Newport, and a Rymer Jones; and others, I trust, will yet be found labouring for the same desired end, the establishment of a uniform and more natural system of Classification than we at present possess, a system, perhaps, which we never can perfectly realize, but which may certainly be very much in advance of that which we now tolerate.

Having above stated my opinions, it is now high time to allude to the Families which will form the subject-matter of this second part of my Manual.

The group under consideration has been denominated the Adephaga; the first sub-group of which are the Cicindeloidea, which, according to my views, consist of four families, the Manticoridæ, the Megacephalidæ, Cicindelidæ, and Collyridæ. As I am not satisfied with the published arrangement of any one author as a whole, I have, in the following groups, taken advantage of the labours of my predecessors, sometimes following one and sometimes another, according as their views coincide with mine, or where I consider they have more ably threaded the intricate labyrinths of Nature than myself.

It should ever be the chief object of writers on Natural History, to make their groups as conformable to nature as possible: human systems ever must be artificial and imperfect, indeed it is presumptuous in man to fancy that he can attempt a system uniform with nature in all its bearings. How can a finite being comprehend the wisdom of Omniscience, or even the exquisite perfection of creation's works, conceived by a Power that is infinite as well as incomprehensible.

The author of this Preface hopes that, in the

composition of the Families and Groups, no very great anomalies will occur. He is aware of the difficulty of the undertaking, and will undoutedly err like his predecessors; many gaps and apparent omissions will necessarily appear in the grouping of the Families, deficiencies which future discoveries will no doubt assist to rectify. To return however to Groups, I have stated above that the Cicindeloidea was the first sub-group of the Adephaga, which latter has naturally been subdivided into two groups, the Terrestrial and Aquatic Adephaga; the former has received the denomination of Geodephaga, and comprehends the Cicindelidous and Carabideous families: the latter also has been named by Mr. MacLeay, Hydradephaga, and includes the Genera Dyticus and Gyrinus of Linneus. The next important group which follows the Aquatic Adephaga, has been denominated Rypophaga by Mr. Stephens (i. e. the Cleansers), from the important functions they perform in removing animal and vegetable putrescence. This group has also been divided into three minor groups, viz. the Philydrida, the Necrophaga, and Brachelytra; preferring the arrangement of Mr. Stephens, who adopts the two former, I leave the latter for the termination of the Coleoptera.

Before concluding this Preface, I take the opportunity of publicly thanking Dr. Horsfield for his liberal views and kindness in forwarding this Manual. Whilst engaged in grouping the Families of the ground beetles I was repeatedly at a loss where to place several of Mr. MacLeay's genera, published in the Annulosa Javanica; by Dr. Horsfield's ready attention to my wishes, I was enabled to examine the rich collection in the India House, and had his permission to figure those forms which, though published, are little known to the Entomologists of the Continent. Instead, however, of giving the generic details here, I beg to refer the reader to the above excellent work. The drawings were made by Mr. Westwood, and are accurately engraved by Mr. I therefore trust that the plates will not be the least interesting part of the present number, as they will tend to clear up many difficulties, and give an increased value to the publication.

F. W. H.

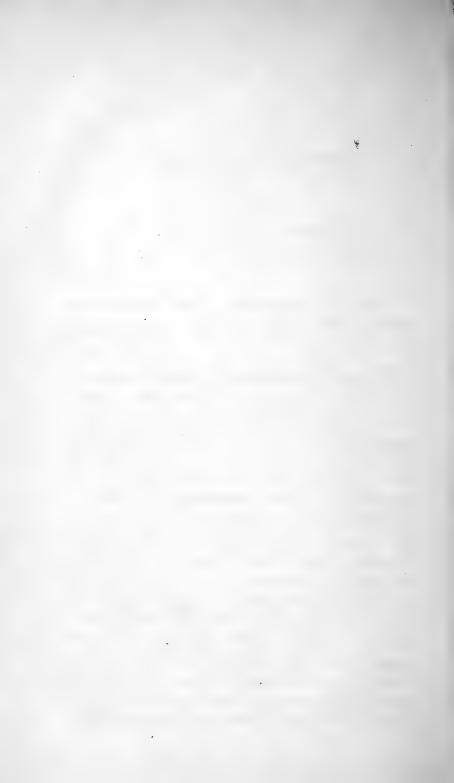
Since my manuscripts were in the printer's hands, Monsieur Aube has published a volume on Aquatic Coleoptera. Reference should be made to that work, which is evidently a great improvement on that of the Baron De Jean's "Spécies Général des Coleopteres."

GENUS CICINDELA of LINNEUS.

CICINDELIDÆ of Leach.

CICINDELOIDEA of Hope.

Linnean Species.	Country.	Genera of Authors.
1. Campestris	England	Cicindela, Linneus.
2. Hybrida	North Wales	Cicindela, Linneus.
3. Capensis	P. B. S.	Cicindela, Linneus.
4. Germanica	Isle of Wight	Cylindera, Westwood.
5. Virginica	Carolina	Tetracha, Westwood.
6. Carolina	N. America	Tetracha, Westwood.
7. Equinoctialis	Surinam	Tetracha, Westwood.
8. Sylvatica	England	Cicindela, Linneus.
9. Maura	Algiers	Cicindela, Linneus.
0. Riparia	England	Elaphrus, Fabricius.
11. Flavipes	France	Bembidium, Illiger.
12. Rupestris	England	Peryphus, Megerle.
3. 4-maculata	Germany	Lopha, Megerle.
4. Aquatica	Éngland	Nothiophilus, Dumeril



REMARKS AND ANNOTATIONS

ON THE

LINNEAN CICINDELIDÆ.

Species 1. Campestris.*—From the foregoing tables it will appear that only fourteen species

^{*} For an account of various species of Cicindela described by Swedish writers, I refer the reader to Schonherr's Synonymia Insectorum; to Thunberg's Musæum Upsaliense, page 51; to Forskall's Travels in Egypt, and to a Memoir published in the Stockholm Transactions, in 1799, by de Ljunch. Of German writers let him consult the Magazines of Wiedemann and German; the Symbolæ Physicæ of Klug; the Zoologischer Atlas of Eschcholtz, and the Deutschlands Fauna of Sturm. Amongst French writers, the works of Olivier and Latrielle; the Species General des Coleopteres by the Baron de Jean; the Magazine of Guerin; Les Etudes Entomologiques par Monsieur de Laporte, and the Hist. Nat. des Insectes par Audouin et Brulle; La Centurie de Carabiques par Gory; La Revue Entomologique par Silberman. Les Coleopteres du Mexique par Chevrolat; the Entomological part of Duperrey's Voyage autour du Monde, as well as that of the Scientific Expedition to the Morea by Monsieur Brulle, and the Annales de la Societé Entomologique de France. Amongst the Russian authors may be mentioned L'Entomographie de la Russie par M. Fischer, tab. 1.2.3. Of American works the reader may consult the Monograph of Say on the Cicindelidæ of North America, published in the New Series of the Philadelphian Transactions; Say's American Entomology, and lastly a description

were ranged by Linneus under the generic term of Cicindela, nine of them at present belong to the Cicindeloidea, while the remaining five are ranked under the Caraboidal families usually denominated Ground Beetles.

Perhaps no one group of Insects evinces more the rapid progress which Entomology has made of late years than the Cicindelidæ. Fabricius, uniting the Collyridæ with that family, enumerates but 67 species. The Baron De Jean in his first Catalogue published in 1821, mentions 67 species and in his last (bearing the date of 1837) about 278. Dr. Gistl of Munich in the first Fasciculus of his Systema Insectorum (which does not include the whole genera composing the group) mentions the same number of species, viz. 278. It is probable that 70 others will be added in his second

of some new species mentioned in the Journal of the Academy of Sciences at Philadelphia by the same author. Of English writers, who treat of our indigenous species, I name for reference the works of Messrs. Stephens and Curtis, and particularly the invaluable Systematic Catalogue of the former writer. As to Exotic species consult the Annulosa Javanica by Mr. MacLeay, the Fauna Boreali Americana by Mr. Kirby, a new New Holland genus in Selby's Journal by Mr. Westwood, and also the Introduction to the Modern Classification of Insects by the same author; lastly, the Coleopteral part of the Zoological Miscellany by myself, wherein are described the oriental species of the collection of General Hardwicke.

Fasciculus of the above work, and if we allow that there are in the different European collections about 50 which are undescribed, the total number known will be about 400 species, and this amount is evidently far short of what may yet be expected to occur, as Naturalists are, comparatively speaking, unacquainted with the Entomology of many very extensive regions, situated in Asia, Africa, and the two Americas.

Sp. 2. Hybrida.—For determining accurately this species which was originally recorded by Linneus, the reader is referred to Mr. Stephens's excellent work, "The Illustrations of British Entomology," and also to the Histoire Naturelle des Insectes par Audouin and Brulle, vide vol. 1. p. 65.—Cicindela aprica Stephens is the true Hybrida of Linneus, and Cic. Hybrida of Stephens is a variety of the Linnean Hybrida. The Linnean specimen is already figured in the frontispiece of Mr. Westwood's "Introduction to the Modern Classification of Insects."

Sp. 4. Germanica.—Now of the genus Cylindera Westwood; according to that author this species is made the type of the genus. M. M. Audouin and Brulle seem to have confounded the genus Odontocheila of Mons. Laporte with Cylindera; which

is erroneous, the latter apparently confining itself to Europe in the Old World, while the former seems peculiar to the southern regions of the New World.

Sp. 5, 6, and 7.—All of them originally belonging to Latreille's genus Megacephala and now to Mr. Westwood's genus Tetracha, the major part of the species inhabit North and South America as well as some Islands of the New World: the following genera compose the family.

MEGACEPHALIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Megacephala, Latreille	Senegal	C. Senegalensis, Linneus.
2. Tetracha, Westwood	N. & S. America	C. Carolina, Linneus.
3. Aniara, Hope	Cayenne	C. Sepulchralis, Fabricius.

The Megacephalidæ belong to the Old and New World, the true type of the first genus is Meg. Senegalensis, Lat; which in the French Encyclopædie, Mons. Serville has named Aptema, as it is apterous. Meg. Euphratica and 4-signata, closely allied to the former, are undoubtedly winged species, we have therefore two sections of the group, which may be described as follows.

GENUS 1. MEGACEPHALA (stricte sic dicta) inhabits the Old World, and forms the group (Aptema of Serville).

(Mandibles with three apical teeth).

Section 1. Corpus apterum elytris postice dilatatis, humeris thoracis latitudini æqualibus. Species Meg. Senegalensis.

SEC. 2.—Corpus alatum elytris in medio latioribus, humeris (sc. angulis anticis) magis prominentibus, thorace latioribus. Species Meg. 4-signata and Euphratica.

Genus 2. Tetracha.—Westwood.—Inhabits the New World.

(Mandibles with four apical teeth). (Typus Cic. Carolina, Linneus.)

Genus 3. Aniara, *Hope*.—Type of the genus C. sepulchralis, Fab. This insect diverging from Megacephala and Tetracha, I consider as the type of a sub-genus, it differs chiefly from the latter in the following particulars. First, it is of a more convex form than other known species having the elytra scarcely more dilated than the thorax, near

the extremity of the apex they are subsinuated and subacuminate, while in Tetracha they are rounded. The head and antennæ are in proportion shorter than in Tet. Carolina and other allied species, while the upper lip also projects, is more rounded and armed with four small teeth. Mons. Lacordaire states that the habits of this species differ from the Megacephalidæ, as it is usually found running among the herbage in sandy situations and rarely is seen to fly. The typical species is named Sepulchralis; I apply to it the name of aviapos tristis, as it is almost the only dark species of Megacephala of my acquaintance.

Sp. 10. Riparia.—Now of the Fabrician genus Elaphrus. Mr. Stephens is apparently the first Entomologist who considered these Insects entitled to rank as a family. Mons. Laporte has I think injudiciously united them to the Nebriadæ, and in this opinion M. M. Audouin and Brulle seem to agree. Mr. Kirby is of a different opinion and coincides with Mr. Stephens, and adds several pertinent observations respecting the Elaphridæ, to which the reader is referred. Vide Fauna Boreali Americana, p. 60. The following genera belong to the family.

ELAPHRIDÆ, Stephens.
(FILIPALPIA, Kirby.)

. Genera.	Country.	Typical Species.
1. Nothiophilus, Dumeril	England	Cic. Aquaticus, Linneus.
2. Elaphrus, Fabricius	England	Cic. Riparius, Linneus.
3. Opisthius, Kirby	N. America	Op. Richardsoni, Kirby.
4. Elethisa, Bonelli	England	Car. Multipunctata, Fab.
5. Pelophila, De Jean	Sweden	Car. Borealis, Fabricius.
6. Metrius, Eschscholtz	California	El Contractus, Eschscholtz

It appears that the genera composing this family belong almost entirely to Northern climates, they seem peculiar (as far as is known at present) to Northern Europe and to North America. In warmer regions I am inclined to think that Catascopus takes the place of Elaphrus. It is certain that some of the species belonging to the former genus abound in marshy places and on banks of rivers; should it eventually appear that a large proportion of the species of Catascopus frequent such localities, there cannot be a doubt of the connection of the above genera. The Baron De Jean has arranged Catascopus between Thyreopterus and Graphiptera, with the latter it can have little relation, and certainly it does appear singular for a

natural arrangement that the Scaritidæ and Grand Carabi should be placed between Catascopus and Elaphrus.*

Sp. 11, 12, and 13.—All these insects belong to the Bembidiidæ, as they will be alluded to more particularly in my remarks on the Caraboidea, I pass them at present.

Sp. 14. Aquatica. — Now a Notheophilus of Dumeril. In addition to the authorities (for the various Elaphridæ) recommended in the foregoing note, the Zoologischer Atlas of Eschscholtz and the Deutschlands Fauna by Sturm should also be consulted.

^{*} For the species of Elaphrus, vid. Insecta Sueccia by Gyllenhal De Jean Species, t. 2. page 269. et Icon. pl. 85. fig. 2. Say's North American Insects and Philadelphia Transactions, tab. 2. Germar's Magazine Le Bulletin de la Soc. des Natur. de Moscow, 1829. Messrs. Stephens and Curtis's British Entomology, and also the Fauna Boreali Americana, page 60-64.

GENUS CINCIDELA of FABRICIUS.

CICINDELIDÆ of Leach.

CICINDELOIDEA of Hope.

Fabrician Species.	Country.	Genera of Authors.
1. Grossa	Coromandel	Apteroessa, Hope.
2. Heros	Pacific Isles	Cicindela, Linneus.
3. Labiata	Pacific Isles	Therates, Latreille.
4. Violacea	Carolina	Cicindela, Linneus.
5. Cyanea	East Indies	Therates ?
6. Megalocephala	Senegal	Megacephala, Latreille
7. Virginica	Virginia	Tetracha, Westwood.
8. Carolina	N. America	Tetracha, Westwood.
9. Sepulchralis	Cayenne	Aniara, Hope.
10. Bicolor	Calcutta	Calochroa, Hope.
11. Campestris	England	Cicindela, Linneus.
12. Maroccana	Morocco	
13. Hybrida	England	
14. Sinuata	Austria	
15. Sylvatica	England	
16. Maura	Barbary	
17. Littoralis	France	
18. Tristis	Brazils	Oxycheila, De Jean.
19. Interrupta	Sierra Leone	Calochroa, Hope.
20. Lunulata	P. B. S.	Cicindela, Linneus.
21. Melancholica	Guinea	
22. Lurida	P. B. S.	-
23. Chinensis	China	Calochroa, Hope.
24. Analis	Sumatra	Heptodonta, Hope.
25. Semivittata	Sumatra	Calochroa, Hope.
26. Flexuosa	Spain	Cicindela, Linneus.
27. Capensis	P. B. S.	
28. Abdominalis	Carolina	Cylindera?
29. Germanica	Germany	Cylindera, Westwood.
30. Obscura	N. America	Cicindela, Linneus.
31. Micans	N. America	
32. Tuberculata	New Zealand	
33. Unipunctata	N. America	
34. Bipunctata	S. America	Odontocheila, Laporte

Fabrician Species.	Country.	Genera of Authors.
35. Chrysis	S. America	Odontocheila, Laporte
36. 4-punctata	Java	Prothyma, Hope.
37. 6-punctata	Madras	Calochroa, Hope.
38. Aurulenta	Sumatra	-
39. 4-lineata	Singapore	Cicindela, Linneus.
40. Cineta	Senegal	Calochroa, Hope.
41. Vittata	Guinea	Calochroa, Hope.
42. Biramosa	Concan	Cicindela, Linneus.
43. Marginalis	Canada	
44. Punctulata	Carolina	
45. 6-guttata	Virginia	
46. Catena	East Indies	
47. Longipes	Tranquebar	Abroscelis, Hope.
48. Marginata	Virginia	Cicindela, Linneus.
49. 10-guttata	Java	Calochroa? Hope.
50. Suturalis	Isle St. Thomas	Cicindela, Linneus.
51. 8-guttata	Sierra Leone?	
52. Argentata	S. America	Cylindera, Westwood.
53. Viduata	Sumatra	Cicindela, Linneus.
54. Trifasciata	Cayenne	
55. Angulata	Tranquebar	Section of the sectio
56. Funesta	East Indies	
57. Holosericea	Java	Cicindela, Linneus.
58. Interrupta	Java	Calochroa, Hope.
59. Cajennensis	Cayenne	Odontocheila, Laporte.
60. Æquinoctialis	Surinam	Tetracha, Westwood.
61. Guttula	Pacific Isles	Cicindela ? Guerin.
62. Flavilabris	Pacific Isles	Therates, Latrielle.
63. Fasciata	Pacific Isles	Therates, Latrielle.
64. Minuta	East Indies	Cicindela, Linneus.

COLLYRIS of Fabricius.

COLLIURIS of Latreille.

COLLYRIDÆ of Hope.

1. Longicollis	Siam	Collyris, Fabricius.
2. Aptera	East Indies	Collyris, Fabricius.
3. Formicaria	Brazils	Ctenostoma, Klug.

REMARKS AND ANNOTATIONS

ON THE

FABRICIAN CICINDELOIDEA.

Sp. Grossa.—The Baron De Jean has expressed his opinion in his Species General des Coleopteres that the above insect is probably a Dromica, believing it however to be the representative in Asia of the African Dromica. I am inclined to make it the type of a new genus, which I have named Apteroessa, as it belongs to the Apterous section; the generic characters will appear in their proper place at the end of this Fasciculus, along with various other instituted sub-genera.

My friend Mr. Kirby, in the commencement of his Fauna Boreali Americana, under his section Euptera places his three sub-tribes, viz. Longicollia (Colliuris), Brevicollia (Cicindela), and Fissicollia (Manticora); with this arrangement I am inclined to differ, and suggest that the Manticoridæ either

stand by themselves, or that the term Euptera be changed to Ocypoda, which will characterise admirably the three sub-tribes; such cannot be said of the term Euptera when some of the genera of the Manticoridæ and others of the Cicindelidæ are apterous.

As we are now considering those groups of insects which have been most studied by Entomologists, perhaps a concise view of the arrangement of Authors may here be attempted, as well as an outline of the table of the sub-genera composing the family Cicindelidæ. After the tables each of the genera will be separately commented on.

CICINDELIDÆ.

(Divisio prima Corpus Apterum.)

Genera.	Country.	Typical Species.
1. Dromica, De Jean	P. B. S.	C. Coarctata, Latreille.
2. Apteroessa, Hope	Coromandel	C. Grossa, Fabricius.
3. Eurymorpha, Hope	Madagascar?	E. Cyanipes, Hope.

(Divisio 2da. Corpus alatum.)

(Divisio Saa. Corpus anarum.)			
4. Oxycheila, De Jean	Brazils	C. Tristris, Fabricius.	
5. Iresia, De Jean	Rio Janeiro	C. Lacordairei, De Jean.	
6. Euprosopus, Latreille	Brazils	C. 4-notata, De Jean.	
7. Odontocheila, Laporte	Cayenne	C. Lacordairei, De Jean.	
8. Plochiocera, Hope	Brazils	C. Nodicornis, De Jean.	
9. Cicindela, Linneus	Europe	C. Campestris, Linneus.	
10. Abroscelis, Hope	Java	C. Longipes, Fabricius.	
11. Calochroa, Hope	East Indies	C. 8-notata, Wiedemann.	
12. Distipsidera, Westwood	New Holland	C. Undulata, Westwood.	
13. { Therates, Latreille Eurychile, Bonelli	New Guinea	C. Labiata, Fabricius.	
14. Cylindera, Westwood	England	C. Germanica, Linneus.	
15. Oxygonia, Mannerheim	Colombia	C. Schonherri, Mannerheim	
16. Heptodonta, Hope	East Indies.	C. Analis, Fabricius.	

1. Dromica, De Jean.

The species of Dromica are few in number and appear to belong exclusively to the southern part of the African Continent, but three are recorded by the Baron De Jean in his last catalogue. I have however recognised a fourth in one of our English collections.

2. Apteroessa, Hope.

The Baron De Jean appears to be acquainted only with Olivier's figure, never having seen the real insect, or he would not have considered Cic. Grossa as a true Dromica. Apteroessa approaches in form Megacephala, and may be regarded as representing Dromica in Asia.

3. Eurymorpha, Hope.

I am ignorant of the true locality of this remarkable insect. I have given Madagascar as its country with a doubt. It is certainly one of the most remarkable forms to be found among the Cicindelidæ, the name is derived from $\epsilon \nu \rho \nu s$ and $\mu o \rho \phi \eta$, from its exceedingly dilated form.

4. Oxycheila, De Jean.

Only five species of Oxycheila have been described, in habits they approach Cicindela, their flight however is less rapid, and during the heat of the day they shelter themselves under stones. According to Mons. Lacordaire when captured they produce a sharp noise by rubbing the posterior thighs against the edge of their scaly elytra. I have figured one species, which will be found among the

new genera at the end of this fasciculus under the name of Oxych. Laportei. Mons. Guerin in the Dictionaire Pittoresque d'Hist. Nat. Tom. 6, p. 572, mentions a species named by him Oxycheila bisignata.

5. IRESIA, De Jean.

The Baron De Jean originally gave the term Iresia. It should however have been written Hiresia. Three species are recorded in Gistl's Systema Insectorum; they are found on the leaves of trees and are exceedingly rapid in flight. A fourth species is described by the Comte De Mannerheim in his excellent Memoire sur quelques genres et especes de Carabiques.

6. Euprosopus, Latreille.

Only one species of this elegant genus appears to be known; a second equally brilliant, if not more splendid, has fallen under my inspection. It was brought to this country by Mr. Lance, from Surinam.

7. ODONTOCHEILA, Laporte.

Nearly 30 species belong to this genus: evidently they require further subdivision. A remark is

made in Dr. Gistl's Systema Insectorum that one of the species feeds on vegetation. Is this a peculiarity of the genus or not?

8. PLOCHIOCERA, Hope.

I have separated the Cic. nodicornis D. J. from Odontocheila of Laporte, and have formed it into a subgenus, attaching the name of Plochiocera, derived from $\pi\lambda o\kappa \iota os$ twisted, and $\kappa\epsilon\rho\alpha s$. In habits it resembles the former genus, it differs chiefly in having the first article of the antennæ of the male dilated, or knotted, and in the truncation of the front of the short upper lip. In other respects it accords with Odontocheila, which has the upper lip as long and acute at the tip, as in Oxycheila.

9. CICINDELA, Linneus.

After detaching Odontocheila from Cicindela more than 200 species remain huddled together under that term. The Baron De Jean has attempted sundry sections; they are not however characterised, and still remain in great confusion. Cic. analis Fab. affords from its form and 7-toothed labium sufficient marks for forming a sub-genus, and might appropriately be named Heptodonta.

10. Abroscelis, Hope.

The Fabrician description of Cic. longipes is almost sufficient to separate it from other species of Cicindela. I originally in my MSS. gave it the name of Podabra, which as it is used by Schonherr, I change to that of Abroscelis. The following short characters may be considered sufficient, as the type is well known; Corpus subcylindricum thorace quadrato, postice subdilatato, elytris denticulatis, femoribus posticis fere longitudine corporis. To this sub-genus belong Cic. tenuipes Guerin, and other Indian species. A singular species lately received from Professor Klug, bearing the name of Cic. graphiptera belongs apparently to this genus, it is remarkable by its broad upper lip and large posterior trochanters.

11. CALOCHROA, Hope.

Many of the insects of the Baron De Jean's fifth division belong to this genus. In my MSS. I have given it the name of Colochroa from $\kappa\alpha\lambda\delta$ and $\chi\rho\delta\alpha$ as the major part of the species are adorned with rich colours. The following characters will designate it: "Corpus subdepressum labro pruducto

quinque dentato, femoribus posterioribus longitudine modicis." To this genus belong Cic. 8-notata Wiedemann, Chinensis Fab. De Jeanii Hope, and Princeps of Vigors. It may here be mentioned that the species of this genus are deservedly reckoned amongst the most beautiful and splendid insects of our Cabinets.

12. DISTIPSIDERA, Westwood.

This new genus exhibits the characters of several of the groups of Cicindelidæ; from Cicindela it is distinguished by the large size of the labrum, the unarmed mentum, the large labial palpi, the short The same characters remove it antennæ, &c. from Odontocheila Laporte, of which it has the external habit, but a different thorax. From Therates which it also much resembles, it is removed by the large labial palpi, simple fourth joint of the tarsi, and by having an external maxillary palpus. Dromica its peculiar form and labrum remove it. It appears most nearly allied to Euprosopus and Hiresia; agreeing with the former in the structure of the labial palpi, but differing in the labrum and mentum, and resembling Hiresia in the form of the body and in the peculiar style of punctuation on the elytra,

but having very different palpi. Vid. Jardine and Selby's Magazine, vol. 1, p. 252, for further ample details, and an excellent figure.

13. THERATES, Latreille.

There are about 10 known species of Therates, apparently they are confined to New Guinea, Java, New Holland, and some of the Polynesian Isles.

14. CYLINDERA, Westwood.

M. M. Audouin and Brulle appear to have confounded Odontocheila with Cylindera; the following species belong to the latter genus, viz. C. scalaris of Latreille, Tenuis of Steven, gracilis of Pallas and various others.

15. Oxygonia, Mannerheim.

This is an insect of the New World, I am only acquainted with the Author's description. In its form it approaches Therates, but is evidently more allied to Euprosopus. The name is derived from oξυs and γονυ signifying sharp-kneed.

16. Heptodonta, Hope.

See the description of the genus under C. Analis, Species 24.

- Sp. 2. Heros.—According to Vanderlinden this species is ranked by him as a true Cicindela; the description of Fabricius inclines me to think it approaches Therates. As I have never seen the insect I cannot speak decidedly respecting that point, it certainly varies from the type of Cicindela.
- Sp. 3. Labiata.—Now a Therates of Latreille. Bonelli of Turin gave the name of Eurychile to designate these remarkable insects, as the former name has the claim of priority in its favour, the latter is abandoned. For an account of the species belonging to the genus, the reader may consult Bonelli Mem. de l'Academ. de Turin, tab. 23. p, 248. Vanderlinden, sur les Cicindeles de Java. The Annulosa Javanica by Mr. W. Sharpe, MacLeay and Guerin's Magazine, tab. 1. n. 39.
- Sp. 5. Cyanea.—From the concise Fabrician description I am inclined to think that this insect may be a Therates, it was originally described from

Vahl's collection. Latreille makes mention of a species which he names Cyanea; can they be the same, as both are from the East Indies?

Sp. 6. Megalocephala.—For the sake of euphony the word Megacephala is used instead of the former.

Sp. 9. Sepulchralis.—In my MSS. I formerly gave the name of Scythropa as a generic name to the above species, as it is previously used by Schonherr in his Curculionidæ, I have substituted the name of Aniara from aviapos mæstus. There cannot be a doubt that the species (described by the Baron De Jean as Meg. variolosa) is the same as C. sepulchralis, Fab.

Sp. 10. Bicolor.—There are three insects from the East Indies very similar in their appearance, viz. Cic. bicolor above mentioned, the second is Cic. pulchella Hope, described in the Synopsis of the new species of Nepaul insects in the collection of Major General Hardwicke, and the last is a new species lately received from my friend Col. Whithill from the Concan which I propose to name after him, the description will be added. All the three belong to the genus Calochroa, the type of which I make Cic. 8-notata, Wiedemann.

Calochroa Whithillii. Long. lin. 7. lat. lin. $2\frac{1}{2}$. Viridis, sutura lateribus elytrorum pallidioribus

nitidis, elytris unipunctatis tibiis tarsisq. violaceis; antennæ fuscæ basi virescentes. Thorax viridis nitidus, Elytra medio cyanea, sutura nitida, lateribus virescentibus, marginibus externe violaceis, punctum flavum unicum rotundatum in medio disci locatum. Corpus subtus viride, nitidum, segmentis ultimis abdominis violaceis, femoribus virescentibus, nitidis tibiis tarsisq. violaceo-cyaneis.

In Museo. Dom Whithill.

This beautiful insect I have named after my friend Colonel Whithill, whose superb collection of Entomology from the vicinity of Bombay is quite unrivalled.

Sp. 13. Hybrida.—Mr. Stephens, in his Illustrations of British Entomology, has made several original observations on this species, to which the reader is referred, vid. vol. i. p. 8. &c.

Sp. 18. Tristis.—Now an Oxycheila of De Jean. M. M. Audouin and Brulle, in their Histoire Naturelle des Insects, mention five species of this genus. Gistl gives the same number. I have figured one species, which appears to have been mistaken by my friend the Comte de Castelneau. His Oxy. binotata evidently is not the Oxy. binotata of Gray, previously described. I propose therefore to give it the name of Laportei, as origi-

nally published by that individual, one who has so ably grouped the Cicindeloidea.

Sp. 19. Interrupta.—Now a Calochroa of Hope. This insect in Africa seems to represent what C. Chinensis does in Asia; some of the specimens are exactly like the dark varieties of the latter species.

Sp. 24. Analis.—Now an Heptodonta of Hope. The Baron De Jean, uniting Cic. 4-punctata with the above insect, thinks them worthy of sectional distinction; as the labrum of Analis has seven teeth, I make that insect the type of the genus, and exclude Cic. 4-punctata, which approaches Calochroa in its form, and yet may probably at a future time be considered as a sub-genus. As Analis is an insect well known, the generic characters are derived chiefly from the points of difference it presents compared with other Cicindelidæ.

Corpus subcylindricum elytris cylindricis, ad apicem latioribus, lateribus abdominis obtectis, labro septem dentato, in reliquis Cicindela convenit.

This sub-genus appears to unite Cicindela and Therates.

Sp. 26. Flexuosa.—Some of the varieties of this insect have been described as distinct species; for instance, Cic. Sardea and Circumflexa of De Jean.

Its range is very extensive, as it occurs in France, Spain, and Sicily, as well as in the southern provinces of Russia, and also at Rosetta in Egypt.

Sp. 27. Capensis.—In Dr. Gistl's Systema Insectorum the locality of Calabria is given to this insect. I apprehend there must be some mistake respecting it, or the information he has received is erroneous.

Sp. 28. Abdominalis.—I have considered this insect as a Cylindera, merely from the Fabrician description, Statura parva C. germanicæ. I am totally unacquainted with the species.

Sp. 29. Germanica.—The reader is referred to the observations on Germanica, given in my former remarks on the Linnean Cicindelidæ.

Sp. 30. Obscura.—This insect seems to deviate from the type of Cicindela. I am not aware of any other North American species that presents a similar subcylindrical and elongated form.

Sp. 31. *Micans*.—This is evidently the same insect which Olivier has described under the name of Cic. punctulata.

Sp. 34. Bipunctata.—Professor Audouin appears first to have noticed the following peculiarity in the insects belonging to the genus Odontocheila, namely, that they have "les tarses sillonnes en dessus."

Sp. 36. 4-punctata.—I have only arranged this species under Calochroa for the present, as it appears to afford sufficient characters for subdivision: my own specimens are not perfect enough to describe. Since writing the above I have received a specimen, and therefore give it as a subgenus, with the name of Prothyma, from $\pi\rho o\theta v\mu os$, alacer, signifying brisk and lively. The characters are, Corpus subelongato-cylindricum thorace subrotundato elytris cylindricis, parallelis, labro fornicato et dentato.

Sp. 43. Marginalis.—This insect appears to vary considerably, when the spots on the elytra are wanting, it is the variety which Olivier has named Cic. purpurea.

For remarks on this species, which my friend the Rev. William Kirby considers the American representative of Cic. campestris of Europe, the reader is referred to the Fauna Boreali Americana, page 11, where several varieties of the above insect are minutely described.

Sp. 44. *Punctulata*.—This is evidently a variety of the species which Fabricius previously described under the name of Micans.

Sp. 45. Sexguttata.—Cicindela violacea, Fab. is

only a variety of this species. It is similar, with the exception of the wings, which are spotless.

Sp. 46. Catena.—I have repeatedly received this Insect from India, and believe it to be an Oriental species. Dr. Gistl says, "habitat in India Orientali, inque promontorio bonæ spei plurimis locis satis frequens." I am inclined to think that the specimens occurring in the Cape collections, have been purchased out of ships trading with India.

Sp. 47. Longipes.—I have thought fit to separate this insect from Cicindela giving it the name of abroscelis, from $\alpha\beta\rho\sigma$ and $\sigma\kappa\epsilon\lambda\sigma$, from the delicate form of the legs. Cic. Tenuipes of Guerin may be associated with it and other East Indian species.

Sp. 48. Marginata.—From the description of Cic. variegata by De Jean I have little hesitation in giving that species as a synonym of Cic. marginata, Fab.

Sp. 51. 8-guttata.—There appears to exist a difference of opinion respecting the country to which the above insect belongs, Palisot de Beauvois gives St. Domingo, Fabricius North America, Olivier South America, and Schonherr Sierra Leone, with the latter authority I am inclined to side.

Sp. 52. Argentata.—I have given the name Cylindera to this species, merely from reading the

Fabrician description. I am totally unacquainted with the insect.

Sp. 54. Trifasciata. — Fabricius gives two localities for this species; one America, the other Europe, there can be little doubt, therefore, that he has confounded two distinct insects. According to modern writers, this Fabrician species enjoys an extensive range of country, as it is common to North as well as South America.

Sp. 61. Guttula.—M. Guerin in his Magazine, maintains that this insect is a Cicindela. He describes it as obtained from the debris of Billar-diere's collection. It is remarkable that Fabricius mentions that the specimen he described was deprived of its antennæ. Mons. Guerin's description therefore is partly conjectural, from his figure it certainly approaches Therates more than Cicindela, and if not a true Cicindela is the type of a sub-genus.

Collyris, Fabricius.

As Collyris was early separated from Cicindela by the above author, and as at the present day it is admitted to approach the Cicindelidæ rather than the Carabidæ, I here insert my remarks on the genus before entering on the next grand group. Only three species are classed under the name of Collyris, the two former belong to it at present, the latter is a Ctenostoma of Klug.

Sp. 1. Longicollis.—The type of the Genus Collyris.—Latreille was the first person to change the name of Collyris to Colliuris. M. M. Audouin and Brulle have very properly restored the original name. The Baron De Jean however, in his last Catalogue, still maintains his partiality for Colliuris.

Sp. 2. Aptera.—It may here perhaps save the student some loss of time to inform him that Collyris aptera, Fab. is totally distinct from Trycondyla aptera of Olivier. Colliuris major, Latreille, is the same insect as Collyris aptera, Fab. The following genera compose the family.

COLLYRIDÆ, Hope.
(Longicollia, Kirby.)

Genera.	Country.	Typical Species.
1. Collyris, Fabricius	Siam	C. Longicollis, Fabricius.
2. Tricondyla, Latreille	East Indies	T. Aptera, Latreille.
Procephalus, Laporte	Brazils	P. 3-notatus, Fischer,
3. Procephalus, Laporte Caris, Fischer	Cayenne	C. 3-notatus, Fischer.
4. Ctenostoma, Klug	Brazils	C. Formicarium, Fabricius.
5. Psilocera Brulle	Madagascar	P. Elegans, Brulle.

1. Collyris, Fabricius.

I am acquainted with about twenty species of Collyris, the major part of them are from the Continent of India; they abound in all the Presidencies and in many of the Islands of Asia. They appear to have been much neglected by our Entomologists, with the exception of Mr. MacLeay, who has described some new species from Dr. Horsfield's rich Javanese collection.*

2. TRICONDYLA, Latreille.

The species of Trycondyla are few in number compared with Collyris, only six have fallen under my inspection; for a better acquaintance with them, apply to De Jean's Species de Coleopteres; to Guerin's Icones du Regne Animal Ins. pl. 3, fig. 3. Silberman's Revue, t. 2, p. 38. To Vanderlinden's Cicindeles de Java, page 27, and the Zoologischer Atlas, by Eschscholtz, Fas. 1, p. 6.

^{*} For information respecting the species, refer among French authors, to De Jean's Species general de Coleopteres; to Guerin's Iconographiæ; to Bellinger's Voyage to the East Indies by the same writer; to the writings of M. M. Brulle and Laporte; and Silbermann's Revue Entomologique, Tab. 2, p. 11. and Tab. 2, p. 37. Vanderlinden sur les Cicindeles de Java should also be consulted.

3. Procephalus, Laporte.

This genus was first published by Dr. Fischer, under the name of Caris, a name which has been applied to some of the Arachnida. Mons. Laporte consequently adopted the term Procephalus. Professor Audouin who has studied these insects minutely, records an opinion in his L'Histoire Natural des Insectes (Vol. 1, page 107) that Procephalus of Laporte differs from Ctenostoma of Klug, and is identical with Caris of Dr. Fischer. For a description of the known species consult L'Entomographie de la Russie, pl. 4, fig. 4., and Silbermann's Revue, t. 2, p. 36.

4. CTENOSTOMA, Klug.

The insects of this genus as well as the former, seem peculiar to the warm regions of the new world; only three recorded species are known. For an account of them consult the Nova Acta Acad. Natur. Curiosorum, Tab. 10. Also Observations in the Zoological Journal, by Mr. J. O. Westwood, vide Vol. 5, page 53, pl. 41. Supp.

5. PSILOCERA, Brulle.

This genus was originally published by M. M. Audouin and Brulle under the name of Stenocera, it was afterwards changed to Psilocera, as the former name was used anteriorly by Schonherr in his work on the Curculionidæ.

For an acquaintance with the species the student is referred to an elegant Monograph, published by the Comte de Castelneau and Mons. H. Gory conjointly; eleven species are therein described and exquisitely figured.

In concluding my remarks on the Cicindeloidea, it may here be stated that they still require further sub-divisions. The rapid progress Entomology is making, and the vast influx of new species added annually to our European Cabinets, lead me to think that few individuals in future will be bold enough to attempt a general collection of Insects. Many Entomologists confine themselves at present to one order, and the time has arrived when it is almost an impossibility for any one to accomplish even that successfully. Some persons are directing their attention to isolated groups, such as the

illustrious Schonherr to the Curculionidæ, and Baron Chaudoir to the Carabidæ.

I may go still further, and assert that the time is gone by when individual exertion can keep pace with the increasing state of Entomological Science. It is only to the united labours of different Societies and to future Committees, formed from those Societies, that we can in future expect any thing like a Species Insectorum. The Botanists, by their united labours and publications hold out to Zoologists an example worthy of being followed: let Entomologists in the several orders make similar exertions in publishing Monographs of families and genera.

It would greatly tend to the advance and diffusion of the science, if the different Entomological Societies of Europe were to set apart sums of money for the publication and illustration of such works. I have been led into these remarks from having investigated the first part of a Systema Insectorum, published at Munich by the zealous and indefatigable Gistl. All must admire his ardour in the pursuit of science, and regret the difficulties he has had to encounter, as no where in Munich will be found collections at all comparable with those of London, Paris, Leyden, or Copenhagen.

Gmelin's Systema at best is but an indifferent compilation; in that work it is no unusual occurrence to find the self-same species described under different names, and such must still continue to be the case, till individuals of various countries, united for a common purpose, undertake impartially to investigate and publish their researches. Let Entomologists be united for such ends, the result must be beneficial to Science. In conclusion we may add—

"In tenui labor, at tenuis not Gloria."

CARABUS of LINNEUS.

CARABIDÆ of LEACH.

CARABOIDEA of HOPE.

Linnean Species.	Country.	Genera of Authors.
1. Coriaceus	Germany	Procrustes, Bonelli.
2. Granulatus	France	Carabus of Authors.
3. Hortensis	England	
4. Leucophthalmus	England	Sphodrus, Clairville.
5. Clathratus	Ireland	Carabus, Linneus.
6. Nitens	England	
7. Auratus	Switzerland	
8. Violaceus	Wales	
9. Cephalotes	England	Broschus, Leach.
10. 10-guttata	P. B. S.	Thermophila, Leach.
11. Inquisitor	England	Calosoma, Weber.
12. Sycophanta	England	
13. Buprestoides	Southern Europe	Unknown.
14. Fastigiatus	P. B. S.	Aptinus, Bonelli.
15. Lividus	England	Nebria, Leach.
16. Marginatus	Wales	Chlænius, Bonelli.
17. Complanata	Spain	Nebria, Leach.
18. Crepitans	England	Brachinus, Weber.
19. Americanus	N. America	Galerita, Fabricius.
20. Spinipes	England	Curtonotus, Stephens.
21. Cyanocephalus	England	Lamprias, Bonelli.
22. Melanocephalus	England	Calathus, Bonelli.
23. Vaporariorum	England	Stenolophus, Ziegler?
24. Latus.	N. America?	Calathus, Bonelli.
25. Ferrugineus	England	Bradytus, Stephens.
26. Germanus	Germany	Ophonus, Ziegler.
27. Vulgaris	England	Amara, Bonelli.
28. Cœrulescens	Bavaria	Pæcilus, Bonelli.
29. Cupreus	England	
30. Piceus	England	Agonum, Bonelli.
31. Velox	Sweden	Bembidium, Latreille
32. Multipunctatus	England	Blethisa, Bonelli.

Linnean Species.	Country.	Genera of Authors.
33. Bipunctatus	England	Tachypus, Megerle.
34. 4-pustulatus	England	Panagæus? Latreille.
35. 6-punctatus	England	Agonum, Bonelli.
86. Meridianus	England	Trechus, Clairville.
37. Testaceus	England	Epaphius, Leach?
88. Ustulatus	England	Notaphus, Megerle.
9. Crux major	England	Panagæus, Latreille,
0. Crux minor	England	Lebia, Latreille.
1. 4-maculatus	England	Dromius, Bonelli.
2. Atricapillus	England	Demetrias, Bonelli.
3. Truncatellus	England	Syntomus, Hope.
4. Bimaculatus	East Indies	Brachinus, Fabricius.

CARABUS of FABRICIUS.

CARABIDÆ of LEACH.

CARABOIDEA of HOPE.

CYCHRUS of FAB.

1. Rostratus	England	Cychrus, Fabricius.
2. Attenuatus	Germany	Cychrus, Fabricius.
3. Reflexus	Coromandel	Camptoderus, Hope.
4. Elevatus	S. America	Scaphinotus, Latreille.
5. Unicolor	S. America	Scaphinotus, Latreille.
	1	

CARABUS of FABRICIUS.

CARABIDÆ of LEACH.

Fabrician Species.	Country.	Genera of Authors.
1. Scabrosus	Carniola	Procerus, Megerle.
2. Coriaceus	Germany .	Procrustes, Bonelli.
3. Cœlatus	Carniola	Carabus, Auctorum.
4. Marginalis	Russia	
5. Meyerlei	Guinea	Tefflus, Leach.
6. Glabratus	Wales	Carabus of Authors.
7. Violaceus	England	
8. Purpurascens	Germany	
9. Catenulatus	England	
0. Carolinus	S. Carolina	Carabus ?

Fabrician Species.	Country.	Genera of Authors.
11. Cyaneus	England	Carabus of Authors.
12. Excellens	Moldavia	
13. Hispanus	Spain	
14. Nodulosus	Hungary	
15. Monilis	England	
16. Lusitanicus	Portugal	
17. Gemmatus	Germany	
18. Hortensis	England	
19. Sylvestris	Germany	
20. Concolor	Holsatia	Carabus ?
21. Irregularis	Germany	
22. Creutzeri	Carniola	
23. Tædatus	N. America	
24. Scheidleri	Austria	
25. Arvensis	England	Carabus of Authors.
26. Hungaricus	Hungary	
27. Retusus	Patagonia	Calosoma, Weber.
28. Maderæ	Madeira	Calosoma, Weber.
29. Convexus	Germany	Carabus of Authors.
30. Auratus	Switzerland	
31. Splendens	Pyrenees	
32. Auronitens	Germany	
33. Suturalis	Terra del Fuego	
34. Morbillosus	Mauritania	
35. Rugosus	Morocco	Carabus?
36. Granulatus	France	Carabus of Authors.
37. Cancellatus	Germany	
38. Clathratus	Ireland	
39. Melancholicus	Spain	
40. Nitens	England	
41. Leucopthalmus	England	Omaseus, Ziegler
42. Fasciatopunctatus	Austria	Pterostichus, Bonelli.
43. Terricola	Germany	Pristonychus, De Jean
44. Scrobiculatus	Austria	Platynus, Bonelli.
45. Maurus	Germany	Omaseus? Ziegler.
46. Niger	England	Platysma, Bonelli.
47. Planus	London	Sphodrus, Clairville.
48. Striatulus	Patagonia	Platysma, Bonelli.
49. Arenarius	Wales	Nebria, Latreille.
50. Sabulosus	Saxony	
51. Lateralis	France	

Fabrician Species.	Country.	Genera of Authors.
52. Quadricolor	East Indies	Chlænius, Bonelli.
53. Ruficornis	England	Harpalus, Latreille.
54. Fulvipes	Germany	Harpalus, Latreille.
55. Picicornis	Italy	Nebria, Latreille.
56. Flavicornis	Saxony	Dolichus, Bonelli.
57. Piceus	England	Calathus? Bonelli.
58. Femoralis	Sierra Leone	Chlænius, Bonelli.
59. Madidus	England	Steropus, Megerle.
60. Decorus	Carolina	Calleida, De Jean.
61. Spinibarbis	England	Leistus, Frolich.
62. Æneocephalus	S. American Isles	Chlænius?
63. Humeralis	Italy	Tarus, Clairville.
64. Angusticollis	Germany	Platynus, Bonelli.
65. Miliaris	Austria	Tarus, Clairville.
66. Axillaris	Austria	
67. Trilobus	Guinea	Unknown.
68. Multipunctata	England	Blethisa, Bonelli.
69. Borealis	Suecia	Pelophila, De Jean.
70. Oblongopunctatus	England	Pterostichus, Bonelli.
71. Crœsus	Guinea	Epomis, Bonelli.
72. Spoliatus	Morocco	Chlænius, Bonelli.
73. Cinctus	Coromandel	Chlænius, Bonelli.
74. Festivus	Austria	
75. Rufipes	England	Patrobus, Megerle.
76. Elegans	Sumatra	Catascopus?
77. Splendidulus	Bengal	Catascopus, Kirby.
78. Nitidulus	Kamtschatka	Helobia, Latreille.
79. Tenuicollis	P. B. S.	Chlænius, Bonelli.
80. Ruficollis	Guinea	Calleida, De Jean.
81. Tricolor	Austria	Pæcilus, Bonelli.
82. Modestus	Austria	Peryphus, Megerle.
83. Agilis	England	Dromius, Bonelli.
84. 4-notatus	East Indies	Tetragonoderus, De Jean
85. Fasciatus	England	Dromius, Bonelli.
86. Atricapillus	England	
87. Marginellus	Germany	
88. Bis 2-guttatus	Equinoctial Africa	Brachinus, Fabricius.
89. 8-punctatus	N. America	Agonum, Bonelli.
90. Oblongus	England	Anchomenus, Bonelli.
91. Pallipes	England	
92. Rubens	Kiel	Blemus, Ziegler.

Fabrician Species.	Country.	Genera of Authors.
93. Festinans	Cayenne	Calleida, De Jean.
94. Cephalotes	England	Broschus, Panzer.
95. Megacephalus	P. B. S.	Camptoscelis, De Jean.
96. Interruptus	Arabia ?	Ditomus, Bonelli.
97. Calydonius	Italy	Ditomus, Bonelli.
98. Caliginosus	N. America	Selenophorus, De Jean.
99. Striola	England	Abax, Bonelli.
100. Impressus	East Indies	Diplocheila, Brulle.
101. Striolatus	Carniola	Molops, Bonelli.
102. Metallicus	Austria	Cheporus, Latreille.
103. Frigidus	Germany	Abax, Bonelli.
104. Elatus	Germany	Molops, Bonelli.
105. Gibbus	England	Zabrus, Clairville.
106. Politus	East Indies	Diplocheila, Brulle.
107. Lepidus	England	Pœcilus, Bonelli.
108. Cassidius	Paris	Licinus, Latreille.
109. Silphoides	England	
110. Sabulicola	England	Ophonus, Ziegler.
111. Globosus	Morocco	Steropus? Megerle.
112. Melanocephalus	England	Calathus, Bonelli.
113. Fuscus	England	
114. Brevicollis	Wales	Helobia, Leach.
115. Punctulatus	Saxony	Sogines, Leach.
116. Oculatus	Guinea	Chlænius, Bonelli.
117. Posticus	East Indies	Lissauchenius, MacLeay?
118. Micans	Bengal	Chlænius, Bonelli.
119. Notula	Guinea	Chlænius, Bonelli.
120. Obscurus	England	Ophonus, Ziegler.
121. Stigma	East Indies	Planetes, MacLeay.
22. Ammon	Guinea	Chlænius? Bonelli?
123. Pudicus	Bengal	Chlænius?
124. Bicolor	N. America	Harpalus, Latreille.
25. Holosericeus	England	Chlænius, Bonelli.
26. Binotatus	England	Anisodactylus, De Jean.
27. Fulvicollis	Barbary	Lebia, Latreille.
28. Pilicornis	England	Loricera, Latreille.
29. Dimidiatus	Germany	Pœcilus, Bonelli.
30. Cœrulescens	Bavaria	
31. Lætus	Europe	Pœcilus ?
32. Vividus	Madeira	Harpalus, Latreille.
33. Tardus	Germany	Harpalus, Latreille.

Fabrician Species.	Country.	Genera of Authors.
134. Cupreus	England	Pæcilus, Bonelli.
135. Tricolor	Kiel	
136. Carnifex	S. America	Antarctia, De Jean.
137. Vulgaris	England	Amara, Bonelli.
138. Communis	England	-
139. Integer	American Isles	Bradytus?
140. Alpinus	Switzerland	Amara? Bonelli.
141. Latus	England	Bradytus, Stephens.
142. Abdominalis	P. B. S.	Harpalus, Latreille.
143. Ovatus	England	Amara, Bonelli.
144. Helopioides	England	Oodes, Bonelli.
145. Azureus	Saxony	Harpalus, Latreille.
146. Æneus	England	
147. Erythrocephalus	Kiel	Nebria, Latreille?
148. Analis	Germany	Leistus? Frölich.
149. Lineola	N. America	Agonoderus, De Jean.
150. Ferrugineus	England	Bradytus, Stephens.
151. Pallidus	Saxony	Cymindis, Latreille.
152. St. Crucis	American Isles	Agonoderus, De Jean.
153. Surinamensis	Surinam	Cymindis, Latreille?
154. Dorsiger	Barbary	Unknown.
155. Aterrimus	England	Omaseus, Ziegler.
56. Nigricornis	England	Chlænius, Bonelli.
157. Austriacus	Austria	Agonum, Bonelli.
58. Parumpuntatus	England	
59. 6-punctatus	England	
60. Palliatus	N. America	Selenophorus, De Jean.
C1. Discoideus	Germany	Bradytus?
62. Marginatus	England	Agonum, Bonelli.
63. Vestitus	England	Chlænius, Bonelli.
64. Nigrita	Germany	Omaseus, Ziegler.
65. Pallipes	N. America	Agonoderus, De Jean.
66. Quadrum	Senegal	Tetragonoderus, De Jean
67. Cyanocephalus	England	Lamprias, Bonelli.
68. Rufibarbis	England	Leistus, Frölich.
69. Flavilabris	East Indies	Colpodes? MacLeay?
70. Amethystinus	Cayenne	Lebia, Latreille?
71. Lividus	Denmark	Amara?
72. Semivittatus	East Indies	Barysomus, De Jean.
73. Notulatus	Bengal	Panagæus, Latreille.

Fabrician Species.	Country.	Genera of Authors.
175. Curtus	New Holland	Lebia? Latreille.
176. Crux major	England	Panagæus, Latreille.
177. Crux minor	England	Lebia, Latreille.
178. Vittatus	N. America	
179. 2-vittatus	N. America	
180. Augulatus	Tranquebar	Panagæus, Latreille.
181. Turcicus	England	Lebia, Latreille.
182. Hæmorrhoidalis	Saxony	
183. Picipes	Sweden .	Agonum, Bonelli.
184. 2-pustulatus	England	Badister, Clairville.
185. Andreæ	England	Tachypus, Megerle.
186. Elevatus	Paris	Blemus, Ziegler.
187. Germanus	England	Ophonus, Ziegler.
188. Heros	Barbary	Anisodactylus, De Jean
189. Spinilabris	Austria	Leistus, Frölich.
190. Velox	England	Bembidium, Latreille.
191. Rufescens	England	Leistus, Frölich.
192. Præustus	Germany	Leistus?
193. Apricarius	England	Bradytus, Stephens.
194. Lunatus	England	Callistus, Bonelli.
195. Prasinus	England	Anchomenus, Bonelli.
196. Cursor	Italy	Trechus, Clairville.
197. Furcatus	America	Agonoderus, De Jean.
198. Vaporariorum	England	Stenolophus, Ziegler.
199. Meridianus	England	Trechus, Clairville.
200. Discus	Germany	Blemus, Ziegler.
201. Comma	America	Agonoderus?
202. Vernalis	England	Argutor, Megerle.
203. 4-maculatus	England	Dromius, Bonelli.
204. 4-guttatus	England	Lopha, Megerle.
205. 4-pustulatus	England	Panagæus, Latreille.
206. Ustulatus	England	Notaphus, Megerle.
207. Dorsalis	Kiel	Trechus, Clairville.
208. 2-guttatus	Norway	Philochthus, Stephens.
209. Guttula	England	Philochthus, Stephens.
210. Fenestratus	Germany	Dromius, Bonelli.
211. Smaragdulus	East Indies	Catascopus? MacLeay.
212. Cruciger	Saxony	Trechus, Clairville.
213. Testaceus	England	Epaphius, Leach.
214. Truncatus	Saxony	Dromius, Bonelli.
215. Abbreviatus	Norway	Lesteva, Latreille.

Fabrician Species.	Country.	Genera of Authors.
216. 2-punctatus	England	Tachypus, Megerle.
217. Celer	England	Tachypus, Megerle.
218. Minutus	England	Trechus, Clairville.
219. Pygmæus	Germany	Philochthus, Stephens.
220. Tristis	Germany	Trechus, Clairville.
221. Fasciola	S. America	Tetragonoderus? De Jean.
222. Truncatellus	England	Philorhyzus, Hope.
223. Minimus	Germany	Lopha, Megerle.

CARABIDÆ FABRICIANÆ.

MANTICORA, FABRICIUS.

1.	Maxillosa	P. B. S.	Manticora, Fabricius.
2.	Pallida	P. B. S.	Platychile, MacLeay

SCARITES, FABRICIUS.

1.	Depressus	Cayenne	Pasimachus, Bonelli.
2.	Marginatus	N. America	Pasimachus, Bonelli.
3.	Testaceus	Senegal	Scarites?
4.	Grandis	Brazil	Scarites, Fabricius?
5.	Gigas	Africa	Scarites, Fabricius.
6.	Impressus	S. America	Scarites, Fabricius?
7.	Quadratus	Guinea	Scarites, Fabricius.
8.	Subterraneus	N. America	Scarites, Fabricius?
9.	Lævigatus	Italy	Scarites, Fabricius.
10.	Porcatus	East Indies	Scarites, Fabricius?
11.	Ruficornis	P. B. S.	Acanthoscelis, Latreille.
12.	Crenatus	East Indies	Scarites, Fabricius.
13.	Cyaneus	New Holland	Carenum, Bonelli.
14.	2-pustulatus	American Isles	Clivina, Latreille.
15.	Arenarius	England	Clivina, Latreille.
16.	Thoracicus	England	Dyschirius, Bonelli.
17.	Gibbus	England	Dyschirius, Bonelli.
18.	Cursor	Europe	Dyschirius ? Bonelli.
19.	Arabs	Arabia ?	Scarites, Fabricius?

CALOSOMA, FABRICIUS.

1.	Alternans	American Isles	Calosoma, Fabricius.
3.	Porculatum	New Holland	Adelium, Kirby.
6.	Sericeum	Hambro'	Calosoma, Fabricius.

GALERITA, FABRICIUS.

Fabrician Species.	Country.	Genera of Authors.
1. Americana	Pennsylvania	Galerita, Fabricius.
2. Attelaboides	Africa?	Galerita, Fabricius.
3. Hirta	Tranquebar	Omphra, Leach.
4. Olens	Italy	Zuphium, Latreille.
5. Depressa	East Indies	Siagona, Latreille.
6. Plana	East Indies	Siagona, Latreille.
7. Flesus	East Indies	Siagona, Latreille.
8. Bufo	Tangier	Siagona, Latreille.
9. Fasciolatus	England	Polistichus, Bonelli.

BRACHINUS, FABRICIUS.

1.	Bimaculatus	East Indies	Pheropsophus, Solier.
2.	Complanatus	St. Domingo	Pheropsophus, Solier.
3.	Annulus	Tranquebar	Pheropsophus, Solier.
4.	Fulminans	Guinea	Pheropsophus, Solier.
5.	Nigripennis	P. B. S.	Aptinus, Bonelli.
6.	Tripustulatus	Siam	Pheropsophus, Solier.
7.	Mutilatus	Austria	Aptinus, Bonelli.
8.	Piger	East Indies	Pheropsophus, Solier?
9.	Histrio	East Indies	Pheropsophus?
10.	Ruficeps	P. B. S.	Brachinus, Fabricius.
11.	Fumans	America	
12.	Crepitans	England	
13.	Sclopeta	Paris	

ANTHIA, FABRICIUS.

1.	Maxillosa	P. B. S.	Anthia, Fabricius.
2.	Thoracica	P. B. S.	
3.	10-guttata	P. B. S.	Thermophila, Leach.
4.	6-guttata	Calcutta	Pachymorpha, Hope.
5.	Venator	Senegal	Thermophila, Leach.
6.	Sulcata	Senegal	
7.	6-maculata	Barbary	
8.	7-guttata	P. B. S.	
9.	Nimrod	Senegal	The state of the s
10.	4-outtata	P. B. S.	The Association Control of the Contr

Fabrician Species.	Country.	Genera of Authors.
11. Tabida	P. B. S.	Thermophila, Leach.
12. Umbraculata	Guinea	Piezia? Brulle.
13. Variegata	Arabia ?	Graphiptera, Latreille.
14. Exclamationis	Barbary	
15. Trilineata	P. B. S.	
16. Obsoleta	P. B. S.	
	AGRA, FABRE	icius.
1. Ænea	S. America	Agra, Fabricius.
2. Rufipes	S. America	
3. Attelaboides	East Indies	Novum Genus.
Ol	DACANTHA, I	FABRICIUS.
1. Melanura	England	Odacantha, Fabricius
2. Bifasciata	Brazil	Cordistes, Latreille.
3. Cyanocephala	East Indies	Casnoidea, Laporte.
4. 3-pustulata	Paris	Anthicus ? Fabricius ?
5. Elongata	S. America	Cordistes? Latreille.
6. Dorsalis	Carolina	Leptotrachelus, Latreill
	DRYPTA, FAR	BRICIUS.
1. Emarginata	England	Drypta, Fabricius.
2. Cylindricollis	Morocco	Desera, Leach.
E	LAPHRUS, F.	ABRICIUS.
1. Uliginosus	England	Elaphrus, Fabricius.
2. Riparius	Wales	Elaphrus, Fabricius.
3. Striatus	Germany	Bembidium? Dumeril.
4. Impressus	Germany	Bembidium, Illiger.
5. Atratus	America	Elaphrus ? Fabricius.
6. Flavipes	England	Bembidium, Illiger.
7. Aquaticus	England	Nothiophilus, Dumeril.
8. Semipunctatus	Saxony	
9. Rupestris	Germany	Peryphus, Megerle.
10. Biguttatus	Norway	Nothiophilus, Dumeril.
	SOLYTUS, FA	BRICIUS.
1. Flexuosus	East Indies	Omophron, Latreille.
2. Limbatus	France	
3. Labiatus	Carolina	



REMARKS AND ANNOTATIONS

ON HE

LINNEAN SPECIES OF CARABUS.

Sp. 1. Coriaceus.—This insect is a Procrustes of Bonelli, and one of the family of the Carabidæ. The following Table gives an outline of the genera composing it, from which I have thought fit to separate the Pamboridæ, consisting at present of only two genera, Pamborus and Callimosoma, both of them inhabiting New Holland.

CARABIDÆ, Latreille.

Country.	Typical Species.
Carniola	C. Scabrosus, Fabricius.
Germany	C. Coriaceus, Fabricius.
France	C. Granulatus, Linneus.
China	C. Prodigus, Erichson.
England	C. Sycophanta, Fabricius.
N. America	C. Calidum, Fabricius.
	Carniola Germany France China England

As the major part of the above genera will be referred to in their proper places, I shall only allude at present to the fourth, which as it appears to differ from any species of known Carabus, I make the type of a sub-genus, naming it Apotomopterus, from αποτομος, broken off, and πτερου, the apex of the elytra having the appearance of having been abruptly broken off. Vid. Act. Acad. Cæs. Leop. Carol. Nat. Cur. Vol. 16, Suppl. Table 37, figure 1. Mr. Kirby in his Fauna Boreali America, forms a sub-genus (named by him Chrysostigma) of some of the species belonging to Calosoma. The type of the latter is Sycophanta, of the former C. Calidum, Fab.; for the characteristic distinctions the reader is referred to the above-mentioned work, page 18.

Sp. 2. Granulatus.—Now a Carabus of authors. The granulatus of our English Cabinets is not the same as the C. granulatus of the French collections, the latter appears to be found in the South of France, and is never met with in the British Isles.

Different writers have attempted to form the species of Carabus into sections, which I shall not here introduce, as they require very considerable alteration. In the Histoire Naturelle des Insectes, par Audouin et Brulle, when speaking of the grand Carabi, the following statement occurs, "pendant long temps on a pensè quel n'en existait pas das l'Amerique Meridionale depuis les Voyages du

Naturaliste Eschcholtz, on a acquis la preuve du contraire. Ce n'est que dans le nord de l'Afrique et dans l'Asie Mineure que l'on trouve des especes de ce genre pour chacune de ces deux parties du monde, et l'Australasie n'en a pas encore offert une seule jusqu' ici."

It is singular that neither of the above Entomologists are aware that Fabricius had early described a species from Terra del Fuego, under the name of Car. suturalis. Mr. Charles Darwin has lately brought with him from the same country the above species, and five others. As to Carabus being found only in Asia Minor, it may here be noticed that one species, under the name of Car. Hardwickii, was published by me in the Synopsis of Nepaul Insects, and four other species were in the same collection when it reached this country.

- Sp. 3. Hortensis.—This insect is subject to be attacked by parasitic worms of the genus Filaria; I have twice seen the worms escape from the insect when dead.
- Sp. 4. Leucopthalmus.—Now a Sphodrus of Clairville, who first separated this genus from Carabus. The species are widely dispersed in the world, occurring in Europe, Africa, and Asia. Some subgenera from New Holland are allied to it. Sphodrus

ought to be raised to the rank of a family. With regard to the species named leucopthalmus, it lives in the cellars of our metropolis, and feeds, I think, chiefly on Cockroaches.

Sp. 9. Cephalotes. — Now a Broschus of Dr. Leach. The Baron De Jean retains Bonelli's generic name of Cephalotes, which ought to be changed, as it is previously used as a genus of Mammalia by Cuvier, in the Regne Animal. The species of Broschus are widely dispersed, as they occur in Europe, Africa, and Asia. The most splendid of them all is from New Holland, and is named by me Sumptuosus.

Sp. 10. 10-guttata. — Now a Thermophila of Leach, and one of the genera of Anthiadæ.

Anthiadæ, Hope.

Genera.	Country.	Typical Species.
 Anthia, Weber Pachymorpha, Hope Thermophila, Leach Graphiptera, Latreille Piezia, Dupont 	P. B. S. East Indies P. B. S. Africa P. B. S.	Thoracica, Fabricius. 6-guttata, Fabricius. 10-guttata, Fabricius. Variegata, Fabricius. Axillaris, Dupont.

Anthia, Weber.

I retain the name of Anthia for those species allied to Anth. Marginata, and Thoracica of Fabricius. Pachymorpha 6-guttata represents in Asia what Anthia does in Africa. Thermophila includes all the sulcated species. The characters of the above genera are as follow, and might be still further subdivided.

(Fissicollia, Kirby.) (Anthia, Fabricius.)

Anthia &. Aptera, clypeo porrecto rotundato integro. Thorax bilobus marginatus, dorso elevato, medio concavo, posticè producto dilatato, lamellis duabus depressis. Corpus subdepressum, glabrum sub lente subpunctatum marginatum. Anthia &, differt præcipue thorace cordiformi bilobo, medio fortissime sulcato. Type Sp. Anthia Thoracica, Fab.

Раснумогрна, Норе.

Pachymorpha &. Aptera, clypeo fere quadrato integro. Thorax cordiformis, bilobus, convexus postice productus, apice fortissime inciso. Corpus crassum, valde convexum, punctulatum subsericeum.

Pachymorpha & differt thorace cordiformi, linea longitudinali fortiter impressa.

THERMOPHILA, Leach.

Aptera, thorace cordiformi, seu subhexagono, in medio sulcata, seu linea longitudinali impressa, elytris fortissime sulcatis. The sexes in the present genus do not appear to vary in the shape of the thorax. With respect to the localities of the above genera, Anthia and Thermophila belong to Africa, while Pachymorpha seems peculiar to Asia. new East Indian species will be figured in the plates of the present number. The Anthiadæ I am inclined to think have no intimate relationship with the Helluonidæ; they are connected on one hand with Manticora, and with Cicindela on the other, by means of Graphiptera and Eurymorpha. A singular species of Cicindela, named Ritchii by Mr. Vigors, so closely resembles some of the Graphiptera, that at first sight it might be mistaken for one; Fabricius indeed seems to have been of opinion that these genera were allied; he names one species Cicindeloides. In their habits also they appear to accord. My friend Monsieur Lefebvre, who collected them in Egypt, writes as follows, "Ces insectes se trouvent (selon lui) pendant la plus grand chaleur du jour, ils courent dans le sable des terrains peu cultives." "They produce a singular sound resembling the utterance of the word xexe, by which they are discovered in their lurking places." The reputed larva of Pachymorpha 6-guttata, (which I cannot consider as a Carabideous larva) will be found figured in Guerin's Magazine of Zoology. It is probable that the larvæ of the African species, when known, will be found to vary considerably from those of the East Indian Anthiadæ.

- Sp. 12. Sycophanta.—Now a Calosoma of Weber. Linneus states that at night they devour the larvæ of Lepidoptera; I am inclined to think that they are more destructive in the day time. The larvæ when taken, smell strongly, as of lamp oil. The reader is referred to a valuable paper in the Entomological Transactions, by Dr. Hermann Burmeister, on the anatomy of the larva of Calosoma Sycophanta.
- Sp. 13. Buprestoides. Schonherr, in his Synonyma Insectorum, has not attempted to say to what genus this insect belongs, and from the concise Latin description it is impossible to determine it with any accuracy.
 - Sp. 14. Fastigiatus. Now an Aptinus of Bo-

nelli. This insect was originally described by Linneus, and was afterwards named Nigripennis by Fabricius. Olivier was correct in following Linneus. The tabular arrangement of the genera composing this family will be found under Brachinus, among the Fabrician Carabidæ.

Sp. 16. Marginatus.—This insect is a Chlænius, and has different names applied to it: the oldest is marginatus, and consequently takes precedence of the Fabrician name vestitus.

Sp. 17. Complanatus.—Now of the genus Nebria Latreille. The Nebriadæ require to be separated from the Elaphridæ, with which they have been associated by M. M. Audouin and Brulle, the following genera compose the family.

NEBRIADÆ, Hope.

	Typical Species.
N. Europe	Complanata, Linneus.
Kamtschatka	Forströmii, Gyllenhall.
England	Brevicollis, Fabricius.
Switzerland	Castaneus, Bonelli.
England	Spinibarbis, Fabricius.
	Kamtschatka England Switzerland

In addition to the above genera, Notiobia of Perty might probably be added. Le Comte de Castelneau, speaking of Notiobia, says, that it has the general appearance of a Nebria; as I am only acquainted with the figure, I cannot give a decided opinion. A glance at the countries these insects inhabit, tells us at once that they are a northern group; they are abundant amid the Alpine snows and even in Wales and Scotland; they are found to abound more in the range of Alpine vegetation, than in the plains.

With respect to the genus Pteroloma, it appears to be the Adolus of Eschcholtz and the Holocnemis of Schilling, according to Erichson this genus belongs to Agyrtes one of the Silphiadæ. I here cannot help suspecting some error, which I am unable to explain, Eschcholtz was too accurate an Entomologist to have committed so egregious a blunder, as to confound the Carabidæ with the Silphiadæ.

Sp. 18. Crepitans.—Now of the genus Brachinus. In the Linnean cabinet there are two distinct insects confounded under the above name; one of them is the Brachinus fumans Fab. from North America, the other the well known European species named Crepitans by Linneus.

Sp. 19. Americanus.—Now a Galerita of Fabricius. From the Linnean description "Similis C. crepitanti sed quadruplo major," some have supposed the above species to be a Brachinus, and it is singular that in Lee's cabinet named by Fabricius,

a large species of Brachinus is named by him Americanus.

Sp. 20. Spinipes.—Now a Curtonotus of Stephens, and one of the genera of Amaridæ. A species named convexiusculus, by the same author, feeds on the bleached roots of grasses under stones. Respecting the typical species, Scopoli has recorded that it is abundant "super trictici spicas frequens," and why there? Some have imagined that these insects resort to standing corn in quest of the Aphides, my observations lead me to believe they attack the stalk of the wheat and devour it, and in this habit they approach Zabrus. Mr. Stephens in his Systematical Catalogue has placed Bradytus and Curtonotus before Zabrus, evidently proving himself by that judicious arrangement to be, in the language of Barrington, an out-door Naturalist. The researches of Zimmerman induce him to believe that the Amaridæ are vegetable feeders, and from collecting assiduously the Harpalidæ, I am also inclined to think that the Ophoni and Trechidæ, and even some of the species of true Harpalus feed on the roots of I think it also not improbable that the peculiar smell of the Amaridæ is derived from the vegetation they eat. Lebia, Brachinus, and Panagæus will eventually be found to feed on vegetation. Lamprias and Panagæus exhale alike the same disagreeable odour.

Sp. 21. Cyanocephalus. — Now of the genus Lamprias of Bonelli, and of the family of Lebiadæ. I differ with M. M. Audouin and Brulle in reuniting Lamprias with Lebia; as it appears a very natural sub-genus, I retain it. If we reject the generic characters given by such a writer as Bonelli, and revert back to early authors, it would be wise to retain the sectional characters those writers adopted, generally expressed in a short Latin sentence; if not, we are again likely to have the self-same species formed into sub-genera, with increased confusion by addition of new names.

Sp. 23. Vaporariorum.—Now a Stenolophus of Ziegler. The insect in the Linnean cabinet labelled as Vaporariorum is now a Tarus, and not a Stenolophus; it appears to be the same as Tarus basalis.

Sp. 24. Latus.—According to M. M. Audouin and Brulle, the above insect is a Calathus of Bonelli, and is found in France under stones, according to Illiger, his Carabus Cisteloides is the same insect. Erichson, in the Kafer der Mark Brandenburg, vol. 1, page 103, gives Carabus latus

as a synonym of C. apricarius, it must therefore be a Bradytus of Stephens. There is evidently very great confusion respecting this species, as in the Linnean cabinet it is a true Harpalus. Linneus also in the Systema Natura mentions two localities, Europe and North America, probably confounding two species.

Sp. 25. Ferrugineus.—Now a Bradytus of Stephens. A genus closely allied to Curtonotus of the same author.

Sp. 27. Vulgaris.—Now an Amara of Bonelli. The monograph of Zimmerman on these interesting insects should be studied by all Entomologists; the following genera compose the family, viz. Percosia, Celia, Amara, Bradytus, Leirus, Leiocnemis, Amathitis, and Acrodon; instead of Leirus the name of Curtonotus should be substituted, as previously characterized by Mr. Stephens in his illustrations of British Entomology. In the Linnean cabinet the insect ticketed vulgaris, is not an Amara but a Platysma.

Sp. 30. *Piceus*.—Now an Agonum of Bonelli, according to the specimens preserved in the Linnean cabinet.

Sp. 31. Velox.—Now a Bembidium of Illiger.

The Entomologists of Sweden think that Carabus velox of Linneus is only a variety of Bembidium, impressum Gyll.

Sp. 33. Bipunctatus. — Now a Tachypus of Megerle, one of the genera of the Bembidiidæ. The following remarks occur in the Histoire Naturelle des Insectes relating to the above family. "C'est Mons. Stephens qui dans son interressant Traité sur les Insectes d'Angleterre en a le premier publié les caractères en les regardant toutes comme des genres particuliers ce savant Entomologiste en a porte le nombre à douze qui ne correspondent pas tout-a-fait a celles du species de M. le comte De Jean. Comme elles nous paraissent plus faciles a saisir dans le dernier ouvrage nous adopteron de preference la methode du Naturaliste Français," Vid. Hist. Nat. des Insect par Audouin et Brulle, Vol. 2. p. 156, &c. Argument is one thing, Nationality another. Because the published genera of Mr. Stephens do not correspond with the Baron De Jean's, or because De Jean's genera at first sight are more readily taken, therefore those of the French Naturalist are to be adopted. If the genera described by the above writers are accurate they must accord; the claim of priority then cannot be set aside on

any other account, excepting that of inaccuracy. It is to be regretted that the names of Megerle and Dahl were adopted by our English Naturalist. The generic details were first published by Mr. Stephens in July, 1828, by De Jean in 1831, in the first part of his fifth volume of the Species general des Coleopteres, where the Megerlean types are given. From enquiry it appears doubtful if Megerle ever published any Entomological In concluding these observations, a brochure. passing remark is added, which has attracted the attention of many individuals. "It is singular that scarcely a reference is ever made by De Jean and other Entomologists to the two first works ever published in this country on our Insectal Fauna, those of Messrs. Stephens and Curtis." The works are costly and valuable publications, and such works ever will be, when illustrated by excellent figures; the great cost of them, however, cannot be pleaded as an excuse by the princely De Jean, or by other French writers, as a reason for not quoting them. It is a notorious fact, that the libraries of Natural History in France are far superior to those of England, why then, it must be asked, are our ablest authors passed by and neglected?

Bembididæ, Stephens.

Genera.	Country.	Typical Species.
1. Lymnæum, Stephens 2. Cillenum, Leach	England England	Car. Nigropiceus, Marsh. Cill. Laterale, Leach.
3. Tachys, Ziegler	England	Tach. Scutellaris, Steph.
4. Shilochthus, Steph. Leia, Megerle	England	Bem. biguttatum, Illiger.
5. Ocys, Kirby	England	Car. Tempestivus, Panz.
6. Peryphus, Megerle	England	Bem. femoratum, Sturm.
7. Notaphus, Megerle	England	Car. Ustulatus, Linneus.
8. Lopha, Megerle	England	Cic. 4-maculata, Linneus.
9. Tachypus, Megerle	England	Cic. Andreæ, Fab.
10. Bembidium, Illiger	England	Cic. flavipes, Linneus.
11. Chalybe, Laporte	Cayenne	Chal. Leprieuri, Laporte.
12. {Æga, Laporte Pselaphopetius, S.	Cayenne	Æg. Anthicoides, Laporte.

It is probable that the two last genera will be found eventually to connect the Bembidiidæ with the Trechidæ. The above table seems to include all the known genera composing the family. Intermediate forms may be expected to occur, uniting the European and Transatlantic genera; there is, however, much to be done in the investigation of the exotic species, as little of their habits are known.

The name of Leia was, of necessity, changed by Mr. Stephens to Philochthus, as the former had previously been applied by Meigen to designate a genus of Diptera (Vid. Meig. Zw. 1, 253). After paying much attention to this family, I have adopted the arrangement of Mr. Stephens as the most satisfactory. Three Entomologists of different countries have given different types of the genus Bembidium; Illiger refers to Paludosum Panzer, Latreille to Striatum Fab., and De Jean to Laterale Leach. Mr. Kirby in his Fauna Boreali Americana, exalts Peryphus into a family, which he denominates Peryphidæ. In the following Fabrician Carabidæ the genera composing it will be given.

Sp. 36. Meridianus.—Now a Trechus of Clairville. Latreille and De Jean use the term Acupalpus, and Erichson that of Bradycellus; the second name ought to be abandoned, although used by the Prince of Entomologists.

Sp. 37. Testaceus.—Most likely an Epaphius of Leach, and probably a pale variety of C. secalis. In this opinion Mr. Stephens seems to accord. In a note in the Synonymia Insectorum of Schonherr, some additional remarks occur respecting this species.

Sp. 41. 4-maculatus. —Now belonging to the genus Dromius; according to my views Dromius should be raised to the rank of a sub-family; in habits they are Lebiadous, and at first sight they may be distinguished from the latter by their elongated

form, the elytra also rarely exceed the width of the thorax, while in true Lebia they are very considerably wider.

DROMIIDÆ, Hope.

Genera.	Country.	Typical Species.
 Demetrias, Bonelli Dromius, Bonelli 	England England	Car. Atricapillus, Linn. Car. 4-maculatus, Linn.
 Philorhizus, Hope Syntomus, Hope 	England England	Car. Fasciatus, Fab.

It was my intention to have used the abandoned term of Rizophilus applied by Dr. Leach to Demetrias; as it might lead to further confusion I merely transpose the word, adopting that of Philorhizus, from $\phi\iota\lambda os$ and $\rho\iota\zeta\alpha$. The species of the following genera are apterous; as the types are well known, there is no need of long generic characters, the following may suffice.

PHILORHIZUS, Hope.

Apterous, form oblong. Thorax, with its anterior part wider than the posterior. The anterior angles are rounded, while the latter are nearly rectangular. The elytra at the apex are not so abruptly truncated as in Dromius, and are gradually rounded from the external sides till they meet the suture.

Syntomus, Hope.

From συντομος, brevis. Apterous, body short, contracted. The anterior part of the thorax broader than the posterior, the latter sensibly contracted, and differing from the former genus, which has the angles of the thorax rectangular. The elytra are remarkable for the shoulders being rather prominent. I am acquainted with several tropical species which require sub-division. They occur in the Old and New Continents; none are recorded, I believe, as inhabiting the East Indies; they will, no doubt, occur in the Himalaya.

Sp. 44. Bimaculatus.—Now a Brachinus. This last species will be found in the Mantissa Plantarum of Linneus, at page 532, and is the only Carabideous insect therein mentioned. It will be seen that I have omitted the tables of the genera belonging to the families of Trechidæ, Lebiadæ, &c. They were purposely passed by, as they will appear in my remarks on the Fabrician Caraboidea, where they will be associated with their allied groups.

REMARKS AND ANNOTATIONS

ON THE

FABRICIAN CARABOIDEA.

Cychrus, Fabricius.

CYCHRIDÆ, Hope.

Species 1. Rostratus.—Now of the genus Cychrus Fab. I am inclined to consider Cychrus as entitled to be raised to the rank of a family; the following genera pertaining to it.

CYCHRIDÆ, Hope.

Genera.	Country.	Typical Species.
 Cychrus, Fabricius Irichrous, Newman Sphæroderus, D. J. Scaphinotus, Latreille Damaster, Kollar 	Europe N. America N. America N. America Japan	Ten. Rostratus, Fab. Cych. Unicolor, Knoch. Sp. Lecontei, De Jean. Sc. Élevatus, Fab. Dam. Blaptoides, Kollar.

Nearly all the species of true Cychrus inhabit northern climates; they are few in number. The same remarks will apply also to the three succeeding genera. Damaster of Kollar, lately published in the Vienna Transactions, belongs to warmer regions. I have long been acquainted with a specimen in this country, it was, however, in too mutilated a state to describe. In the collection at Leyden there are some specimens of the above remarkable insect.

Sp. 3. Reflexus.—There are two insects bearing the name of Reflexus, both of them belonging to the Panagæidæ. Pan. reflexus in my collection (was obtained from Lee's Cabinet) and Cychrus reflexus, which I am inclined to consider as a Panagæus, rather than a Cychrus. It is remarkable that the Fabrician locality is Germany, Olivier mentions Coromandel, and Illiger, Sierra Leone; of these countries India appears the most likely. The Baron De Jean erroneously in his last catalogue makes Panagæus Tomentosus Z. J. and Cychrus reflexus Fab. the same insect; instead of being of this opinion, I consider reflexus as the type of a new genus, and as the figure in Olivier is execrable it was better to re-figure it, in order that it may The generic name applied to the be known. species is Camptoderus, from $\kappa \alpha \mu \pi \tau \omega$ and $\delta \epsilon \rho \eta$. Vid. under Panagæidæ some additional remarks.

Sp. 5. Unicolor.—This insect is ranked by De

Jean as a Cychrus. In my MSS. I formerly gave it as the type of a new genus, as Mr. Newman, however, has lately published it, it is better to adopt his appellation than create confusion by increase of names, or even by adding to synonyma by publishing manuscript ones. In the 24th number of the Entomological Magazine (April, 1838) at page 385, the generic characters are published.

CARABUS, Fabricius.

- Sp. 1. Scabrosus.—Now a Procerus. Under the Linnean species of Carabus will be found the Genera belonging to that particular family. As to the species of Procerus, they are few in number. For figures of them the student is referred to Guerin's Magazine, Tab. 1, No. 9. To Brulle's Morea, No. 149, pl. 33, fig. 4. To Olivier, pl. 7, fig. 83; and lastly, to Adams. Mem. Soc. des Natur. de Moscou, tom. 5, pl. 10, fig. 1—5.
- Sp. 2. Coriaceus.— Now a Procrustes of Bonelli. The species belonging to this genus are rather more numerous than those of Procerus. For an account of them, in addition to the former authorities quoted above, consult Les Etudes Entomologiques de Mons Laporte, De Jean's Species general des Coleopteres; the Horæ Entomologicæ,

by Charpentier; and the Symbolæ Physicæ of Klug. In Erichson's work, Die Kafer der Mark Brandenburg, there are concise generic characters given of many of the Caraboidea. Vid. Procrustes, p. 11.

Sp. 5. Meyerlei.—Now of the genus Tefflus Leach. Probably an error of the press, instead of Megerlei.

Sp. 10. Carolinus.—This insect is not in the Banksian collection; it was originally described from the Museum of Gigot d'Orcy; it apparently is unknown at present in Paris. From French writers we may eventually expect some future notice respecting the species, as well as the desired information of what became of the Entomological part of the Museum of the above personage.

Sp. 18. *Hortensis*.—This species is very subject to be attacked by Filaria.

Sp. 20. Concolor.—Most likely a true Carabus. Vid. Panzer, Ent. G. 1, p. 46, n. 10.

Sp. 23. Tædatus.—There are two specimens still to be found in the Banksian Cabinet. Olivier's figure tolerably well represents the insect.

Sp. 27. Retusus.—This insect is evidently a Calosoma; the Fabrician reference to Olivier is incorrect, it ought probably to be Oliv. Ins. 35, p. 30. Tab. 10. fig. 113. The figure, however, is

larger than the real insect; the species may vary considerably in size.

Sp. 28. Maderæ.—This insect decidedly belongs to the genus Calosoma; more than forty species of Calosoma have fallen under my inspection; they may be divided into two sections, like the Necrophori, those with straight, and those with crooked tibiæ.

Sp. 31. Splendens.—The locality mentioned by Fabricius is erroneous. He describes it as from the island of Jamaica, whereas, it is undoubtedly an European species, occurring abundantly in the Pyrenees.

Sp. 33. Suturalis.—This elegant insect, as it is apparently unknown to Continental writers, is worth figuring. Other species closely allied to it from the same country, were brought to England by my zealous friend and Entomologist, Mr. Charles Darwin of Shrewsbury. The new species are already described in a late number of the Entomological Transactions. Vol. ii. part 2, p. 128.

Sp. 36 and 37.—Granulatus and Cancellatus.— There has been great confusion respecting these species. It appears that Fabricius considered Granulatus Linn. the same as his Carabus cancellatus. He applied, therefore, the Linnean name to another species, which Illiger has very properly changed to Cancellatus.

Sp. 41. Leucopthalmus.—Now an Omaseus of Ziegler, and one of the genera composing the Feroniadæ of Latreille. I have before recorded my opinion respecting this group. It requires a thorough revision; my friend, Dr. Eschscholtz, informed me by letter that he had undertaken the arrangement of these Carabidæ, and had communicated his views to the Baron De Jean. Is the De Jeanian arrangement of the last Catalogue the same as that of Dr. Eschscholtz? if so, little improvement has been made. I subjoin a Table of the various forms which may be classed together, but not under the name of Feronia, which has previously been used by Dr. Leach to designate a dipterous genus. I propose, therefore, to change the name of the goddess of the groves, for that of one of the Muses, namely Thalia.

THALIADÆ, Hope.

Genera.	Country.	Typical Species.
1. Sogines, Leach	England	C. punctulatus, Fab.
2. Pæcilus, Bonelli	England	C. Cupreus, Linneus.
3. Argutor, Megerle	France	C. Vernalis, Fabricius.
4. Omaseus, Ziegler	England	C. aterrimus, Fab.
5. Steropus, Megerle	England	C. madidus, Fab.
6. Platysma, Sturm	England	C. niger, Fab.
7. Cophosus, Ziegler	Hungary	C. Cylindricus, Herbst.
8. Pterostichus, Bonelli	France	C. fasciatopunctatus, Fab.
9. Cheporus, Latreille	Austria	C. Metallicus, Fab.
10. Omalosoma, Hope	N. Holland	O. Vigorsii, Hope.
11. Abax, Bonelli	England	C. Striola, Fab.
12. Percus, Bonelli	Spain	C. Navaricus, Latreille.
13. Molops, Bonelli	England	C. Terricola, Fab.
14. Adelosia, Stephens	England	C. Macer, Marsham.
15. Stereocerus, Kirby	N. America	S. similis, Kirby.

The last genus named Stereocerus by Mr. Kirby, in the North American Fauna, appears to connect those genera which have robust antennæ, as Omaseus, &c. with those that have those organs more slender, as Pæcilus, &c. Its general aspect is that of Curtonotus, but the intermediate tooth of the labium is entire as in Bradytus; we have therefore in this genus, an interesting form, uniting the Thaliadæ and Amaridæ. Vide Fauna Boreali Americana, page 34. I have not included Myas of De Jean among the Thaliadæ, as most likely it belongs to a distinct family, it is distinguished from the

latter by the terminal article of the labial palpi being large and triangular; in the Thaliadæ this article is cylindrical. There are various other points of difference which separate Myas from the above group. The following genera, Abaris, Rathymus of De Jean, and Strigia and Heteracantha of Brulle, probably belong to Thaliadæ; as I am totally unacquainted with their forms, I defer giving a decided opinion respecting them. Laporte, I find, places Myas in the family of Trigonotomidæ, to it belong four genera, viz. Myas, Lesticus, Trigonotoma, and Catadromus, they certainly are all allied to Pæcilus. For reference consult Audouin and Brulle, and the writings of Laporte.

Sp. 43. Terricola.—Now a Pristonychus of De Jean and of the family Dolichidæ of Audouin and Brulle. The following genera compose it, according to the above authors, and to them they add Calathus, which I detach.

(Dolichidæ, Audouin and Brulle.)

Genera.	Country.	Typical Species.
 Synuchus, Gyllenh. Pristodactyla, D. J. Dolichus, Bonelli Onypterygia, D. J. 	England N. America Austria S. America	 C. Vivalis, Panzer. P. Americana, De Jean. C. Flavicornis, Fabricius. C. Fulgens, De Jean.

I have purposely omitted the genus Calathus, which, in habits, seems to differ from any of the other genera. From the account given of Onypterygia, it seems likely that that genus may belong to a distinct family.

Sp. 44. Scrobiculatus. — Now a Platynus and belonging to the family of Agonidæ. Colpodes of MacLeay probably belongs to the family of

AGONIDÆ, Kirby.

Genera.	Country.	Typical Species.
1. Platynus, Bonelli	England	C. Angusticollis, Fabricius.
2. Anchomenus, Bonelli	England	C. Prasinus, Thunberg.
3. Agonum, Bonelli	England	C. Marginatus, Linneus.
4. Cardiomerus, Bassi	Sicily	C. Genei, Bassi.
5. Euleptus, Klug	Madagascar	Eul. Geniculatus, Klug.
6. Olisthopus, De Jean	France	C. Rotundatus, Paykull.
7. Odontonyx, Stephens	England	C. Rotundicollis, Marsham.

M. M. Audouin and Brulle add to the Agonidæ the genera Loxocrepis of Eschscholtz and Dyscolus of De Jean; the former belongs to the Lebiadæ, the latter seems altogether mis-located.

Sp. 47. *Planus*.—Now a Sphodrus of Clairville. This genus was first separated from Carabus by Clairville. Some modern writers have arranged Sphodrus under the Agonidæ, I have, in a former page included Platynus under the Agonidæ, and

stated my opinion that Sphodrus ought to rank as a family. Pristonychus, which has been separated from Sphodrus on account of its denticulated tarsi, appears to connect the two families; in habits I regard it as a Sphodrus.

Sphodridæ, Hope.

Genera.	Country.	Typical Species.
 Sphodrus, Clairville Pristonychus, D. J. Promecoderus, D. J. Craterocerus, Hope 	England England New Holland New Holland	C. Leucopthalmus, Linneus. C. Terricola, Paykull. P. Brunnicornis, De Jean. C. Brunnicornis, Hope.

In my MSS. I had given the name of Stereocerus to this genus, which I am obliged to alter, as it is previously used in Mr. Kirby's Fauna Boreali Americana, page 34.

Sp. 48. Striatulus.— This insect appears to be unknown to the Continental Entomologists; it is a Platysma, and somewhat like the species named Pl. cordicollis, by De Jean. It will be figured among the Carabidæ, among the new genera. I think that it may be considered as the type of a subgenus, which will include many species of Platysma of the New World.

Sp. 52. Quadricolor.—Now a Chlenius of Bo-

nelli, the genera comprising this family are few in number; the species may be subdivided artificially into four sections. The first containing all the maculated species, they appear common to Africa and Asia. The second have the external edges of the elytra margined with yellow. The third division have the wings deeply sulcated; and the last are generally of uniform colour and spotless, being either green or black; to the latter section, however, there are some few exceptions. The following genera belong to the family of Chlænius.

SARROTHROPODA, Kirby.
CHLÆNIADÆ, Kirby.

Genera.	Country.	Typical Species.
 Lissauchenius, MacLeay Chlænius, Bonelli Epomis, Bonelli Dinodes, Bonelli Callistus, Bonelli Vertagus, De Jean 	Java Italy Italy France England Senegal	C. Rufifemoratus, MacLeay. C. Spoliatus, Rossi. C. Circumscriptus, Bonelli. C. Azureus, Duftschmidt. C. Lunatus, Fabricius. V. Buqueti, De Jean.

Sp. 52. Quadricolor.—Now a Chlænius. I have no doubt that it inhabits the East Indies, as General Hardwicke had in his collection a species from Bengal, which closely suited the Fabrician insect. The locality of the Cape of Good Hope, mentioned

by De Jean, applies to a species resembling the above, yet is certainly distinct.

Sp. 58. Femoralis.—Most probably a Chlænius. From the specimen in the Banksian Cabinet, there can be little doubt of it.

Sp. 61. Spinibarbis.—Now a Leistus. I once took this insect in immense numbers congregated together under moss, in the cave of Caractacus, on the Caradock in Shropshire.

Sp. 62. Æneocephalus. — In turning to the description in the Ent. Sys. p. 137, 56, it appears that this insect is likely to be a Pæcilus.

Sp. 63. Humeralis.—In the Tables the name of Tarus has been given as including the insects allied to the above species. Latreille's name of Cymindis ought to have the preference on the claim of priority.

CYMINDIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Cymindis, Latreille Tarus, Clairville	England	C. Humeralis, Fabricius.
2. Anomæus, Fischer	Russia	A. Dorsalis, Fischer.
3. Cymindoidea, Laporte	Senegal	C. Bisignata, De Jean.
4. Corsyra, De Jean	Siberia	C. Fusula, Fischer.
5. Calleida, De Jean	Senegal	C. Fasciata, De Jean.
6. Plochionus, De Jean	East Indies?	P. Bonsfilii, De Jean.
7. {Cryptobatis, Esch. Aspasia, De Jean	Brazils	C. Cyanoptera, De Jean.

This sub-family seems to be intimately connected with Lebiadæ; there are yet wanting other links more intimately to unite them. According to Laporte, the Cymindidæ follow the family Agridæ, and precede the Lebiadæ; from the latter family I detach the genera Demetrias and Dromius, as will be seen in a future page. The generic characters of Anomæus will be found in the Entomographia de la Russie, Vol. 1. page 124.

Sp. 67. Trilobus. — I can give no satisfactory information respecting this insect; it inhabits Guinea and was originally described by Fabricius, from Isert's Cabinet.

Sp. 73. Cinctus.—Now a Chlænius of Bonelli; Car. Xanthocrus of Wiedeman, is the same insect, and inhabits the East Indies. C. cinctus Olivier is distinct, and an European species.

Sp. 75. Rufipes.—Now a Patrobus of Megerle, and belonging to the Feronians of Latreille. I am inclined to range with the following genera, Cremacanthus of Gray.

PATROBIDÆ, Kirby.

Genera.	Country.	Typical Species.
 Patrobus, Megerle Baripus, D. J. Cnemacanthus, Gray 	England Brazils New Holland	Car. Rufipes, Fabricius. B. Rivalis, Germar. C. Gibbosus, Gray.

Monsieur Audouin suspects that the original word was Petrobus, and not Patrobus, signifying that these insects live chiefly under stones. The Patrobidæ are connected on one hand with the Pogonidæ and with Broschidæ on the other.

Sp. 76. Elegans.—Probably a Catascopus, and one of the genera of the family of the Pericallidæ Hope. At page 105 of this manual will be found a table of the genera belonging to it. Little is known respecting the habits of Catascopus. I consider that in warm climates it takes the place which Elaphrus does in our northern regions. The species are chiefly blue or green, and are more numerous than is generally imagined.

The genera of this family evidently approach the Elaphridæ, and certainly have a close affinity with them. The situation in which they are placed by the Baron De Jean, namely, before the Anthiadæ, is clearly anything but a natural arrangement.

Sp. 79. Tenuicollis. — Fabricius mentions this insect as inhabiting the Cape of Good Hope and the East Indies. The former appears to be its correct locality; probably two species have been alluded to.

Sp. 80. Ruficollis.—Now a Calleida of De Jean. There is a doubt respecting the country of this

insect. In Dr. Hunter's Cabinet, South America is mentioned; I believe it to be from Africa, and agree with Fabricius.

Sp. 82. Modestus.—Now a Peryphus of Megerle. Mr. Kirby considers the insects allied to Peryphus, as affording sufficient characters to entitle them to the rank of a family, the following genera compose it:—

Subulipalpia, Kirby. Peryphidæ, Kirby.

Genera.	Country.	Typical Species.
1. Peryphus, Megerle	England	Car. Littoralis. Olivier.
2. Lopha, Megerle	France	4-maculata, Linneus.
3. Eudromus, Kirby	North America	E. Nitidus, Kirby.
4. Tachyta, Kirby	North America	T. Picipes, Kirby.

Mr. Kirby, in the Fauna Boreali Americana, states that the Peryphidæ are distinguished from the Bembidiidæ, not only by the shape of the thorax, but by having the apex and sides of the elytra nearly smooth, or with obliterated furrows. The latter family is also distinguished from the Peryphidæ by the elytra having the typical number of furrows, none being obliterated.—Vid. page 52 and 57.

Sp. 88. Bisbiguttatus.—Now a Brachinus. A

specimen will be found in the Banksian Cabinet. (Vid. Olivier's figure.) The above species is evidently the same insect as Brachinus 4-pustulatus Fab.

Sp. 93. Festinans.—This insect now belongs to the genus Calleida De Jean. There are several other green species from North and South America which are allied to C. festinans Fab.

Sp. 94. Cephalotes.—Now a Broschus of Panzer and of the family Broschidæ: the following genera pertain to it.

Broschidæ, Hope.

Genera.	Country.	Typical Species.
1. Broschus, Panzer	England	Car. Cephalotes, Linn.
2. $\begin{cases} \text{Miscodera, } Esch. \\ \text{Oncoderus, } Stephens \end{cases}$	England	C. Arcticus, Payhull.
3. Stomis, Clairville	England	C. Pumicatus, Illiger.

Other species of Broschus from the East Indies and New Holland will eventually form sub-genera.*

Sp. 95. Megacephalus.—This is now the type of the genus Camptoscelis of De Jean. The Carabus Hottentottus of Olivier is only a synonym of Megacephala Fab. It seems closely to approach to the Broschidæ, and may unite them to the Thaliadæ.

^{*} I have in my collection also some allied genera from the Swan River, belonging to this family. They will be described in the Fauna Australasiæ.

Sp. 96. Interruptus.—Now a Ditomus of Bonelli. M. M. Audouin and Brulle give a table of the genera and sub-genera of Ditomidæ. With some of the insects I am acquainted, and therefore, only remark, at present, that there appears in their arrangement an union of forms which belong to families very different to the true Ditomus. The Morionidæ unite this family with the Scaritidæ.

DITOMIDÆ, Audouin.

Genera.	Country.	Typical Species.
1. Ditomus, Bonelli Distomus, Leach Aristus, Ziegler	France England France	S. Calydonius, Rossi. Dis. Leachii, Samouelle. Dit. Fulvipes, Lat.
2. Carterus, De Jean	Portugal	C. Interceptus, De Jean.
3. Glyptus, Brulle	East Indies	Gl. Sculptilis, Brulle.
4. Melænus, De Jean	Senegal	Mel. Elegans, De Jean.
5. Coscinia, De Jean	Egypt	Cos. Schuppelii, De Jean
6. Apotomus, Latreille	Italy	Ap. Rufus, Rossi.

Sp. 100. Impressus.—Formerly a Rembus of Latreille, as Germar in his Species Insectorum has applied this name to one of the Curculionidæ. It has been changed by Brulle to Diplocheila, from $\delta\iota\pi\lambda oos$ and $\chi\epsilon\iota\lambda os$, signifying, double-lipped. The following genera belong to the family of Licinidæ.

Genera.	Country.	Typical Species.	
1. Licinus, Latreille	England	C. Agaricola, Olivier.	
2. Badister, Clairville	England	C. 2-pustulatus, Fab.	
3. Trimorphus, Stephens	England	T. Scapularis, Stephens.	
$4. \left\{ egin{array}{l} ext{Diplocheila, } Brulle \ ext{Rembus, } Latreille \end{array} ight.$	East Indies	C. Impressus, Fabricius.	
5. Dicœlus, Bonelli	North America	D. Violaceus, Bonelli.	
6. Asporina, Laporte	Brazils	A. Gigantea, Laporte.	
7. Oodes, Bonelli	England	C. Helopoides, Fab.	

Sp. 105. Gibbus.—Now belonging to the genus Zabrus. The insects belonging to this genus are evidently vegetable feeders; they are at present arranged with the Amaridæ, as in habits they are closely allied to them. It is likely that at some future period they will be raised to the rank of a family. The genera Curtonotus and Bradytus of Stephens occur in North America and Europe. I am not aware however of any yet discovered genus in the New World which approaches Zabrus of Europe, such a form may naturally be expected to occur.

Sp. 111. *Globosus*.—It is with doubt that I range this insect under Steropus, it was originally described by Fabricius from Schestedt's Cabinet.

Sp. 117. Posticus.—Probably a Chlænius, as the general description agrees with many species of

that genus. It inhabits the East Indies, and is to be found in Daldorff's collection in Copenhagen. Mr. MacLeay regards it as a Lissauchenius.

Sp. 118. *Micans*.—Evidently a Chlænius. Olivier gives Senegal as the locality of this insect, which is an error, as I have received it from Bengal, which is the same country that Fabricius has mentioned.

Sp. 119. *Notula*.—Most probably a Chlænius. The species referred to by Fabricius is Micans, which according to Olivier's figure is a Chlænius, "statura omnino micantis" warrants the conclusion.

Sp. 121, 122, and 123.—From the brief Latin descriptions of the above species, I am inclined to consider them as belonging to Chlænius. They were originally described from the cabinets of Daldorff, Lund, and Sehestedt, as to C. Stigma it may probably be a Planetes of MacLeay.

Sp. 126. Binotatus.—Now an Anisodactylus of De Jean, who has very properly detached it from true Harpalus. Although the Harpalidæ have been studied by many individuals, few have satisfactorily arranged them. The Tables which have been published by M. M. Audouin and Brulle contain the Stenolophidæ, which appear to connect Harpalus and

Trechus. The following are the genera and subgenera belonging to the

HARPALIDÆ.

Genera.	Country.	Typical Species.
1. Anisodactylus, De Jean	Portugal	C. Binotatus, Fabricius.
2. Gynandromorphus, D.J.	Italy	C. Etruscus, Schonherr.
3. Geobænus, De Jean	P. B. S.	G. Lateralis, De Jean.
4. Harpalus, Latreille	England	C. Ruficornis, Fabricius.
5. Pangus, De Jean	Germany	Harp. Scaritides, Sturm.
6. Actephilus, Stephens	England	C. Vernalis, Dufls.
7. Bradybænus	Senegal	C. Scalaris, Olivier.
8. Hypolithus, De Jean	Senegal	C. Saponarius, Olivier.
9. Ophonus, Ziegler	England	Harp. Sabulicola, Panzer.
10. Selenophorus, De Jean	N. America	C. Palliatus, Fabricius.
11. Geodromus, De Jean	Senegal	G. Dumolini, De Jean.
12. Gynandropus, De Jean	N. America	G. Americanus, De Jean.
13. Diachromus, Esch.	Germany	C. Germanus, Linneus.
14. Cratocerus, De Jean	Brazils	C. Monilicornis, De Jean.
15. Somoplatus, De Jean	Senegal	S. Substriatus, De Jean.
16. Axinotoma, De Jean	Senegal	Ax. Fallax, De Jean.

The genera belonging to the Harpalidæ must still be considerably increased. This family, very diversified in form and rich in species, will afford ample employment to any individual bold enough to undertake it. It will be observed that I omit Paramecus, and place it with the Acinopidæ; Acupalpus and Stenolophus belong also to another family. The latter may be considered as the genus which unites them.

Sp. 127. Fulvicollis.—Now a Lebia of Latreille. The following genera appear to belong to the Lebiadæ, after detaching the sub-families Dromiidæ, Cymindidæ, and Pericallidæ.

LEBIADÆ, Hope.

Genera.	Country.	Typical Species.
1. Lamprias, Bonelli	England	C. Cyanocephalus, Linneus
2. Lebia, Latreille	England	C. Crux minor, Linneus.
3. Physodera, Esch.	Manilla	C. De Jeanii, Esch.
4. Chelonodema, Laporte	Brazils	C. Variabilis, Laporte.
5. Onypterygia, De Jean	East Indies	O. Fulgens, De Jean.
6. Orthogonius, MacLeay	East Indies	O. Duplicatus, Wiedem.
7. Hexagonia, Kirby	East Indies	Hex. Terminata, Kirby.
8. Aploa, Hope	East Indies	Ap. Picta, Hope.
9. Coptodera, De Jean	Cuba	C. Festiva, De Jean.

The above genera belong to the Lebiadæ. There are wanting particular forms which may more satisfactorily connect them together. Aploa is between Cymindis and Lebia, Hexagonia is quite an anomaly. I suspect that New Holland is the country from whence this insect comes, and not the East Indies.

Sp. 131. *Lætus*.—This insect, in the Appendix to the fourth volume of Fabricius, is compared to C. Lepidus, which is evidently a Pæcilus.

Sp. 136. Carnifex.—Now an Antarctia, and one of the genera belonging to the Amaridæ: for an account of other species the reader is referred to the Species General des Coleopteres by De Jean, to the works of Eschscholtz, and Germar, and also to the Voyage du Bresil par M. M. Spinx et Martius.

It is not unlikely that some of the species of Amara, described by Mr. Kirby in the Fauna Boreali Americana, belong to Antarctia.

Sp. 137. Vulgaris.—Now an Amara of Bonelli; and the typical genus of the family Amaridæ.

AMARIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Amara, Bonelli	England	C. Vulgaris, Linneus.
2. Oodes, Bonelli	England	C. Helopioides, Fabricius.
3. Acrodon, Zimm.	Sweden	H. Brunneus, Gyll.
4. Celia, Zimm.	Germany	H. Bifrons, Gyll.
5. Bradytus, Stephens	England	C. Ferrugineus, Fabricius.
6. Curtonotus, Stephens Leirus, Megerle	England	C. Convexiusculus, Marsh
7. Percosia, Zimm.	Sicily	Per. Sicula, De Jean.
8. Leiocnemis, Zimm.	Caucasus	L. Cordicollis, Menetries
9. Amathites, Zimm.	Egypt	A. Ægyptia, Klug.
10. Antarctia, De Jean	Buenos Ayres	An. Carnifex, Fabricius.
11. Lophidius, De Jean	Sierra Leone	L. Testaceus, De Jean.

To the above genera might also be added Zabrus, as this genus has been considered worthy of family distinction by Zimmerman, in his valuable Monograph. I give the genera composing it.

Zabridæ, Zimmerman.

Genera.		Country.	Typical Species.
1. Eutroctes, Zimm.		S. Russia	E. Congener, Zimm.
2. Zabrus, Clairville		England	Car. Gibbus, Fabricius.
3. Pelorus, Bonelli Pelobatus, Fischer	}	Austria	Bl. Spinipes, Fabricius.
4. Polysitus, Zimm.		Asia Minor?	P. Farctus, Zimm.
5. Acorius, Zimm.		Egypt	A. Metallescens, Zimm.

For an abstract of the genera of Amaridæ, the reader is referred to the Faunus of Gistl, published at Munich in 1832.

Sp. 139. Integer.—This insect is compared with C. Latus; Vid. Sys. Supp. 58. 128. It is most likely therefore a Bradytus, which occurs in North America.

Sp. 144. *Helopioides*.—Now an Oodes of Bonelli. For an account of the species belonging to this genus consult the 2nd and 3rd volumes Des Annales de la Societé Entomologique de France, Germar's Magazine, and the Zoological Atlas by Eschscholtz. In my own collection are three nondescripts from New Holland.

Sp. 147. *Erythrocephalus*.—This is the same insect as Nebria picicornis. Erichson, however, states that it is only a variety of Harpalus fulvipes.

Sp. 148. Analis.—Probably a Leistus. Erichson makes it a variety of Bradytus apricarius.

Sp. 149. Lineola.—An Agonoderus of De Jean; and one of the genera composing the Acinopidæ of M. M. Audouin and Brulle. I add their Tables, as some of the genera are unknown to me.

Acinopidæ, Aud	louin.
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Genera.	Country.	Typical Species.
1. Acinopus, De Jean	France	C. Picipes, Olivier.
2. Eucephalus, Laporte	P. B. S.	Euc. Capensis, Laporte.
3. Amblygnathus, De Jean	Cayenne	Amb. Cephalotes, De Jean.
4. Platymetopus, De Jean	Senegal	Pl. Notitus, De Jean.
5. Barysomus, De Jean	Mexico	B. Hopfneri, De Jean.
6. Cratognathus, De Jean	Buenos Ayres	C. Mandibularis, De Jean.
7. Daptus, Fischer	Russia	D. Vittatus, Fischer.
8. Agonoderos, De Jean	North America	C. Lineola, Fabricius.
9. Paramecus, De Jean	Monte Video	P. Cylindricus, De Jean.
10. Cratacanthus, De Jean	North America	C. Pensylvanicus, De Jean
11. Hippolætis, Laporte	Senegal	Hip. Rufa, Laporte.

Sp. 151. Pallidus.—This insect, according to Paykull, is considered a variety of (Bradytus) ferrugineus Fab.; in the Banksian Cabinet this species is Plochionus Bonsfilii.

Sp. 153. Surinamensis.—This insect was described from Lund's Cabinet, in the Ent. Syst. p. 156. There is added, "statura omnino C. pallens ut duplo fere minor," leaving us in doubt where to place it.

Sp. 154. *Dorsiger*.—I can find no account of this species in any modern author; it was described from Vahl's collection.

Sp. 161. *Discoideus*.—Erichson makes this insect a true Harpalus, and synonymous with H. Petifii and Smaragdinus, Duft.

Sp. 163. Vestitus.—This is the same species as C. marginatus of Linneus. The latter name should be adopted.

Sp. 166. Quadrum.—Now a Tetragonoderus of De Jean; and one of the genera belonging to Stenolophidæ.

Stenolophidæ, Hope.

Genera.	Country.	Typical Species.
1. Stenolophus, Ziegler	England	C. Vaporariorum, Linneus.
2. Masoreus,* Ziegler	England	M. Luxatus, De Jean.
3. Amphasius, Newman.	N. America	A. Fulvicollis, Newman.
(Trechus, Clairville	England	C. Meridianus, Linneus.
4. Acupalpus, Latreille		
Bradycellus, Erichson	Sweden	Harp. placidus, Gyll.
5. Blemus, Ziegler	England	C. Discus, Fabricius.
6. Epaphius, Leach	England	C. Secalis, Panzer.
7. Æpus, Leach	England	Æp. Fulvescens, Leach.
8. Tetragonoderus, De Jean	Senegal	C. Quadrum, Fabricius.
9. Lachnophorus, De Jean	Cayenne	L. Impressus, Brulle.
10. Aretharia, Say	N. America	A. Type unknown.

Mr. Kirby in his Fauna Boreali Americana has given us two families, the Stenolophidæ and Trechidæ. Stenolophus certainly appears closely allied to the Harpalidæ, and conduct us on to Trechidæ, as these sub-families are most intimately connected I have thrown them together. The genus Amphasia Newman is another link between Masoreus and Harpalus, as all the other genera terminate in us, Amphasia as well as Aretharia should do the same.

^{*} For an account of the Species of Masoreus, Vid. Gistl's Faunus, page 119.

For an account of the generic characters of the former genus, vide 24th number of the Entomological Magazine for April 1838.

Sp. 168. Rufibarbis.—This insect by several persons has been considered as a Leistus of Frölich; in Die Kafer der Mark Brandenburg, Erichson asserts it to be a variety of Harpalus fulvipes; vide page 50, Erster Band.

Sp. 169. Flavilabris.—Probably a Dioryche Mac-Leay, or rather a Colpodes? This insect was described from Daldorff's Cabinet: in the Supplement occurs "affinis C. palliato (Selonophoro D.J.) at distinctus et paullo major, elytra striata apicè sinuata." It is evident from the above description that it cannot be a Selonophorus; Mr. MacLeay therefore is probably right in his conjectures, as far as relates to the genus. (Vide Annul. Javan. page 22.)

Sp. 171. Lividus.—Described originally from Lund's Cabinet; and is most likely an immature Amara.

Sp. 173. Notulatus.—From the Fabrician description I consider this insect a Panagæus. Mr. MacLeay in his Annulosa Javanica regards it as allied to Dromius.

Sp. 176. Crux major.—Certainly a Panagæus; the following genera belong to the family Panagæidæ.

PANAGÆIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Loricera, Latreille	England	C. Pilicornis, Fabricius.
2. Panagæus, Latreille	England	C. Crux major, Linneus.
3. Eurysoma, Oberleitner	Brazils?	E. Tenebroides, Klug.
4. Tefflus, Leach	Senegal	T. Megerlei, Leach.
5. Coptia, Laporte	Cayenne	C. Armata, Laporte.
6. Dercylus, Laporte.	Brazils	Ater, Laporte.
7. Brachygnathus, Perty	S. America	B. Festivus, Perty.
8. Geobius, De Jean	Buenos Ayres	G. Pubescens, De Jean.
9. Craspedophorus, Hope	Coromandel	C. Reflexus, Fabricius.
10. Pelecium, Kirby	Brazils	P. Cyanipes, Kirby.
11. Eripus, De Jean	Mexico	E. Scydmænoides, DeJean

The above genera, according to modern arrangement, belong to the Panagæidæ. Tefflus, by Brulle and Audouin, is justly located; but I cannot agree with them concerning Pamborus, which if it does not belong to the Carabidæ, must naturally belong to a peculiar family, which I would name Pamboridæ. Some of the genera of this group are unknown. Should it turn out that there is a difference in the thorax of the sexes, it must be arranged de novo.

Sp. 177. Crux minor.—In the Banksian Cabinet the species labelled Crux minor is evidently Stenolophus vaporariorum; there are two specimens remaining.

Sp. 178. Vittatus.—Now a Lebia of Latreille, it

was described originally from the cabinet of the unfortunate Yeats. I cannot learn what became of his collection. There is in the library of the Linnean Society a presentation copy of Yeats's Institutions of Entomology, which was given to Sir James Smith, the president. The marginal illustrations are coloured by Mr. Sydenham Edwards, and are far superior to any entomological drawings of that period.

Sp. 180. Angulatus.—This species has in later years been described under the name of Panagæus tomentosus, Vid. Zool. Journal. The Baron De Jean gives, in his last Catalogue, Cychrus reflexus Fab. as a variety of Panagæus tomentosus; the species differ entirely.

Sp. 190. Velox.—The specimens in the Banksian Cabinet labelled Velox are only varieties of Anchomenus sordidus, Marsham.

Sp. 192. Præustus.—Schonherr, in his note relating to this species, writes, "sive idem ac C. rufescens sive varietas C. 4-maculati vix enim species distincta," vid. p. 213, 257. Illiger is of opinion that it is only a variety of C. 4-maculatus.

Sp. 194. Lunatus.—Now a Callistus. I have lately received from the East Indies a species of this genus, which I name pulchellus; I am not aware of its previous occurrence in Asia.

Sp. 196. Cursor.—Apparently a variety of C. micros Herbst, which is at the present day a Trechus.

Sp. 198. Vaporariorum.—Now a Stenolophus of Ziegler. In the Banksian Cabinet, the insect labelled as Vaporariorum is Anchomenus prasinus.

Sp. 201. Comma.—Probably an Agonoderus. This insect was originally described from Drury's collection; it has never, I believe, been figured, and has scarcely been mentioned in any other entomological work but that of Illiger, who considers it a variety of Agon. furcatum, or C. lineola Fab.

Sp. 211. Smaragdulus.—From the Fabrician description, and locality, I am inclined to consider this insect as a Catascopus.

Sp. 213. Testaceus.—Now an Epaphius of Dr. Leach, and most likely a pale variety of C. secalis. Vid. Stephens's Illustrations of British Entomology.

Sp. 215. Abbreviatus.—Fabricius in his Eleutheratorum adds a note to this species, "Nullo modo Staphylinus caraboides huc pertinet." Abbreviatus Fab. is only a synonym of St. caraboides, Linn. ii. 635. By many this insect is considered as a link uniting the Carabidæ and Brachelytra.

Sp. 222. Truncatellus.—The type of the genus Philorhyzus Hope, one of the genera of the subfamily of Dromiidæ. The two following species

may be mentioned as pertaining to it, D. foveolus of Stephens, and D. punctatellus of De Jean; others also will be found in our northern European collections. For an account of the British Dromii, consult Mr. Babington's Monograph in the Entomological Transactions of London, vol. i. c. 80, 1.

CARABIDÆ FABRICIANÆ.

CARABOIDEA, Hope.

Having finished my observations on the species of Cychrus and Carabus, mentioned by Fabricius, I should pass to Manticora, which appears next on the Tables among the Carabideous genera, but as it has already been treated of as a distinct family under the name of Manticoridæ; the next group we have to consider are the Scaritidæ. The genera pertaining to it are as follows:

SCARITIDÆ, Leach.

Genera.	Country.	Typical Species.
 Pasimachus, Bonelli Scapterus, De Jean 	N. America East Indies	S. Depressus, Fabricius. S. Guerini, De Jean.
3. Acanthoscelis, Latreille	P. B. S.	S. Ruficornis, Fabricius.
4. $\left\{ \begin{matrix} \text{Carenum, } \textbf{\textit{Bonelli}} \\ \text{Armidius, } \textbf{\textit{Leach}} \end{matrix} \right.$	New Holland	C. Cyaneum, Fabricius.
5. Oxygnathus, De Jean	East Indies	S. Elongatus, Wiedem.
6. Eutomus, Newman	New Holland	E. Tinctilatus, Newman.
7. Scarites, Fabricius	S. France	S. Gigas, Olivier.
8. Oxystomus, Latreille	Brazils	Ox. Cylindricus, De Jean.
9. Camptodontus, De Jean	Cayenne	C. Cayennensis, De Jean.
10. Clivina, Latreille	England	C. Arenaria, Fabricius.
11. Dyschirius, Panzer	England	S. Gibbus, Fabricius.

Genus 5. Oxygnathus, De Jean.

I formerly gave to this genus the name of Arpephorus, which had better be abandoned; it is consequently not inserted in the Tables.

GENUS 6. EUTOMUS, Newman.

For the generic characters of this genus, the reader is referred to the Entomological Magazine of the year 1838, No. 22, page 170.

FABRICIAN SCARITIDÆ.

- Sp. 3. Testaceus.—Schonherr still retains this insect among the Scaritidæ; from the description it appears to be an immature specimen, the species being almost invariably black.
- Sp. 6, 10, 12.—These insects are all of them deposited in the Museum at Copenhagen, where we may be enabled to glean further intelligence respecting them; apparently they are unknown to most Entomologists.
- Sp. 18. Cursor.—Not unlikely to turn out an immature variety of a species of Dyschirius.
- Sp. 19. Aralis.—Probably the type of a new genus, as the thorax is mentioned as being serrated. This insect was collected in the East by the indefatigable Forskahl.

CALOSOMA, Fabricius.

Amongst my remarks on the Linnean Caraboidea will be found a Table of the genera of the Carabidæ. I have only to observe, before entering on the species, that Fabricius included under Calosoma, the Heteromerous genus Adelium, mistaking analogy for affinity. I have only alluded to three species in the Tables; ten are recorded by Fabricius, as to the rest they require no further notice.

Sp. 6. Sericeum.—This insect occurs at Hambro' and in Russia, and in various parts of Germany, enjoying an extended range. De Jean makes Cal. Caspium Fischer a variety of the above. It seems doubtful if C. auropunctatum can be considered as the same species. Dr. Fischer adds a sub-genus Callisthenes, which may be regarded as one of Calosomidous genera. Type, C. Panderi.

Sp. 10. Longicornis.—This species of Calosoma appears to be unknown to most of the Continental collectors, not having occurred since the days of Fabricius; it was originally described from Sehestedt's Cabinet, on the authority of Schousboe, the locality is Morocco. This species was accidentally omitted in my Tables; it is too late now to alter the press.

GALERITA, Fabricius.

The passage from the Cicindeloidea to the Caraboidea, by Mr. Kirby's arrangement, is through the family of Agridæ; by Mr. Stephens' method, by the Dryptidæ; and according to the Comte de Castelneau, by means of Odacanthidæ. It is immaterial by which family we proceed, each of them bearing a close affinity to the other. De Jean, in his last Catalogue, proceeds from the Collyridæ to the Odacanthidæ: as this plan accords not with the Fabrician arrangement but with my views, we will first examine the genera of Dryptidæ, and then the remaining allied families.

DRYPTIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Zuphium, Latreille	Italy	G. Olens, Fabricius.
2. Polistichus, Bonelli	England	G. Fasciolatus, Fabricius.
3. Diaphorus, De Jean Pseudaptinus, Lap.	Cayenne	D. Lecontei, De Jean.
4. Drypta, Fabricius	England	D. Emarginata, Fabricius.
5. Trichognathus, Latreille	Brazils	T. Marginatus, Guerin.
6. Eunostus, Laporte	Madagascar	E. Latreillii, Laporte.
7. Galerita, Fabricius	N. America	G. Americana, Fabricius.
8. Schidonychus, Klug	Brazils	S. Brasiliensis, Klug.
9. Desera, Leach	Morocco	Cylindricollis, Fabricius.

Such are the genera belonging to the Dryptidæ at present; Fabricius, among the species of his Galerita, adds two insects belonging to other families, viz. Planetes and Siagona.

Sp. 2. Attelaboides.—This species is evidently a Galerita; from examining the specimen in the Banksian Cabinet, I find that it closely approaches in its form Gal. Africana D.J., of which species I am inclined to think it the other sex. It may be stated that the thorax of Attelaboides is similar to Gal. unicolor D.J.; the insect is all black, its elytra are not so broad as the true Africana; instead of adding the locality of India, I suspect it to be from Sierra Leone.

Sp. 3. Hirta.—This insect is an Omphra of Leach, a Planetes of MacLeay, and pertains to the family of Helluonidæ; the table of the genera composing it will be found at the end of the Fabrician Caraboidea. At page 215 of the Eleutheratorum there is a singular remark, after stating that Hirta inhabits Tranquebar, the description is given and terminated thus, "Character generis e Gal. Americana desumptus." It may here be remarked that Galerita has never been found in the East Indies; the genus alluded to is evidently one of the Helluonidæ and a Planetes of MacLeay. I think it will be found eventually that all the species of Helluo of the New World differ generally from those of

the Old Continent. The true type of the genus Helluo is H. Costatus Leach, a New Holland insect, differing entirely from other Asiatic species.

Sp. 5, 6, 7, & 8, belong to the Siagonidæ. The two genera belonging to this sub-family are Enceladus of Bonelli, and Siagona of Latreille. It seems, according to Laporte, that Lævigatus, (Ent. Syst. p. 143, No. 86), is an Enceladus, the country of it is probably Cayenne.

Brachinus, Fabricius.

The genera belonging to this family, according to the French writers, are the following:

BRACHINIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Pheropsophus, Solier	St. Domingo	B. Complanatus, Fabricius
2. Brachinus, Weber	England	Car. Crepitans, Linneus.
3. Aptinus, Bonelli	Austria	C. Mutilatus, Fabricius.
4. Pseudaptinus, Laporte	Brazils	P. Albicornis, Laporte.
[Ictinus, Laporte	Cayenne	Ic. Rogerii, De Jean.
5. { Ictinus, Laporte Pachyteles, Perty	S. America	P. Striola, Perty.
6. Nomius, Laporte	East Indies?	N. Græcus, Laporte.
Physea, Brulle		P. Testudinea, Brulle.
7. Physea, Brulle Trachelizus, Solier	Brazils	T. Rufus, Solier.

The four first genera of this family may be considered as true Brachinidæ, the remaining three will eventually no doubt be formed into a subfamily, as they most probably belong to the Ozænidæ.

Pheropsophus, Solier.

This genus includes all the gigantic species of Brachinus Fab.; they are chiefly from exotic and tropical countries, black and yellow being the predominating colours; the lateral margins of the wings are strongly elevated.

Brachinus. Weber.

The insects belonging to true Brachinus are small in size compared with Pheropsophus; the prevailing colours are red and green; the elytra are rarely so deeply striated as in the latter genus. For references to the four remaining genera consult Audouin et Brulle's Hist. Nat. des Insectes, vol. 1. page 240. L'Histoire Nat. des Anim. Articulés par Laporte de Castelneau, Livaraison 9, and refer also to page 108 of this number.

FABRICIAN SPECIES.

- Sp. 1. 2-maculatus.—In the tables this insect is given as a Brachinus, it is a Pheropsophus of Solier.
- Sp. 2. Nigripennis.—Now an Aptinus. De Jean thinks this insect the same as Fastigiatus of Olivier; it is no longer a matter of doubt that

Fastigiatus of Fabricius is the same as Olivier's insect.

Sp. 6. 3-pustulatus.—This insect cannot be considered an Helluo; the specimens in the Banksian Cabinet are decidedly of the genus Pheropsophus.

In terminating my observations on the Brachinidæ, it may be stated with regard to the habits of these insects, that the European species live chiefly beneath stones, they are gregarious, and live, as far as I have observed, chiefly on the roots of grass. I have known a dead individual remain a long period, untouched by its confederates, living beneath the same stone. Westermann informs us that the larger species in India, allied to Bimaculatus live beneath the bark of Palm trees, probably the whole of them are naturally vegetable feeders; one part deriving nutriment by sucking grasses, the other feeding more particularly on the luscious sap of trees.

Anthia, Fabricius.

As the table of the genera belonging to this sub-family has been given in my observations on the Caraboidea of Linneus, I shall merely remark on the species.

- Sp. 4. 6-guttata. The type of the genus Pachymorpha, a new species lately received from the East Indies, will be figured among the new genera at the end of this part of the Manual.
- Sp. 12. Umbraculata.—This species is little known, from the description of the joints of the antennæ being compressed, it is probable that Brulle derived his notion of the genus Piezia. It is not unlikely that the above species will prove to be his P. axillaris. For an account of the species of Anthia, refer to Lequien's monograph of that genus.

Agra, Fabricius.

Mr. Kirby raises Agra to the rank of a family, uniting it with Casnonia; Laporte more suitably ranges the latter genus with Odacanthidæ; he considers Agra as belonging to the Ctenodactylidæ, preferring Mr. Kirby's term on many accounts, but more particularly as Agra is the typical genus of the family. I consider Ctenodactyla in the light of an allied genus.

AGRIDÆ, Kirby.

Genera.	Country.	Typical Species.
i. Agra, Fabricius 2. Ctenodactyla, De Jean	Cayenne Carolina	A. Ænca, Fabricius. Ct. Chrevrolatii.

With regard to Agra it may very properly be subdivided into three sections, according as the species are toothed at the extremity of the wings, and into a fourth where the dentation is evanescent. There are about 50 known species in the European cabinets, for an account of them Vid. Etudes Entomologiques, by Laporte, vol. 1. page 45.

Sp. 3. Attelaboides. — The Baron De Jean has stated his opinion that this is an American insect. I have received it from the East Indies and can therefore substantiate the authority of Fabricius, he describes it with a remark, "Habitat in India Orientali, Præcedenti affinis videtur, an satis distincta;" the dentation at the extremity of the wings of Agra settles the question. I regard it as the type of a new genus closely allied to Casnonia, and consequently belonging to the Odacanthidæ instead of Agra.

Odacantha, Fabricius.

The following genera belong to the Odacanthidæ, Monsieur Laporte de Castelneau is the first person who raised it to the rank of a family.

Odacanthidæ, Laporte.

Genera.	Country.	Typical Species.
1. Casnonia, Latreille	N. America	C. Pensylvanica, Fabricius.
2. $\left\{ \begin{array}{l} \text{Casnoidea, } \textit{Laporte} \\ \text{Ophionea, } \textit{Kluy} \end{array} \right\}$	East Indies	C.Cyanocephala, Fabricius.
3. Lasiocera, De Jean	Senegal	L, Nitidula, De Jean.
$4. \left\{ \begin{array}{l} \text{Leptotrachelus, } Lat. \\ \text{Spheracia, } Say \end{array} \right\}$	N. America	Lep. Dorsalis, Fabricius.
5. Rhagocrepis, Esch.	Brazils	R. Riedelii, Eschscholtz.
6. Stenidia, Brulle	Senegal	St. Unicolor, Brulle.
7. Stenocheila, Laporte	Cayenne	St. Lacordairei, Laporte.
8. Odacantha, Fabricius	England	Att. Melanurus, Linneus.
$9. \left\{ egin{array}{ll} ext{Cordistes, Latreille} \\ ext{Calophæna, Klug} \end{array} \right\}$	Cayenne	C. Acuminatus, Olivier.
10. Trigonodactyla, DeJean	Senegal	T. Terminata, De Jean.
11. $\left\{ egin{array}{l} ext{Miscelus, } \textit{Klug} \ ext{Leptodactyla, } \textit{Brulle} \end{array} ight\}$	Java	M. Javanus, Klug.

For references to the above genera, consult the works of Laporte, Audouin, and Brulle; as well as those of Latreille, Klug, De Jean, Eschscholtz, and Say.

Sp. 3. 3-pustulata. This insect is described as being found in Paris, and was originally in the possession of Mons. Tigny; as it is impossible to believe that any other Odacantha than Melenura is found in the vicinity of Paris, some other insect must have been confounded with it; the only genus that approaches the form is Anthicus; as no size is mentioned, it is impossible to speak with any certainty respecting 3-pustulata.

DRYPTA, Fabricius.

As the genera of this family will be found in a former page, it is only necessary to remark on the second species.

Sp. 2. Cylindricollis.—Now of the genus Desera of Leach. It differs chiefly from Drypta in having the first joint of the antennæ very long, the palpi are proportionably larger, and the last joint is more dilated than in the latter genus. The tropical species are numerous, abounding particularly in the East Indies, the largest species are from Sierra Leone.

Elaphrus, Fabricius.

The genera composing this family will be found under the Linnean Cicindelidæ with which they were at that time arranged. They are intimately allied to the Pericallidæ; as this sub-family has accidentally been passed by, I now insert it.

Pericallidæ, Hope.

Genera.	Country.	Typical Species.
1. Catascopus, Kirby	East Indies	C. Hardwickii, Kirby.
2. Pericalus, MacLeay	Java	P. Cicindeloides, M. L.
3. Dyscolus, De Jean	American Isles	D. Memnonius, De Jean.
4. Arsinoe, Laporte	Madagascar	A. 4-guttatus, Laporte.
5. Promecoptera, D. J.	East Indies	P. Marginalis, Wiedeman.
6. Eurydera, Laporte	Madagascar	E. Armata, Klug.
7. Thyreopterus, D. J.	Senegal	T. Flavosignatus, De Jean.
8. Nycteis, Laporte	Madagascar	N. Madagascarensis, Lap.
9. Eucheila, De Jean	Brazil	E. Flavilabris, De Jean.
10. Beleophorus, Klug	Madagascar	B. Cyanipennis, Klug.

This family may be considered as a receptacle for various doubtful forms, uniting the whole of the Lebiadæ. By Catascopus we pass readily to the Elaphridæ.

FABRICIAN ELAPHRIDÆ.

Sp. 3. Striatus.—Now a Bembidium. By some authors this species has been considered a Nothiophilus.—Vid. Schon. page 247. On the authority of Mr. Stephens, I gave it as a Bembidium.

Sp. 5. Atratus.—Described originally from Hybner's Cabinet. It is probably an Elaphrus; the remaining species are scarcely worthy of a remark.

Scolytus, Fabricius. Omophron, Latreille.

As the Fabrician name was originally applied to a genus of Bostrichidæ, that of Latreille is adopted and is more appropriate. It was intended to express the agreement of authors respecting the arrangement of these singular insects. They unite the terrestrial and aquatic Caraboidea. In form Omophron is like Haliplus; it lives in the same element, and walks with facility at the bottom of rivers, in this respect evincing an affinity to the

Carabidæ; other forms will yet occur connecting it more closely with the *subaquatic* Elaphridæ. I am induced to rank them as a family under the name of

Cyclosomidæ, Hope.

Genera.	Country.	Typical Species.
1. Omophron, Lat.	France	C. Limbatum, Fab.
2. Cyclosomus, Lat.	East Indies	C. Flexuosus, Fab.
3. Metrius, Esch.	Kamschatka	M. Contractus, Esch.

This genus terminates the Carabidæ of Fabricius, as inadvertently I have omitted some families, and purposely passed over others which may tend to connect the Caraboidea together, I now insert them before proceeding to investigate the aquatics.

Ozænidæ, Hope.

When I grouped my Carabidæ, after examining Mons. Audouin's tables of genera belonging to the Brachinidæ, I felt convinced that Ozæna and its affinities were decidedly belonging to a distinct family, with this opinion, I am glad to find another individual agrees. In Guerin's Magazine will be found the genera and sub-genera of Ozæna, which are in my opinion allied to Helluo in form, and may have the Brachinating power as well as some of the Cicin-

delidæ. Its affinity with true Brachinus still remains to be ascertained.

Ozænidæ, Hope.

Genera.	Country.	Typical Species.
1. Ozæna, Olivier	Сауеппе	Oz. Dentipes, Olivier.
2. Ictinus, Laporte	Cayenne	Ic. Tenebrioides, Laporte.
3. Goniotropis, Gray	Brazils	G. Brasiliensis, Gray.
4. Pseudozæna, Lap.	Java	P. Megacephala, Laporte.
5. Physea, Brulle Trachelyzus, Solier	Brazils Brazils	P. Testudinea, Laporte. T. Rufus, Solier.
6. Pachyteles, Perty	S. America	P. Striola, Perty.
7. Nomius, Laporte	Asia Minor	N. Græcus, Laporte.
8. Melisodera, West.	N. Holland	M. Picipennis, Westwood.
Basoleia, Westwood 9. Axinophorus, Gray	Brazils	B. Brasiliensis, Westwood.
Catapiesis, Brulle	Brazils	C. Nitida, Brulle.

The genera composing the Brachinidæ mentioned at page 99 require alteration, as it is too late now to cancel the press, I consider the first four as Brachinidæ. The remainder, with some others, form the above Table.

Heteromorphidæ, Hope.

This family ranks under its genera some of the most singular forms to be found in our collections; they appear to be allied to the Helluonidæ.

HETEROMORPHIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Heteromorpha, Kirby Drepanus, De Jean Axinophorus, Latreille Pseudomorpha, Kirby	Georgia N. America	H. Excrucians, Kirby. D. Lecontei, De Jean.
 Silphomorpha, West. Sphallomorpha, West. Adelotopus, Hope 	N. Holland N. Holland N. Holland	S. Fallax, Westwood. Sp. Decipiens, Westwood. A. Gyrinoides, Hope.

The references for some of these genera will be found in the Linnean Transactions, Vol. 14. page 101; and in the Entomological Transactions. Vid. New Coleoptera, Vol. 1. Those named by Mr. Westwood will be described in the Fauna Australasiæ.

MORIONIDÆ, Hope.

This family appears to unite on one hand the Scaritidæ and Siagonidæ, and on the other the Ditomidæ and Thaliadæ; the following genera belong to the

MORIONIDÆ, Hope.

Genera.	Country.	Typical Species.
		VI 1
1. Morio, Latreille	N. America	M. Monilicornis, Latreille.
2. Campylocnemis, West. Hyperion, Laporte.	N. Holland	Sc. Schrotteri, Schonherr.
3. Hemiteles, Brulle	Madagascar	H. Interruptus, Brulle.
4. Homalomorpha, Brulle	Cayenne	H. Castanea, Brulle.

I am not at all satisfied with this sub-family. The tables of Audouin and Brulle have been adopted, with the exception of the genus Catapiesis, which is apparently an Ozæna. Campylocnemis, in my opinion, ought to be united with the Trigonotomidæ, if it is not considered as an intermediate between Morio and Catadromus. Of the habits of these insects we are altogether ignorant.

HELLUONIDÆ, Hope.

Genera.	Country.	Typical Species.
 Helluo, Bonelli Ænigma, Newman Planetes, MacLeay Macrocheilus, Kirby 	N. Holland N. Holland East Indies East Indies	H. Costatus, Bonelli. Æn. Iris, Newman. Pl. 2-maculatus, MacLeay. Mac. Bensoni, Kirby.
 Macroenentis, Kiroy Omphra, Leach Pleuracanthus, Gray Helluomorpha, Lap. 	East Indies East Indies Brazils Brazils	Gal. Hirta, Fabricius. Pl. Sulcipennis, Gray. Hel. Heros, Laporte.

True Helluo belongs to New Holland, the East Indian sub-genera are allied to it; there is a probability that the sexes of some of these genera, when better known, will lead us to a more accurate grouping than can at present be done. Helluomorpha of the New World will eventually be sub-divided into several sub-genera. For an account of the characters of Ænigma, Vid. Ent. Mag. fifteenth part, page 449, where the details are published by Mr. Newman.

POGONIDÆ, Kirby.

Genera.	Country.	Typical Species.
I. Pogonus, Ziegler. Raptor, Megerle	England	P. Burrellii, Haworth.
2. $\left\{ \begin{array}{l} \text{Cardiaderus, } D. J. \\ \text{Daptus, } \textit{Fischer} \end{array} \right.$	Siberia	C. Chloroticus, Gebler.
3. Melanotus, De Jean	Buenos Ayres	M. Flavipes, De Jean.
4. Omphreus, De Jean	Montenegro	O. Morio, Pareyss.
5. Stenomorphus, D.J.	Carthagena	S. Angustatus, De Jean.

The next family (which was purposely omitted) is the Trigonotomidæ of Laporte; as no insects mentioned by Fabricius can with any certainty be ascribed to that family, excepting probably some of the exotic Pæcili, I deferred introducing them till the present moment. In my remarks on the Thaliadæ (Feroniadæ olim), I merely alluded to Myas and some few genera which have been classed under the family

Trigonotomidæ, Laporte.

Genera.	Country.	Typical Species.
1. Myas, Ziegler	Hungary	M. Chalybeus, Ziegler.
2. Lesticus, De Jean	Java	L. Janthinus, De Haan.
3. Trigonotoma, D. J.	Java	O. Viridicollis, MacLeay.
4. Catadromus, M.L.	Java	C. Tenebrioides, Olivier.
5. Euchroa, Brulle	Unknown	E. Nitidicollis, Brulle.
6. Microcephalus, D.J. Cynthia, Latreille	Brazils	M. Depressicollis, De Jean
7. Microcheila, Brulle	Madagascar	M. Picea, Brulle.
8. Distrigus, De Jean	East Indies	D. 2-pustulatus, Brulle.
9. Abacetus, De Jean	Senegal	D. Crenulatus, De Jean.
10. Drimostoma, Brulle	Cayenne	D. fuscipes, Brulle.

Such are the genera given by M. M. Audouin, Brulle, and Laporte. As to Myas it is quite out of place, nor do I know where at present it should be located. The affinity of Thaliadæ with the present family is seen at once, by connecting Trigonotoma with Pœcilus; the former genus may be regarded in the East as representing in those countries, what Pecilus does in our northern climes. The two remaining genera which have been omitted are Colpodes and Mormolyce. The former is closely allied to Anchomenus: for a figure refer to the Annulosa Javanica. As to the latter my opinion has formerly been stated in my observations on the Indian Fauna, published by Dr. Royle; instead of placing it with the Sphrodidæ, as Latreille has done, I locate it near Agra. If we take away the greatly dilated wings, in thorax and in form it resembles that genus; moreover I believe it to be a vegetable feeder, and that it lives under bark of trees, has, I believe, already been ascertained.

In concluding my observations on the Caraboidea I am willing to allow that the group, as to variety of form, is one of the most interesting that can engage our attention. In numbers they are inferior to the Lamellicorns, in elegance they cannot be compared with the Cicindelidæ, and in beauty and

splendour they must yield to the rich metallic Buprestidæ. If we look to more important ends, viz. the actual benefit derived from groups of insects, and then contrast the Caraboidea with the Lamellicorns. Entomologists, at least, if not others, will allow the superiority of the latter. As to the grouping of the families, I by no means consider them satisfactory; it has been my endeavour to place before the reader what has been done, and, as far as the extent of my private library goes, the modern genera have been weeded out of many volumes, and incorporated in this Manual. If some of the various sub-divisions turn out to be in accordance with nature, my time has not altogether been thrown away. If others prove erroneous, and these errors should induce others to pay attention to isolated groups, and reconstruct them more accurately, I shall equally also not have written in vain.



DYTISCUS, LINNEUS.

DYTICUS, GEOFFROY.

HYDROPHILIDÆ AND DYTICIDÆ, LEACH.

Linnean Species.	Country.	Genera of Authors.
1. Piceus	England	Hydröus, Linneus, MSS.
2. Caraboides	England	Hydrophilus, Auctorum.
3. Scarabæoides	England	Hydrobius, Leach.
4. Fuscipes	England	Hydrobius, Leach.
5. Luridus	England	Berosus, Germar.
6. Latissimus	Germany	Dyticus, Geoffroy.
7. Marginalis	England	Dyticus, Geoffroy.
8. Semistriatus	England	
9. Striatus	England	Colymbetes, Clairville.
10. Fuscus	England	Colymbetes, Clairville.
11. Cinereus	England	Graphoderus, Eschscholtz
12. Sticticus	Barbary	Eunectes, Erichson.
13. Sulcatus	England	Acilius, Leach.
14. Erythrocephalus	England	Hydroporus, Clairville.
15. Maculatus	England	Necticus, Hope.
16. Ferrugineus	England	Haliplus, Latreille.
17. Bipustulatus	England	Necticus, Hope.
18. Ovatus	England	Hyphidrus, Illiger.
19. Palustris	England	Hydroporus, Clairville.
20. Uliginosus	England	Necticus, Hope.
21. Bimaculatus	France	Phaleria, Latreille.
22. Granularis	England	Hydroporus, Clairville.
23. Minutus	England	Laccophilus, Leach.

GYRINUS, LINNEUS.

1. Natator	England	Gyrinus, Auctorum.
2. Americanus	N. America	Cyclous, Eschscholtz.

HYDROPHILUS, FABRICIUS. HYDROPHILIDÆ, LEACH.

Fabrician Species.	Country.	Genera of Authors
1. Emarginatus	England	Spercheus, Fabricius.
2. Piceus	England	Hydröus, Linneus.
3. Ater	S. America	
4. Olivaceus	Coromandel	
5. Caraboides	England	Hydrophilus, Fab.
6. Ellipticus	Guinea	Hydrophilus?
7. Lateralis	S. America	Tropisternus, Solier.
8. Abbreviatus	S. America	Hydröus? Linneus.
9. Rufipes	Sumatra	Hydrophilus, Leach.
10. Scarabæoides	England	Hydrobius, Leach.
11. Picipes	England	
12. Orbicularis	Germany	Cælostoma, Brulle.
13. Subrotundus	America	Hydrobius?
14. Bicolor	England	Philhydrus, Solier.
15. Collaris	S. America	Hydrophilus, Fab.
16. Testaceus	England	Hydrobius, Leach?
17. Undatus	S. America	Berosus, Leach.
18. Erythrocephalus	Europe ?	Hydrobius ? Leach.
19. Hæmorrhoidalis	Germany	Cercyon, Leach.
20. Marginellus	Germany	Philhydrus, Solier?
21. Attenuatus	East Indies	Hydrobius, Leach.
22. Obscurus	England	Cercyon, Leach.
23. Luridus	England	Berosus, Germar.
24. Melanocephalus	England	Philhydrus, Solier.
25. Griseus	Saxony	Hydrobius, Leach.
26. Striatulus	Germany	Laccobius, Erichson.
27. 2-punctatus	England	
28. Minutus	England	Philhydrus, Solier.
29. Pygmæus	American Isles	Hydrobius? Leach.
30. Nigriceps	East Indies	Hydrobius? Leach.
31. Truncatellus	Denmark	Limnebius, Leach.

(HYDRACHNA,) FABRICIUS.

1. Hermanni	England	Pælobius, Schonherr.
2. Gibba	England	Hyphidrus, Illiger.
3. Ovalis	England	Hyphidrus, Illiger.
4. Scripta	East Indies	Hyphidrus, Illiger.

DYTISCUS, FABRICIUS. DYTICIDÆ, LEACH. DYTICOIDEA, HOPE.

Fabrician Species.	Country.	Genera of Authors.
1. Latissimus	Germany	Dyticus, Geoffroy.
2. Limbatus	East Indies	Cybister, Curtis.
3. Marginalis	England	Dyticus, Geoffroy.
4. Circumflexus	Tangiers	
5. Punctulatus	England	
6. Immarginatus	Senegal	Cybister, Curtis.
7. Rœselii	France	
8. Atratus	Isles of the Pacific	Cybister?
9. Costalis	Surinam	Cybister, Curtis.
10. Lateralis	Tranquebar	Cybister, Curtis.
11. Lævigatus	S. America	
12. Latus	S. America	Cybister ?
13. Ruficollis	Siam	Hydaticus, Leach.
14. Sulcatus	England	Acilius, Leach.
15. Fasciatus	East Indies	Hydaticus, Leach.
16. Striatus	England	Colymbetes, Clairville.
17. Fuscus	England	Colymbetes, Clairville.
18. Lanio	Madeira	Meladema, Laporte.
19. Cicur	P. B. S.	Colymbetes, Clairville.
20. Vittatus	East Indies	Graphoderus, Eschscholtz.
21. Cinereus	Germany	Acilius, Leach.
22. Zonatus	Germany	Graphoderus, Eschscholtz.
23. Unifasciatus	Guinea	Eunectes? Erichson.
24. Sticticus	S. Africa	Eunectes, Erichson.
25. Griseus	East Indies	
26. 10-punctatus	New Holland	Colymbetes, Clairville.
27. Fuliginosus	Germany	Ilybius, Erichson.
28. Carbonarius	England	Necticus, Hope.
29. Bipustulatus	Holland	Necticus, Hope.
30. Cinctus	America	Colymbetes?
31. 2-punctatus	Germany	Necticus, Hope.
32. Fenestratus	England	Ilybius, Erichson.
33. Ater	England	Ilybius, Erichson.
34. Lacustris	Germany	Ilybius, Erichson.
35. Hybneri	England	Hydaticus, Leach.

Fabrician Species.	Country.	Genera of Authors.
36. Nitidus	Germany	Necticus? Hope.
37. Stagnalis	England	Hydaticus, Leach.
88. Transversalis	England	Hydaticus, Leach.
39. Calidus	S. America	Necticus, Hope?
10. Abbreviatus	England	Necticus, Hope.
41. Ulliginosus	Germany	Necticus, Hope.
12. Paludosus	England	Necticus, Hope.
43. Irroratus	America	Necticus ?
14. Agilis	England	Rantus, Boisduval.
15. Maculatus	England	Necticus, Hope.
46. Brunneus	Tangiers	Necticus, Hope.
17. Erythrocephalus	England	Hydroporus, Clairville.
18. Varius	Sumatra	Necticus ? Hope.
19. Interrogatus	Carolina	Coptotomus, Say.
50. Notatus	England	Rantus, Boisduval.
51. Adspersus	England	Rantus, Boisduval.
52. Hæmorrhoidalis	Germany	Rantus?
53. Bicolor	Guinea	Colymbetes? Clairville
54. Posticatus	American Isles	Copelatus, Erichson.
55. Planus	England	Hydroporus, Clairville.
56. Depressus	Switzerland	
57. Dorsalis	England	
58. 6-pustulatus	England	
59. Palustris	England	
30. Ovatus	Europe	
31. Picipes	Germany	
32. Lituratus	Italy	
33. Signatus	Patagonia	Rantus, Boisduval?
34. 12-pustulatus	England	Hydroporus, Clairville.
35. 8-pustulatus	Switzerland	Hydroporus ?
66. Halensis	Germany	Hydroporus, Clairville.
67. Granularis	England	
88. Confluens	England	Hygrotus, Stephens.
69. Obliquus	Kiel	Haliplus, Latreille.
70. Fulvus	England	Haliplus, Latreille.
71. Impressus	Paris	Haliplus, Latreille.
72. Semi-punctatus	Europe	Noterus, Clairville.
73. Crux	Italy	Hygrotus, Stephens?
74. Arcuatus	Germany	Hygrotus, Stephens.
75. Geminus	Saxony	Hydroporus, Clairville.
76. Lineatus	Germany	-,

Fabrician Species.	Country.	Genera of Authors.
77. Inæqualis	England	Hygrotus, Stephens.
78. Minutus	England	Laccophilus, Leach.
79. Pygmæus	Denmark	Hydroporus, Clairville.
80. Reticulatus	England	Hygrotus, Stephens.
81. Crassicornis	Germany	Noterus, Clairville.
82. Flavipes	England	Hydroporus, Clairville.
83. Pictus	Germany	Hygrotus, Stephens.
84. Nigrita	England	Hydroporus, Clairville.
85. Pusillus	Italy	Hydroporus, Clairville.
86. Parvulus	Denmark	Hygrotus, Stephens?

GYRINUS of LINNEUS and FABRICIUS.

GYRINIDÆ, LEACH.

ı.	Natator	England	Gyrinus of Authors.
2.	Bicolor	Switzerland	
3.	Australis	New Holland	Enhydrus, Laporte.
4.	Americanus	N. America	
5.	Micans	Guinea	Enhydrus?
6.	Premorsus	Sierra Leone	Dineutes, MacLeay.
7.	Hastatus	American Isles	Dineutes?
8.	Spinosus	Coromandel	Dineutes, MacLeay.
9.	Striatus	Barbary	Gyrinus of Authors.
10.	Minutus	England	
11.	Nitidulus	East Indies	
12.	Strigosus	New Holland	Gyrinus?
13.	Rufipes	New Holland	Gyrinus, Linneus.
14.	Villosus	Germany	Potamobius, Leach.

ELOPHORUS, FABRICIUS.

HELOPHORIDÆ, LEACH.

1. Aquaticus	England	Helophorus of Authors.
2. Nubilus	Germany	
3. Elongatus	England	Hydrochus, Germar.
4. Humeralis	Germany	Helophorus?
5. Flavipes	Switzerland	Helophorus, of Authors.
6. Crenatus	England	Hydrochus, Germar.
7. Pygmæus	England	Ochthebius, Leach.
8. Minimus	England	Hydræna, Kugellan.

PARNUS, FABRICIUS.

Fabrician Species.	Country.	Genera of Authors.
1. Prolifecornis	England	Parnus, Fabricius.
2. Acuminatus	Saxony	Potamophilus, Germar.
3. Obscurus	Germany	Parnus, Fabricius.

HETEROCERUS, FABRICIUS.

1. Marginatus	England	Heterocerus of Authors.
2. Dubius	Tranquebar	Heterocerus ?
3. Lævigatus	Germany	Heterocerus, of Authors.

SPHÆRIDIUM, FABRICIUS.

1. Scarabæoides	England	Sphæridium of Authors.
2. Lunatum	Germany	
3. 2-pustulatum	Denmark	
4. Marginatum	Saxony	
5. Glabratum	Madeira	Sphæridium?
6. Abdominale	American Isles	Cyclonotum, Erichson.
7. 5-maculatum	East Indies	Sphæridium, Fabricius.
8. Dytiscoides	St. Helena	Hydrobius?
9. Fasciculare	England	Nosodendron, Latreille.
10. Colon	Sweden	Strongylus, Herbst.
11. Globus	Paris	Agathidium, Illiger.
12. Luteum	Sweden	Campta, Kirby.
13. Obscurum	S. America	Cercyon, Leach?
14. Rufipes	S. America	
15. Anale	S. America	
16. Nitidulum	S. America	
17. Flavum	S. America	Annual Control of the
18. Atomarium	England	Cercyon, Leach.
19. Melanocephalum	Europe	p
20. Lugubre	Paris	
21. Stercoreum	Germany	Cercyon?
22. Hæmorrhoidale	England	Cercyon, Leach.
23. Flavipes	England	
24. Unipunctatum	England	

Fabrician Species.	Country.	Genera of Authors.
25. Limbatum	Germany	Hydrobius, Leach.
26. Ruficolle	Saxony	
27. Fimetarium	Europe	Phalacrus, Paykull?
28. Testaceum	American Isles	Cercyon?
29. Æneum	Germany	Phalacrus, Paykull.
30. Minutum	England	Cercyon, Leach.
31. Pulicarium	France	Catheretes, Herbst.
32. Wintheriæ	Unknown	Unknown.

ANISOTOMA, FABRICIUS.

 Ferruginea Humeralis 	Denmark Styria	Anisotoma, Fabricius.
3. Bicolor	Saxony	Phalacrus, Paykull.
4. Nigripennis 5. Seminulum	Germany England	Agathidium, <i>Illiger</i> . Agathidium.



REMARKS AND OBSERVATIONS

ON THE

LINNEAN AQUATIC COLEOPTERA.

LINNEUS and Fabricius very properly threw together the Aquatic groups, and certainly did not in the present instance so outrageously violate the Natural System, as later writers have subsequently done by their artificial arrangements. Fabricius, by means of the genus Scolytus, (now the Omophron of Latreille) passes from the Caraboidea to the Aquatics, and if we regard the habits of that genus, and compare the form of it with Haliplus or even with Pælobius, we shall with difficulty find another genus, which so satisfactorily connects the above groups. Other links might be mentioned, which will be found in the various opinions recorded by Entomologists, but the above is sufficient for our purpose, and we therefore proceed to remark on the two grand

divisions into which the Aquatic Beetles may be divided; namely, the Hydradephaga of MacLeay, and the Rypophaga of Stephens. The Gyronecha of Kirby, comprising under that denomination the Whirl Beetles, or Waltzing Beetles, (Gyrinidæ, Leach) appear to be altogether a distinct group, and will be treated as such; instead of therefore dilating at present on the Aquatics generally, it will be better to remark on them separately as they occur in the respective works of Linneus and Fabricius, merely premising that out of twenty-three species published by the former writer, under the term of Dytiscus, these have been subdivided by later authors into fifteen genera.

Dytiscus, Linneus.

Sp. 1. *Piceus*.—Now an Hydrous of Leach, and of the family of the Hydrophilidæ of the same Author; the following genera belong to it, viz.

PHILYDRIDA, MacLeay.
HYDROPHILIDÆ, Leach.
HYDROPHILOIDEA, Hope.

Genera.	Country.	Typical Species.
1. Hydrous, Linneus 2. Hydrocharis, Lat. Hydrophilus of Authors	England England	D. Piceus, <i>Linneus</i> . D. Caraboides, <i>Linn</i> .
 Hydrophilus of Authors Philhydrus, Solier Hydrobius, Leach Tropisternus, Solier Sternolophus, Solier Volvulus, Brulle Berosus, Leach Enoplurus, Hope Spercheus, Fabricius Limnebius, Leach 	Europe England Mexico Egypt Mauritius England East Indies England England	Hyd. bicolor, Fab. Hyd. fuscipes, Linneus. Hyd. lateralis, Fab. Hyd. Rufipes, Solier. Hyd. inflatus, Brulle. Dyt. luridus, Linneus. Ber. Orientalis, Hope. Hyd. emarginatus, Fab. Hyd. truncatellus, Fab.
12. Chætarthria, Water. Cyllidium, Erichson	0	Hyd. Seminulum, Paykull.

1. Hydrous, Linneus.

The species of this genus are much more numerous than Entomologists are aware of, and from the notes contained in my Journal I find, at least, seventy species have fallen under my notice; they seem to be naturally divisible into three sub-genera, 1st. into true Hydrous, which has the wings rounded at the apex and spineless. 2nd. Those species which have the sutural apex of the elytra more or less spined, to which I give the name of

Mesocanthicus, from $\mu\epsilon\sigma\sigma$ and $\alpha\kappa\alpha\nu\theta\iota\kappa\sigma$, spinosus, and the last sub-genus has the apex of the elytra conspicuously marked by four spines, and is consequently named Tetracanthicus. Three species in my collection are from Tropical Africa, it will also probably occur in the warmer parts of Asia. The two former genera seem widely dispersed throughout the world, inhabiting both the Old and New Continent. I possess among my aquatics three species of Hydrous belonging to Australia. The above insects weave a sort of coccoon, in which the ova are deposited; as to substance it appears to combine the paper of the Wasp, with the silk of the Bombyx, when submerged beneath the water for many hours the coccoon remains nearly unaltered by the moisture, a secretion produced by the insect probably resists the action of water upon it.

2. Hydrophilus of Authors.

Sp. 2. Caraboides.—For figures of the Coccoon and Larvæ of Hydrous and Hydrophilus, the student may consult Rosel's Insect. Belust. Vol. 2. Tab. 41; and also Mr. Westwood's Introduction to the Modern Classification of Insects, Vid. Part 3. p. 121. fig. 8, &c.

3. Philhydrus, Solier.

For the generic characters of the above genus, the reader is referred to M. M. Audouin and Brulle's Hist. Nat. des Insectes, Vol. 2. p. 276. Syst. Eleuth. p. 252. and also to Gyllenhall's Insecta Suecica.

4. Hydrobius, Leach.

For an account of the species peculiar to England, the student may consult with advantage the Illustrations of British Entomology by Mr. Stephens, as well as the writings of Marsham and Dr. Leach. By Fabricius, Solier, Audouin and Brulle, some exotics are also mentioned.

5. Tropisternus, Solier.

The insects belonging to the above genus seem peculiar to the New World. Vid. Solier Annales de la Soc. Ent. de France.

6. Sternolophus, Solier.

This form appears, as far as is known at present, to be peculiar to Africa, occurring in Egypt, Nubia, and Senegal. Vid. Annales de la Soc. Entom. de France, t. 3. p. 311.

7. Volvulus, Brulle.

I suggest the adoption of a new term, instead of Volvulus, as Latin generic names ought not to be adopted. This exotic form is from the Island of Mauritius, a second species has occurred at Ceylon.

Vid. Audouin and Brulle, Vol. 2. p. 282.

8. Berosus, Leach.

The species of Berosus are numerous, those which have the wings at the apex armed with spines, I have detached under the name of Enoplurus. For references consult the works of Messrs. Stephens and Curtis, and the Annulosa Javanica, by Mr. MacLeay, page 35.

9. Enoplurus, Hope.

In my collection there are several species which have the extremity of the wings armed with spines, they seem to be widely spread, occurring in Africa, Asia, and Europe. One species was discovered by Mr. Rudd at Lymington in Hampshire, and is probably the same as Berosus spinosus of Ahrens.

10. Spercheus, Fabricius.

M. M. Audouin and Brulle place this genus along with the Helophoridæ. I am, however, still inclined to rank it with the Hydrophilidæ; and of this opinion Mr. MacLeay appears to be, as well as Mr. Stephens. By the former writer a second species, named Sp. platycephalus, is described from Java, it seems however to deviate from the type; a third has fallen under my inspection from Sierra Leone. Since writing the above, Mr. Westwood, I find, considers this genus as the connecting link between the Hydrophilidæ and Helophoridæ, Vid. part 3, page 122, of the Introduction to the Modern Classification of Insects, for further observations on these singularly formed aquatics.

11. Limnebius, Leach.

This genus was established by Dr. Leach to include several minute Hydrophilidæ; they approach in form and habits some of the Hydrobii as well as the Helophoridæ. There are nine species recorded by Mr. Stephens in his Illustrations of British Entomology.

12. CHÆTARTHRIA, Waterhouse.

Hydrophilus Seminulum of Paykull is the type of this genus, which was first separated from Hydrobius by the above writer; Erichson, in the Kafer den Mark Brandenburg, has given the generic name of Cyllidium to the same species; the latter name of course falls. Vid. page 211 of the last quoted work for the generic details, &c. &c.

LINNEAN AQUATICS—continued.

Sp. 6. Latissimus.—Now a Dyticus, and the type of the genus. The following families, according to my views, belong to the Dyticoidea, viz. Haliplidæ, Dyticidæ, and Gyrinidæ; the genera belonging to the family of Dyticidæ are as follows:

DYTICIDÆ, Leach.

Genera.	Country.	Typical Species.
1. Dyticus, Linneus	France	D. Latissimus, Linneus.
2. Leionotus, Kirby	England	D. Conformis, Stephens.
(Cybister, Curtis	England	Roeselii, Fabricius.
3. Trogus, Leach		
Trochalus, Eschscholtz		
4. Hyderodes, Hope	New Holland	Hyd. Shuckardii, Hope.
5. Acilius, Leach	England	Dyt. sulcatus, Linneus.
Eunectes, Erichson		
6. Eunectes, Erichson Nogrus, Eschscholtz	East Indies	Dyt. griseus, Fabricius.
7. Graphoderus, Esch.	France	D. Cinereus. Linneus.
8. Hydaticus, Leach	England	Hybneri, Fabricius.
9. Agabus, Leach	England	D. Serricornis, Paykull.
10. Ilybius, Erichson	France	D. Ater, Fabricius.
11. Meladema, Laporte	Gallia Merid.	D. Coriacea, Hoffmansegg
12. Rantus, Eschscholtz	England	D. Pulverosus, Knoch.
13. Liopterus, Eschscholtz	England	D. Oblongus, Illiger.
14. Colymbetes, Clairville	England	D. Striatus, Linneus.
15. Necticus, Hope	England	D. Bipustulatus, Linneus.
16. Copelatus, Erichson	Brazils	D. Posticatus, Fabricius.

To the above sixteen genera, others might be added on investigating the tropical species, which have been comparatively neglected. The genus Thermonectus of Eschscholtz seems peculiar to the New World, as the characters are unpublished, and the type of the genus is only a manuscript name, I consequently pass it over. The remarks on the above genera will appear under the different names as they occur in the Fabrician Tables.

LINNEAN SPECIES—continued.

Sp. 16. Ferrugineus.—Now an Haliplus, and one of the genera composing the family of

HALIPLIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Haliplus, Latrielle	England	Dyt. elevatus, Panzer.
2. Cnemidotus, Erichson	Austria	Dyt. Cæsus, Duftschmid.
3. Pælobius, Schon.	England	Dyt. Hermanni, Linneus.
Hygrobia, Clairville		
4. Hyphidrus, Illiger	England	Dyt. Ovatus, Linneus.
5. Hygrotus, Stephens	England	Hyd. Fluviatilis, Leach.
6. Hydroporus, Clairville	France	Dyt. 12-pustulatus, Fab.
7. Noterus, Clairville	Switzerland	Dyt. Crassicornis, Fab.
8. Laccophilus, Leach	England	Dyt. Minutus, Linneus.
9. Hydroporomorpha, Bab.	Rio Janeiro	H. parallelus, Babington
10. Anodocheilus, Bab.	Rio Janeiro	A. Maculatus, Babington.
11. Desmopachrius, Bab.	Rio Janeiro	D. Nitidus, Babington.

The three last genera will appear in the Entomological Transactions of London. The types are deposited in the collection of that Society by the liberality of Mr. Charles Darwin of Shrewsbury. In a paper read before the Entomological Society of London (now on the eve of publication), the details will be given at length by Mr. Babington of Cambridge. Sp. 18. Ovatus.—Now of the genus Hyphidrus of Illiger; the species are few in number, not more than ten appearing in our European Cabinets; hitherto I believe it has not been found in the New World, it may however be expected to occur there; its geographical range extends over Europe and Asia, and some of the African isles. I am not aware of any known species having been obtained from the African Continent.

Sp. 21. Bimaculatus.—This insect, I find, on reference to the Linnean Cabinet, is only a variety of Phaleria Cadaverina.

Gyrinus, Linneus.

As only two species are recorded in the Systema Naturæ of Linneus. I shall defer my remarks on the genera and species till we come to the Fabrician Gyrinidæ.

REMARKS

ON THE

FABRICIAN AQUATICS.

Hydrophildæ, *Fabricius*. Hydrophildæ, *Leach*. Hydrophiloidea, *Hope*.

- Sp. 1. Emarginatus.—Now of the genus Spercheus Fab. For the Table of Genera belonging to the Hydrophilidæ refer to a former page, at the commencement of the Linnean Aquatics, the genus Spercheus, by M. M. Audouin and Brulle, is considered as belonging properly to the Helophoridæ. I retain it, however, among the Hydrophilidæ, as I never found it out of water, and have my doubts if it can exist long out of that element, which is no uncommon case with some of the species of Helophoridæ. Mr. Westwood is of opinion that it may be considered as a connecting link of the two families.
- Sp. 4. Caraboides. Now an Hydrophilus of Authors. By some writers the term Hydrocharus is applied to it. If we retain Hydrous as a

generic name for the larger species of the Hydrophilide, it is better not to abandon the Fabrician name of Hydrophilus. The grand difference between Hydrous and Hydrophilus is the prosternum, which in the former is produced, in the latter it is not so. With respect to the species named Caraboides, it is not unusual to meet with it in a crippled state. I possess in my collection a remarkable monstrosity, and have occasionally seen others; when recently captured they smell like Spanish liquorice.

- Sp. 5. *Ellipticus*.—As I am unacquainted with this species, I give it as an Hydrophilus with a doubt, as it is compared by Fabricius with Caraboides.
- Sp. 7. Abbreviatus.—Evidently not a Tropisternus, as the sternum is abbreviated.
- Sp. 8. Rufipes.—This species has a very wide range of country, extending nearly over the Continent of Asia.
- Sp. 11. Orbicularis.—Now a Cælostoma of Brulle, and one of the Sphæridiidæ. Occasionally this species of Hydrobius has been confounded with Cercyon, most of which have the elytra striated; the above is an exception to the general rule.
 - Sp. 12. Subrotundus.—Originally described from

the collection of Dr. Pflug, from America; I give it as an Hydrobius. I can add no information of what became of the above collection.

Sp. 13. *Bicolor*.—Now a Philhydrus of Solier. For the characters of the genus refer to the Hist. Nat. des Insectes par Audouin et Brulle, vid. vol. 2. p. 276.

Sp. 17. Erythrocephalus.—Described originally from Lund's Cabinet; no locality is given, although it is most likely to be an European species of the genus Hydrobius. Erichson thinks it is only a dark variety of Hydrobius griseus, vide p. 211. Die Käfer der Mark Brandenburg.

Sp. 18. Hæmorrhoidalis.— Now a Cercyon of Dr. Leach. Mr. Stephens has described in his Illustrations of British Entomology sixty-one species; the Baron De Jean mentions in his last Catalogue but twenty, including exotics of the Old and New World. This may be taken as an example that the Entomologists of England are not behind their Continental neighbours in research or assiduity.

Sp. 27. Minutus.—Now an Hydrobius, and probably only a variety of Hyd. bipunctatus.

Sp. 30. Truncatellus.— Now a Limnebius of Leach. Apparently the Chrysomela minuta Linn. described in the Fauna Suecica, is a Limnebius.

Mr. Stephens thinks the Limniidæ ought to rank as a family. The British species are ten in number, and seem widely spread throughout Europe. Monsieur Brulle mentions their occurrence also in Asia Minor.

Dyticus, Fabricius.
Dyticidæ, Leach.
Dyticoidea, Hope.

Sp. 1. Latissimus.—The type of the genus Dyticus. Linneus in his Systema Naturæ, including under one head the Dyticidæ and Hydrophilidæ, records only twenty-three species, whereas, at present, in true Dyticus alone, we have nearly the same number. The genus, according to the Baron De Jean's Catalogue, appears to be confined to the northern regions of the Old and New World; it occurs however in Africa, and on the confines of Asia, and may be expected to occur in the Himalaya generally.

Sp. 2. Limbatus.—Now a Cybister of Curtis. Dr. Leach gave the name of Trogus to these species of Aquatic Beetles, a name which had previously been applied to some of the Hymenoptera. (Vid. Panz. Krit. Rev. 2. 80.) it is therefore abandoned. Dr. Eschscholtz has since applied to it that of Tro-

chalus. Of the two latter authors, the claim of priority is with Mr. Curtis, and his name should be retained, as that of Dr. Leach cannot be sustained. The species of Cybister are more numerous than those of true Dyticus; they are generally robust, and are the most powerful insects of the Aquatic Adephaga; the destruction they cause among the tropical fishes, as described to me by Indian travellers, is wonderful; they are reported to destroy ten times the quantity they can possibly consume, and may justly be considered amongst the most ravenous of insects.

- Sp. 3. Marginalis.—Of this species of Dyticus I have seen three remarkable monstrosities; the first was deprived of its anterior tibiæ and tarsi, and had only the rudiments of legs; a second specimen had three anterior right legs. The third monstrosity, is an Hermaphrodite, which I captured at Netley in Shropshire; it has lately been figured by Mr. Westwood, and will probably be published in a future number of the Entomological Transactions.
- Sp. 8. Atratus.—Probably a Cybister. It was captured by Billiardiere, at some of the islands of the Pacific Ocean.
 - Sp. 9. Costalis.—This species is sometimes dread-

fully afflicted wih Acariasis. A specimen formerly in my possession, was covered with hundreds of an Acarus unknown to me.

Sp. 13. Ruficollis.—From the specimen in the Banksian Collection, I am inclined to consider this species an Hydaticus. Luconicus of Dr. Eschscholtz is closely allied to it, if not the self-same species.

Sp. 16. Striatus.—The typical species of Colymbetes, according to Clairville. The name of Cymatopterus has been given to it by Dr. Eschscholtz; the former should be retained on the ground of priority.

Sp. 18. Lanio.—Now of the genus Meladema Laporte. For the generic characters, consult les Etudes Entomologiques, Liv. 2. p. 98. Dr. Eschscholtz has used the term of Scutopterus for the same sub-genus.

Sp. 19. Cicur.—This species was erroneously introduced into our British Fauna by an optician who received collections from the Cape of Good Hope. As it closely resembles Col. striatus, it probably may have been taken for an English insect.

Sp. 20. Vittatus.—Now a Graphoderus of Esch-scholtz. For the generic characters, vide Die

Kafer der Mark Brandenburg, by Erichson, vol. 1. page 142. The genus Hydaticus, has very properly been divided into three sections.

Sp. 25. Griseus.—Type of the genus Eunectes of Erichson, which has also been named Nogrus by Eschscholtz.

Sp. 26. 10-punctatus.—Still a Colymbetes. I have lately received five other species from New Holland, which will appear in my forthcoming Fauna Australasiæ.

Sp. 29. Bipustulatus.—Now the type of my genus Necticus, from νηκτικος natabilis qui natare potest. I have here been compelled to change Erichson's generic name, as I consider Striatus the true type of Colymbetes, and Serricornis that of Agabus of Leach. As both these terms are previously used, it may prevent further confusion by adopting another name. It appears also that the Baron De Jean and Erichson apply their respective generic names to the same species. It may here be added, that Necticus still requires further sub-division—till we are better acquainted, however, with the sexes of several of them, the above name is attached to those species which are allied to Dyt. 2-pustulatus Lin. and Dyt. Carbonarius Fab.

Sp. 30. Cinctus.—I give this as a Colymbetes,

with a doubt, being unable to obtain any information concerning it. Fabricius described it from Manduit's Collection; as to what became of that collection, I am equally ignorant.

Sp. 30. Ater.—Now an Ilybius of Erichson, and the type of the genus, all the species belonging to it are remarkable for their convexity.

Sp. 36. Nitidus.—A Necticus mihi, and is probably the same insect met with in German collections, under the name of Col. Nitens, which I regard only as a dark variety of Col. Sturmii.

Sp. 48. Varius.—Probably a Necticus of Hope. Mr. MacLeay informs us in the Annulosa Javanica, that Fabricius in his Ent. Syst., described an insect which he found in the Banksian Cabinet under the name of D. varius. With it, he afterwards confounded a Sumatran species which he saw in Daldorff's Collection, and then he altered the original specific character to suit the new insect. The name Varius, therefore, Mr. MacLeay has changed to that of Fabricii.

Sp. 49. Interrogatus.—Now of the genus Coptotomus of Say. The characters will be found in Say's description of new species of North American Insects, page 29, and also in vol. 2. of the Hist. Nat. des Insectes par Audouin and Brulle, p. 211.

Sp. 52. Hæmorrhoidalis.—Probably a Rantus of Eschscholtz. This opinion seems confirmed by Erichson, who regards the above species only as a variety of Rantus agilis.

Sp. 53. Bicolor.—I am inclined to regard this insect as a species of Colymbetes: it was originally described from Isert's Cabinet. Its locality is Guinea.

Sp. 54. Posticatus.—Now of the genus Copelatus of Erichson. These insects have the elytra deeply striated, which at once marks the character of the above genus. The major part of the species are peculiar to the New World; some, however, are from the Old Continent, inhabiting Asia as well as Africa.

Sp. 61. *Bicipes*.—Evidently a typographical error, it should have been printed Picipes.

Sp. 63. Signatus.—This insect is closely allied to Dyticus agilis of Fabricius, which is now a Rantus of Eschscholtz.

Sp. 65. 8-pustulatus.—Schonherr in his Synonymia Insectorum, places this insect under his doubtful species. From the description of Fabricius, I regard it as an Hydroporus.

Sp. 68. Confluens.—Now an Hygrotus of Stephens. Vide Illustrations of Entomology for the generic details. The type of the genus is Hyd. flaviatilis Leach.

Sp. 72. Semipunctatus.—Now a Noterus of Clairville. Erichson regards Noterus sparsus of Marsham as the same insect; the locality of the East Indies, therefore, is changed to Europe.

Sp. 74. Arcuatus.—This species is only a variety of Hygrotus pictus.

Sp. 79. *Pygmæus*.—According to Erichson this insect is only a variety of Hyd. lineatus. Vid. Kafer Brand. page 79.

Sp. 85. Pusillus.—This insect is evidently only a variety of Hydroporus geminus.

Sp. 86. Parvulus.—Now an Hygrotus of Stephens, which, according to Erichson, is only a variety of Dyt. inæqualis, Fab.

GYRINIDÆ, Leach.
GYRONECHA, Kirby.
GYRINOIDEA, Hope.

Most Entomologists consider that Gyrinus is closely allied to Dyticus, and yet it is difficult satisfactorily to point out the connecting link between them. Mr. W. Sharpe MacLeay, in his Annulosa Javanica, without attempting to sub-divide the Hydradephaga into its several families, gives us

only two, which are the Gyrinidæ and Dyticidæ. Mr. Kirby, also in the Fauna Boreali Americana, adopts this twofold arrangement, and applies to them the terms of Eunecha and Gyronecha. Differing from such high authorities, I am inclined to consider the Gyrinidæ as a totally distinct group which I name Gyrinoidea. It may be regarded as an intermediate family, connecting as it does, according to my views, the Dyticoidea and Hydrophiloidea. The larva of true Gyrinus in appearance resembles a Scolopendra. It is carnivorous, and is therefore allied to Dyticus; the connection with the Hydrophilidæ, however, is not so apparent. I think it is not improbable that the larvæ of Dineutus MacLeay, will eventually be found to approach in form the larvæ of the spine-winged species of Hydrous. In the metallic splendour of some of the individuals of both genera, in the armature of the wings, in the partially carnivorous habits of Hydrous, and the silkiness of the coccoons, the Gyrinidæ will be found evidently more allied to the Hydrophilidæ, than the Dyticidæ. At present, I believe, among the genera composing the latter family, not a single species has yet been found which has spined wings, should such occur, it will most probably be the connecting link so much

desired. The passage from the Hydradephaga to the Philhydrida has been pointed out by Mr. Stephens, by means of the sub-aquatic families of Heterocerus and Parnus. Would it not be a more natural arrangement to keep together all the true Aquatics, as Linneus did at first, and then pass to the terrestrial groups, by families which may justly be considered amphibious in their habits? At present we are imperfectly acquainted with these groups, and know little of their larvæ, and until that period arrives, the natural distribution of these families must still remain in doubt and confusion. The following table is an outline of the genera composing the Gyrinidæ.

Gyrinus, Linneus.
Gyrinidæ, Leach.
Gyrinoidea, Hope.

	`	10
Genera.	Country.	Typical Species.
1. Gyrinus, Linneus	England	G. Natator, Linn.
2. $\begin{cases} \text{Enhydrus, } \textit{Laporte} \\ \text{Cyclinus, } \textit{Kirby} \\ \text{Cyclous, } \textit{Eschscholtz} \end{cases}$	N. America	G. Australis, Fab.
3. Porrorhynchus, Lap.	Java	P. Marginatus, Laporte.
4. Dineutes, MacLeay	East Indies	D. Politus, MacLeay.
5. Gyretes, Brulle Cybister, Esch.	East Indies	G. Æneus, Brulle.
Potamobius, Leach	England	Pot. Modeerii, Marsham.
6. Potamobius, Leach Orectocheilus, Mul.	England	G. Villosus, Fab.

Sp. 1. Natator.—The type of the Linnean Gyrinus. For the anatomy of these singular insects, the reader should consult Dufour's Memoire in the Annales Scien. Natur. 1824. A reference also to Mr. Westwood's new publication, the Modern Classification of Insects, part 2. p. 105, will afford a list of authors who have written on this group, and to them may be added the Fauna Boreali Americana, by Mr. Kirby, wherein some new species will be found described.

Sp. 2. Bicolor.—The species named by Fabricius is certainly not the same as G. Bicolor Olivier, as the latter is a variety of Gyr. Minutus, while Elongatus of Marsham is a synonym of the former.

Sp. 6. Premorsus.—Probably a Dineutus of Mac-Leay. The locality given in the Eleutheratorum is Sierra Leone. Is it not singular, that under the above name, Gyrinus Indus, should be found quoted as a synonym? (Vid. Ent. Syst. Supp. 65. 5.) There is evidently some mistake respecting the country. The species of this genus belong to southern and tropical countries, never being found in northern climes as far as is known at present.

Sp. 10. Minutus.—Still a Gyrinus. Mr. Kirby, in his Fauna Boreali Americana, tells us that a single specimen was taken in the northern expedi-

tion by Dr. Richardson, in latitude 65°. I have received it from Algiers, and have it noted down in my Journal as occurring also in Egypt.

Sp. 12. Strigosus.—Probably a Gyrinus. The Baron De Jean, in his Catalogue of 1837, gives this species as a variety of G. Striatus Fab. The locality of the latter is Europe, of the former New Holland; there is, therefore, evidently some error.

Sp. 14. Villosus.—Now a Potamobius of Leach. Most of the Gyrini, when recently captured, emit a very disagreeable odour; this species is scentless; it moreover differs from all others in being a solitary insect, while the rest are social or gregarious. It is reported to be a nocturnal insect, which may probably account for its comparative scarceness.

REMARKS.

Linneus only mentions two species of the family, Fabricius fourteen, De Jean sixty-seven, in my own cabinet there are twenty nondescripts; the number, therefore, in the different European collections, may be reckoned at about one hundred species, and this will eventually be considerably increased as we become acquainted with the extra European species, which at present are in propor-

tion of ten to one, and from what is already known, we may conclude that their metropolis is in the tropical regions.

Elophorus, Fabricius.

Helophoridæ, MacLeay.

Helophoridea, Leach.

Mr. Westwood, in his late work, makes Spercheus the connecting link between the Helophoridæ and Hydrophilidæ. In its form and structure of the legs it certainly accords with the former; in habits, however, I regard it as an Hydrophilus, and certainly it is more of an aquatic than any of the genera composing the

HELOPHORIDÆ.

Genera.	Country.	Typical Species.
 Helophorus, Leach Hydrochus, Germar Enicocerus, Stephens Ochthebius, Leach Amphibolus, Water. Hydræna, Kugellan Empleurus, Hope 	England France England England England England England England	Silp. Aquatica, Linneus. Elop. elongatus, Fab. Eni. Viridiæneus, Stephens. El. Pygmæus, Fab. Am. Atricapillus, Water. El. minimus, Fab. El. Nubilus, Fab.

1. Helophorus, Leach.

Fabricius originally constituted this genus, giving it the name of Elophorus. Dr. Leach very properly changed it to Helophorus; there are about twelve known species, the major part of them inhabiting Europe. As they are minute insects, they have generally been neglected, few being recorded as inhabiting either Asia or Africa, and none, I believe, as belonging to the New World.

Hydrochus, Germar.

A genus peculiarly attached to northern climes. It occurs in the north of Europe and America, and does not extend, I believe, more southward than Spain; a great proportion of the species of the remaining four genera appear more abundant in the northern than southern states of Europe.

Species of Helophorus, Leach.

- Sr. 1. Aquaticus.—As two species have been confounded under the same name, the former takes the name of Grandis, the latter that of Aquaticus.
 - Sp. 2. Nubilus.—The type of my genus Empleu-

rus; Elophorus may properly be divided into two sub-genera: those with striate elytra, and those which have the wings deeply sulcated or porcate. Nubilus is often found at the roots and stalks of cabbages; the water held in the leaves of the plants being quite sufficient to saturate the ground around and satisfy the insects. I have watched the same insects for eight or nine weeks at the same plant, and never knew their numbers during that time increased or diminished. It should be remarked that no water was within a hundred yards, and the nearest was a well many feet beneath the surface of the earth. To this genus belong also El. fennicus Gyll. and probably sulcatus of Dahl and Costatus of Schonherr.

- Sp. 4. *Humeralis*.—This insect is not mentioned by any modern writers. I give it as an Helophorus, with a doubt.
- Sp. 5. Flavipes.—This insect is the same as the Bup. granularis Linn. The Fabrician name of flavipes must therefore be abandoned.
- Sp. 6. Crenatus.—Mr. Stephens gives this insect as an Hydrochus. Mr. Erichson, however, having examined the Fabrician Cabinet, declares it to be Latridius porcatus.

Parnus, Fabricius.

Parnidæ, MacLeay.

Parnidea, Leach.

This family is composed of but three genera, viz. Parnus, Dryops, and Potamophilus.

Genera.	Country.	Typical Species.
 Parnus, Fab. Dryops, Leach 	England France	P. Prolifecornis, Fab. P. Dumerilii, Lat.
3. $\begin{cases} \text{Potamophilus, } Germar \\ \text{Hydera, } Latreille \end{cases}$	Germany	P. Acuminatus, Fab.

PARNUS, Fab.

There are six, if not seven, British species in our Metropolitan Cabinets: the genus is common to the Old and New World. Lacordaire informs us of several South American species. It occurs also in the United States, as well as in the West Indian Isles.

DRYOPS, Leach.

This genus will be found characterized in the third volume of Dr. Leach's Miscellany. Dry. Hardwickii appears the type of another genus. The remaining genus Potamophilus has eleven joints in the antennæ: it is peculiar to Europe. The Baron De Jean has mentioned one in his Catalogue, under the name of Orientalis, which is most likely a Dryops of Leach. Mr. MacLeay remarks in the Annulosa Javanica, that Potamophilus leads off to Ochthebius and the Helophoridæ. Omitting any observations on the species, I pass to the family of

(Heterocerus, Bosc.)
Heteroceridæ, MacLeay.

From the family of Parnus, the approach to the Heteroceridæ is by Mr. Stephens' family Limniidæ; indeed, it cannot be denied that the Parnidæ and Heteroceridæ are intimately connected; till, however, we are better acquainted with some of these minor groups, it is mere idle speculation attempting to connect genera, when we have scarcely any matter before us to support even conjecture. There are seven known British species; the true Heteroceri appear to belong to the northern regions of the Old and New World; Het. Dubius is an exception; it is an East Indian species described by Fabricius, and probably is the type of a sub-genus. As we have but slightly alluded to the genera composing the Limniidæ, I add the table before proceeding to other groups.

LIMNIIDÆ,	Stephens.
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Genera.	Country.	Typical Species.
1. Georyssus, Lat. Cathammistes, Illiger	England Sweden	Pim. Pygmæa, Fab.
2. Elmis, Latreille	England	E. maugetii, Latreille.
Stenelmis, Dufour	France	El.Parallelepipedus, Illiger.
3. Stenelmis, Dufour Limneus, Stephens	,	

Sphæridium, Fab.

Sphæridiidæ, Leach.

The transition from the Hydrophilidæ to this family by the genus Chætarthria is easy, and should another connecting link be required, we may pass by means of those species of Cercyon which are subaquatic in their habits. The insects of this group abound in animal stercor and putrescent vegetable matter. They occur in the Old and New Continents, the major part of them preferring northern regions. In tropical climates they are considered very useful auxiliaries to the Coprophagus lamellicorns, materially conducing to purify the air by feeding on putrescence, and thereby preventing miasma. I know of no species more abundant in individuals than Sp. Scarabæoides. At Aldboro' on the Suffolk coast, at the departure of the tide, I have repeatedly

seen them among the rejectamenta maris in countless numbers.

Sphæridiidæ, Hope.

Genera.	Country.	Typical Species.
1. Sphæridium, Fabricius	Europe	S. Scarabæoides, Fabricius.
2. Cercyon, Leach	England	S. Quisquilius, Linneus.
$3. \left\{ egin{array}{l} ext{Cyclonotum, } Erichson \\ ext{Cælostoma, } Brulle \end{array} ight.$	England	C. Orbiculare, Fabricius.
4. Trichopoda, Brulle	Madagascar	T. Cassidæformis, Brulle.

SPHÆRIDIUM.

Sp. 6. Abdominale.—Now a Cyclonotum of Erichson. The Baron De Jean, in his last Catalogue, gives the above generic name; the characters of the genus will be found in the Hist. Nat. des Insectes, par Audouin & Brulle; the latter writers make use of the term Cælostoma, which has previously been used by Mr. MacLeay, and must therefore be abandoned.

Sp. 13 to 18.—All these insects are mentioned by Fabricius as inhabiting South America. They were originally described from the cabinets of Sehestedt and Lund, now forming part of the Copenhagen collection, from which quarter we still hope for further information respecting them, as well as many other imperfectly known species.

Sp. 18. Atomanum.—An error of the press; read Atomarium.

Sp. 25. Limbatum. — Now an Hydrobius, and probably the same species as Hyd. globulus of Paykull.

Sp. 28 & 29.—Both these species are described from the Cabinet of Dom. Smidt; the former is probably a Cercyon of Dr. Leach, the latter probably a Phalacrus.

Sp. 32. Wintheriæ. — No locality is given by Fabricius to this species; it is described from Lund's Cabinet, and so concisely that it is impossible to form an idea to what genus it ought to be applied.

Anisotomidæ, Stephens. Agathididæ, Westwood.

Fabricius in his Eleutheratorum very properly placed his genus Anisotoma next to Sphæridium. Mr. Stephens in his Illustrations passes from the Sphæridiidæ by Tritoma; the latter genus has been formed into a distinct family by Mr. Curtis. I am inclined at present, however, to follow the arrangement of Mr. Stephens, as it appears to me more natural. These groups evidently require a more thorough investigation. The chief cause of

the confusion has originated in consequence of Entomologists attending too rigidly to the tarsal system: a better classification can only be satisfactorily attempted when the larvæ of the different genera are more accurately known.

Anisotomidæ, Stephens.

Genera.	Country.	Typical Species.
1. Tritoma, Fabricius	Europe	T. Bipustulatum, Fabricius
2. Alexia, Stephens	England	T. Pilifera, Mull.
3. Phalacrus, Paykull	Sweden	Ph. Coruscus, Paykull.
4. Ephistemus, Westwood.	England	Der. Gyrinoides, Marsham
* '	Denmark	Anis. ferruginea, Fab.
5. Anisotoma, Fabricius Leiodes, Latreille		
	England	Silpha seminulum, Linn.
6. Agathidium, Illiger Volvoxis, Kugellan		
- 1	Sweden	Der. Armadillo, De Geer.
7. { Clambus, Fischer Ptilium, Schuppell		
8. Corylophus, Leach Clypeaster, Anderson	England	Der. Cassidoides, Marsh.
9. Orthoperus, Stephens	England	Der. Punctum, Marsh.
10. Sericoderus, Stephens	England	Scap. dubium, Marsh.

Anisotoma, Fabricius.

Sp. 1. Ferruginea.—I retain the Fabrician name of Anisotoma in the place of Leiodes; and instead of changing the family name to Agathidiidæ, as Mr. Westwood has done, I prefer that of Anisotomidæ. True Anisotoma seems attached to northern regions; it occurs in the New as well as in the

Old World. I am not aware of its appearance in Africa; some few East Indian species have fallen under my notice, they deviate however from the typical species.

Sp. 3. Bicolor.—Now a Phalacrus of Paykull. Of the known European and extra European species, the numbers are nearly equal; they are met with in North America and its adjacent isles, and in Africa, the island of Mauritius, and most likely in various parts of Asia; although I cannot state any recorded species from the latter locality.

Sp. 4 & 5.—Belong at present to Illiger's genus Agathidium. All the known species appear to inhabit Europe.

DESCRIPTIONS

OF THE

NEW GENERA AND SPECIES.

1. Manticora, Fabr.

Sp. Latipennis, Waterhouse.—Inhabits Kurrechan in Africa. Long. lin. 21½. lat. lin. 10.

Atra, elytris subcordatis, latis, scabris.

Upon comparing M. Latipennis with Maxillosa the following differences may be observed. In the former the head is larger, exceeding that of the latter nearly one line in length, and about half a line in breadth. It is also more sparingly punctured on the upper parts, and so is likewise the thorax. The elytra are much broader (having the proportion of ten to eight), less convex, the lateral margins are more distinctly recurved, and the minute pointed tubercles (which are observed on the elytra of both species) are not quite so distinct, nor do they extend so far inwards as in M. maxillosa. The disc of the elytra is smooth, rather glossy, and has a pitchy hue. Vid. Mag. of Nat. Hist. new series, vol. i. 1837. The only re-

mark I have to make on the above species, is to change the name of M. Latipennis to that of Waterhouse, who first made us acquainted with the insect. It is one of the grandest discoveries of late years, and may justly be placed at the head of the Cicindeloidea. This magnificent insect was captured by the African traveller, Dr. Smith, at Kurrechan, and presented by him to the Zoological Society.

2. APTEROESSA, Hope.

Type of the Genus, Cicindela Grossa, Fab.

Corpus magnum, apterum, Antennæ sicut in Cicindela. Mandibulæ cultriformes margine interno dente lato striato basali, duobus proximis minutis, altero robustiore.

Palpi maxillares longitudine labialibus æquales 1^{mo} minimo, 2^{do} quadruplo longiori, 3^{tio} sequente minori, extimo oblongo-ovato apice truncato.

Mentum lobis duobus interne acute productis dente acuto in medio emarginaturæ.

Labrum breve, medio in spinam parvam producto dentibus duobus utrinq. armatis, angulis lateralibus acutis.

Thorax capite latior, latitudini elytrorum fere æqualis.

Corpus grossum apterum elytris convexis et acuminatis. Pedes fere æquales.

This genus differs from Dromica, particularly in its general form. The mandibles of Dromica also have the first two teeth very prominent, and considerably more robust than in Eurymorpha; the next two teeth are nearly of the same proportion, differing again from Eurymorpha, which has the third tooth more developed than the first two. The Fabrician locality of Coromandel is correct.

3. Eurymorpha, Hope.

Corpus apterum metallicum nitidum elytris valde dilatatis. Caput ante oculus contractum postice dilatatum et thoracis latitudinem vix superans. Mandibulæ capite longiores acutissimæ dente basali majori latiori — 2^{do} minuto, duobus aliis majoribus æqualibus. Palpi maxillares labialibus haud æquales. Mentum bilobum dente in medio emarginaturæ acuto. Labrum breve angulis anticis rotundatis dentibus ternis minutis centralibus armatum.

Type of the genus, Eur. Cyanipes, Hope.

Eur. viridis, subnitidus, capite thoraceque albidopilosis, elytris immaculatis, labro pedibusque cyaneis. Long. corp. lin. 7. Lat. Elytr. lin. $3\frac{1}{2}$.

Caput obscure-viride, sericeo-punctulatum pilis longis obsitum. Labrum nitide cyaneum. Mandibulænigræ. Antennæ articulis basalibus albo-pilosis Palpi viridi-nigri albo pilosi. Thorax transversus, lateribus parallelis angulis posticis truncatis, sericeo-punctulatus, albo pilosus. Pedes cyanei albo pilosi. Elytra viridia subnitida, dilatata, submarginata, ad humeros impressa sub lente punctis minutissimis distantibus, serieque punctorum majorum in lineam, versus suturam, ornatis.

The locality of this insect is unknown; I suspect that originally it was brought from Madagascar. It is now deposited in the collection of the Zoological Society.

4. OXYCHEILA BISIGNATA, Guérin.

Subviolacea elytris maculâ magnâ rubrâ in medio elytrorum ornatis. Caput violaceum oculis testaceis. Thorax bilobus. Elytra (maculâ inæquali rubrâ ad suturam, at ad margines haud extensa,) parallela ad apicem, rotundata et nigro-violacea. Corpus subtus nigrum pedibus concoloribus. Habitat in agro Surinamensi.

It is probable that this species may be the Oxy. binotata of Laporte. He seems to have considered his O. binotata the same as that described by Gray in Griffith's Animal Kingdom, which is certainly distinct. Mons. Guérin has cleared up the synonymy of the species in the Dictionn. Pittoresq. d'Hist. Nat. tom. 6. p. 572, and has proposed for Mons. Laporte's species the name employed above.

5. CALOCHROA, Hope.

C. Crucigera. Long lin. $10\frac{1}{2}$, lat. lin. $3\frac{1}{4}$.

Nigro-violacea elytris tribus fasciis, duobus primis interruptis tertia apicali, Caput læte violaceum inter oculos rugosostriatum. Mandibulæ nigræ ad basin flavescentes. Palpi maxillares nigri. Thorax rugosus atroviolaceus. Elytra fere glabra sub lente punctata, cruce aurantia interrupta in medio disco elytrorum notata, apicibus concoloribus. Corpus infra purpureo-atrum, pedibus violaceis.

Habitat in India Orientali, Madras.

This superb insect was brought to England from the Nilgherry Mountains; it is allied to C. Princeps of Vigors, and Lepida of Gory; there are two other species in my collection from the same locality, which I name Erichsoni and Lichtenstenii, in honour of Zoologists well appreciated in England for their devotion to science. Short Latin characters of the sub-genus, will be found at p. 19, under the name of Calochroa.

6. PACHYMORPHA ORIENTALIS, Hope.

Long. lin. $14\frac{1}{2}$, Lat. lin. elyt. 5.

Affinis 6 guttatæ Fab. Aptera, atra, thorace, 2-maculato subdepresso, elytris parum convexis depressiusculis, quatuor albis rotundatis maculis notata.

Habitat circa Poonah in India Orientali.

It may be remarked that this species seems peculiar to the western side of India, in the vicinity of Bombay. One specimen from the Himalaya, I received from Dr. Royle. Pach. 6-guttata Fab. is a gigantic insect, and is in every way a more robust species; the elytra are very convex, the markings on the wings are also considerably larger.

7. PLOCHIONUS BONSFILII.

As I am unacquainted with a satisfactory figure of Plochionus, I have thought fit to delineate it

anew with its anatomical details; for the description of species, vid. Syst. Eleuth. Fab. under C. Pallens.

In the Banksian Cabinet this insect is labelled as Carabus pallens. Vid. also Schon. Synonym in loc.

8. Platysma striatulus, Fab.

This insect, which is apparently unknown to Continental writers, I have thought worthy of figuring. For the description of the species, Vid. Sys. Eleuth. p. 179. sp. 48.

The locality of the species is Patagonia; some other allied species have been brought to this country from the same regions by Mr. Charles Darwin, of Shrewsbury.

9. Catascopus Whithillii.

Long lin. $8\frac{1}{2}$, lat. lin. $2\frac{3}{4}$.

Corpus supra purpureum nitidum subtus nigro violaceum. Frons subcaniculatus. Elytra purpurea sulcata, interstitiis fortissime punctatis. Pedes femoribus violaceis, tibiis tarsisq. piceis et tomentosis.

Obs. This magnificent insect is named in honour of Col. Whithill, who brought it with him from Darpouillie, along with other undescribed species of the same genus.

10. Craspedophorus,* Hope.

Type of the genus, Cychrus reflexus, Fab.

Caput utrinque impressum. Thorax rotundatus antice et postice truncatus, depressus, subconcavus lateralibus marginibus latis reflexis.

Elytra striato-punctata octo striis in singulo, apicibus sinuatis.

This species deviates from the true Panagæi, which have the thorax invariably convex. One species from New Holland seems to unite the two genera. For a description of the species consult Fab. Eleut. page 166. n. 3. Its true locality is Coromandel and not Europe. I possess in my cabinet another species of Panagæus, named reflexus by Fabricius, which was originally in Lee's collection. For the latter I propose the name of Fabricii, instead of reflexus.

^{*} From κρασπεδον and φορεω.

11. Macrocheilus, Kirby.

Type of the genus, M. Bensoni.

Long. lin. 6. lat. lin. $2\frac{1}{2}$.

Ater, caput nigrum, fronte aurantio, antennæ & articulis longioribus apice dilatatis. Thorax cordiformis. Elytra abbreviata sulcata pubescentia, quatuor maculis signata, pedibus rubropiceis.

Inhabits Madras.

The above insect was originally described from Mr. Kirby's Cabinet; in his MSS. he has given it the name of Macrocheilus Bensoni, which I retain. In form it appears intermediate between Planetes of MacLeay, and Omphra of Leach; the type of the former is Pl. Bimaculatus MacLeay, of the latter, Galerita hirta Fab.

12. Hyderodes, Hope.

Type of the genus, Hyd. Shuckardi, Hope.

Corpus breve ovatum thorace postice fere elytrorum latitudine. Palpi breves, labiales maxillarium fere longitudine. Elytra feminæ simplicia. Pedes \mathfrak{P} simplices; antici haud ciliati (\mathfrak{F} \mathfrak{P}) Tarsi antici masculi articulis tribus basalibus in palmam

rotundatam dilatatis, subtus vesiculis perpaucis instructam; intermedii articulis tribus basalibus in palmam oblongo-ovalem formatis. Tarsi postici q subtus haud ciliati; aliter mari similes: unguibus duobus (in utroque sexu similibus) instructi.

Long corp. lin. 9. Lat. lin. 5.

Niger, nitidus, antennis tibiis tarsisque piceis, thoracis marginibus lateralibus rufo-piceis. thorace lineâ punctorum impressorum ad marginem anticum, punctisque nonnullis lineam parvam obliquam utrinque versus marginem posticum formantibus; elytris subtiliter punctulatis, margine laterali lineisque tribus longitudinalibus punctatis. Habitat in Novâ Hollandia.

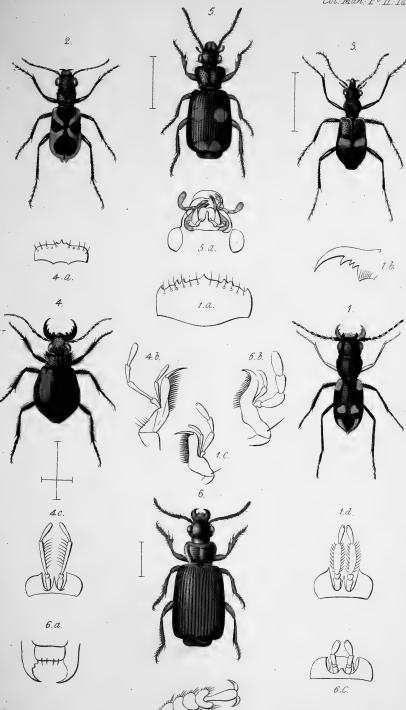
The above insect is named in honour of Mr. Shuckhard, the author of a valuable publication on the indigenous Fossorial Hymenoptera of Great Britain.

13. GLOBARIA, Latreille.

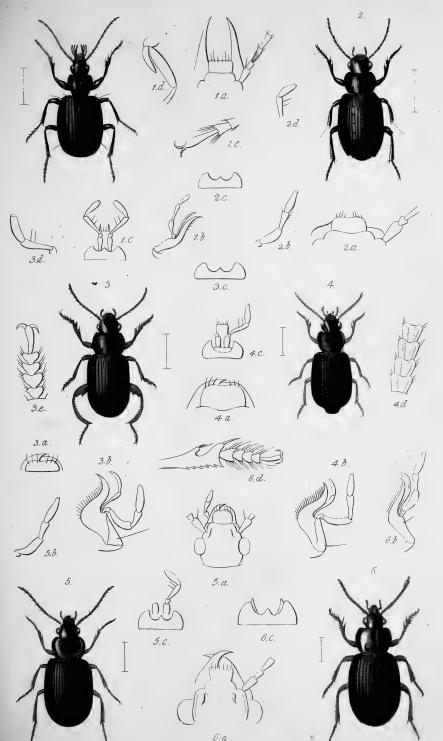
The typical species of this genus is Globaria Leachii of Latreille. As it has not been previously figured, it is here added with its anatomical details. The Globaria nitida of Guérin is not congenerous, or else is very incorrectly figured. The genus Volvulus is identical with Globaria. Its typical species V. inflatus is longer in proportion. The locality of G. Leachii is the East Indies, while the latter is from the Mauritius. The names of Volvulus and Globaria ought to be changed, in their place I suggest the adoption of Spheroides, from the Greek $\sigma\phi\alpha\iota\rhoo\epsilon\iota\delta\eta s$ sphere similis.

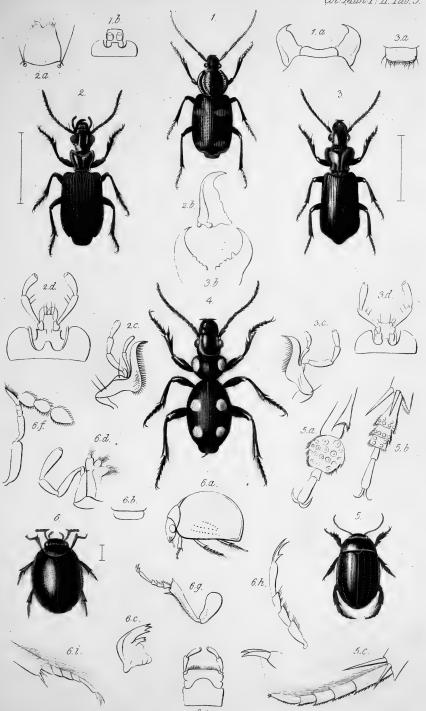
FINIS.

G. NORMAN, PRINTER, MAIDEN LANE, COVENT GARDEN.

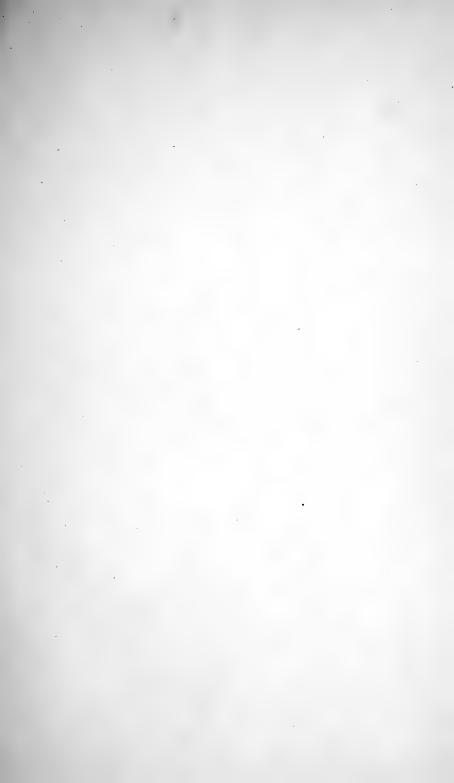




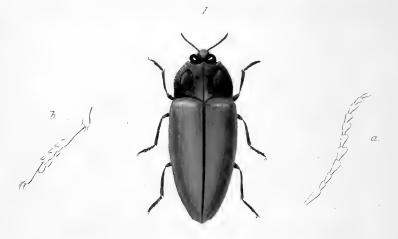








Caledoma Gery



Cul Kirkii Hope Hill in Australia

COLEOPTERIST'S MANUAL,

PART THE THIRD,

CONTAINING VARIOUS

FAMILIES, GENERA, AND SPECIES,

OF

BEETLES,

RECORDED BY LINNEUS AND FABRICIUS.

ALSO,

DESCRIPTIONS

OI

NEWLY DISCOVERED AND UNPUBLISHED INSECTS.

BY THE

REV. F. W. HOPE, M.A. F.R.S. F.Z.S.

ETC. ETC. ETC.

LONDON:

J. C. BRIDGEWATER, SOUTH MOLTON STREET; AND BOWDERY AND KERBY, OXFORD STREET.

MDCCCXL.



DESCRIPTION OF THE PLATES.

PLATE 1 .- FRONTISPIECE.

Fig. 1.—Calodema Kirbii, Hope. a, antennæ; b, tarsus.

PLATE 2.

- Fig. 1.—Estigmena chinensis, Hope. 1 a, underside of head, with the basal joint of the antennæ; 1 b, labrum; 1 c, mandible; 1 d, maxilla; 1 e, mentum labium, and labial palpi.
- Fig. 2.—Prioptera 8-punctata, Fab. 2 a, labrum; 2 b, mandible; 2 c, mentum, labium, and labial palpi [2 d, in the middle of the plate antenna]; 2 e, maxilla.
- Fig. 3.—Agasta formosa, Hope. 3 a, antenna; 3 b. labrum; 3 c, mandible; 3 d, maxilla; 3 e, mentum labium, and labial palpus; 3 f, posterior tarsus.
- Fig. 4.—Pæcilomorpha Passerinii, Hope. 4 a, antennæ; 4 b, labrum; 4 c, mandible; 4 d, maxilla; 4 e, mentum labium and labial palpi.
- Fig. 5.—Ametalla Spinolæ, *Hope*. 5 a, labrum; 5 b, mandible; 5 c, maxilla; 5 d, mentum labium, and labial palpus.
- Fig. 6.—Mecynodera picta, *Hope*. 6 a, labrum; 6 b, mandible; 6 c, mentum labium, and labial palpus; 6 d, maxilla.

PLATE 3.

- Fig. 1.—Calaspidea grossa, Fab. 1 a, ditto seen sideways; 1 b, antennæ; 1 c, labrum; 1 d, mandible; 1 e, maxilla; 1 f, labium, and labial palpi.
- Fig. 2.—Oxynodera variegata, Fab. 2 a, ditto seen sideways; 2 b, antennæ; 2 c, labrum; 2 d, mandible; 2 e, maxilla; 2 f, mentum labium, and labial palpus.
- Fig. 3.—Chiroscelis digitata, Fab. 3 a, underside of the head; 3 b, labrum; 3 c, mandible; 3 d, maxilla; 3 e, mentum labium, and labial palpi; 3 f, fore-leg; 3 g, extremity of hind tibia and tarsus; 3 h, underside of the abdomen of one sex; 3 i, front of thorax of the same individual; 3 k, underside of abdomen of the other sex; 3 l, front of thorax of the latter individuals.
- Fig. 4.—Helota Servillei, Hope. 4 a, underside of head; 4 b, labrum [in the middle of the plate]; 4 c, mandible; 4 d, [b, at the side of the insect] maxilla; 4 c, mentum labium, and labial palpus; 4 f, posterior tarsus.
- Fig. 5.—Thoracophorus Walckenærii, Hope. 5 a, underside of the head; 5 b, labrum; 5 c, mandible; 5 d, maxilla; 5 e, mentum labium, and labial palpus.
- Fig. 6.—Macromelea Wiedemanni, Hope, 6 a, labrum; 6 b, mandible; 6 c, maxilla; 6 d, mentum labium, and labial palpus; 6 e, antennæ; 6 f, anterior tibia and tarsus.



ERRATA.

PAGE.

- 1. Sp. 23-dele Herbst.
- Sp. 25-Melegethes read Meligethes.
- 3. Sp. 9-Aspidimorpha read Aspidomorpha, and elsewhere.
- 35. LINE 26—respecting families; before families, insert the.
- 44. Sp. 83-Iatalicus read Italicus.
- 54. Sp. 31, Line 2-Lattreille read Latreille.
- 71. Sp. 21-Orenata read crenata.
- 75. Sp. 31-Amarigmus read Amarygmus.
- 78. Sp. 45-Neydalis read Necydalis.
- 80. Sp. 20-Timertarius read Fimeterius.
- 96. Sp. 124-Aducta read areata. Vid. p. 167. lin. 14.
- 97. Sp. 6-Phylocharis read Phyllocharis.
- 98. Sp. 28 & 30-Orsadacna read Orsodacna.
- 99. Sp. 60 & 62-Orsadaena read Orsodaena.
- 101. Sp. 8-Trenquebarica read Tranquebarica.
- 107. LINE 3-Cheloniarum read Chelonarium.
- Line 9—hung read being.
- 109. LINE 5-Anthrenis read Anthrenus.
- 111. Note-Line 1-Heteromea read Heteromera.
- 112. Line 10-emarginata read emarginato.
- 117. Lines 1 & 7-Somaticus read Somaticum.
- 127. LINE 28-Tagenidæ read Tageniadæ.
- 137. LINE 16-Eulp. Ent. p. 141.
- 153. LINE 11-conspicius read conspicuis.
- 153. At page 176-I have given ampler generic details.
- 160. LINE 9-Calaspis read Calaspidea.
- 162. Line 24—read κορυνωδησ.
- 164. LINE 27-after longiora place a comma.
- 173. LINE 9-after splendida place a comma.
- 174. Note-read esigneror.
- 180. Expunge the Note.
- 183. Note—instead of aoπισ read aσπις

London:

DERMESTES LINNEUS.

Species.	Country.	Modern Genera.
1. Lardarius	England	Dermestes, Linneus.
2. Elongatus	England	Nemosoma, Latreille.
3. Undatus	England	Attagenus, Latreille.
4. Pellio	England	
5. Capucinus	England	Apate, Fabricius.
6. Muricatus	Guinea?	
7. Typographus	N. America?	Tomicus, Latreille.
8. Calcographus	France	
9. Micrographus	Germany	
10. Poligraphus	France	
11. Piniperda	England	Hylurgus, Latreille.
12. Domesticus	England	Bostrichus, Fabricius.
13. Violaceus	Europe	Corynetes, Paykull.
14. Hirtus	France	Dasytes, Paykull.
15. Fenestralis	England	Corticaria, Marsham.
16. Melanocephalus	England	Cercyon, Leach.
7. Scarabœoides	France	Sphæridium, Fabricius.
18. Murinus	Europe	Dermestes, Linneus.
19. Paniceus	England	Anobium, Fabricius.
20. Eustatius	Isles of Eustatius	Phalacrus ? Paykull.
21. Ferrugineus	Europe	Ips, Herbst.
22. Fumatus	England	Mycetæa, Kirby.
23. Pedicularius	Sweden	Meligethes, Kirby ? Herbst.
24. Pulicarius	England	Cateretes, Herbst?
25. Psyllius	England	Melegethes, Kirby.
26. Scanicus	France	Engis, Latreille.
27. Colon	England	Nitidula, Autorum.
28. Niger	England	Dasytes, Fabricius.
29. Surinamensis	Surinam	Sylvanus, Latreille.
30. Hemipterus	Surinam	Carpophilus, Leach.

PTINUS.

Species.	Country.	Modern Genera
1. Pectinicornis	England	Ptilinus, Geoffroy.
2. Pertinax	England	Anobium, Fabricius.
3. Mollis	Scotland	
4. Imperialis	Paris	Ptinus, Linneus.
5. Fur	London	*
6. Germanus	England	

HISTER.

1. Maximus	Senegal	Oxysternus, Klug.
2. Major	Barbary	Hister, Linneus.
3. Unicolor	England	
4. Pygmæus	Sweden	Dendrophilus, Leach.
5. Bimaculatus	England	Hister, Linneus.
6. 4-maculatus	England	

BYRRHUS.

1. Scrophulariæ	England	Anthrenus, Fabricius.
2. Museorum	England London	
3. Verbasci	England England Suecia	
4. Pilula	England	Byrrhus, Fabricius.
5. Vagus	Suecia	Byrrhus, Fabricius. Anthrenus, Fabricius.

SILPHA.

1. Germanicus	Germany	Necrophorus, Fabricius.
2. Vespillo	England	
3. Bimaculata	Barbary	Nitidula? Fabricius.
4. Bipustulata	England	Nitidula, Fabricius.
5. 4-pustulata	Germany	Ips, Fabricius.
6. Indica	Senegal	Engis, Paykull.
7. Americana	N. America	Necrobora, Hope.
8. Seminulum	England	Agathidium, Illiger.
9. Agaricina	England	Scaphisoma, Leach.
10. Russica	England	Triplax, Paykull.
11. Littoralis	England	Necrodes, Wilkin.
12. Atrata	England	Phosphuga, Leach.
13. Thoracica	England	Oiceoptoma, Leach.

Species.	Country.	Modern Genera.
14. Quadripunctata	England	Silpha, Linneus.
15. Opaca	England	Silpha, Linneus.
16. Rugosa	England	Thanatophilus, Leach.
17. Sabulosa	England	Opatrum, Fabricius.
18. Obscura	England	Silpha, Linneus.
19. Ferruginea	Austria	Peltis, Kugellan.
20. Reticulata	Sweden	
21. Grossa	France	
22. Oblonga	France	
23. Scabra	England	Trox, Fabricius.
24. Rufipes	England	Nitidula, Fabricius.
25. Aquatica	England	Helophorus, Leach.
26. Succincta	Sweden	Lycoperdina, Latreille
27. Colon	England	Nitidula, Fabricius.
28. Fusca	Sweden	Lyctus, Fabricius.
29. Depressa	Europe	Nitidula, Fabricius.
30. Grisea	England	
31. Testacea	Germany	
32. Æstiva	England	
33. Pulicaria	England	Cateretes, Herbst.
34. Pedicularia	England	Meligethes, Kirby.
5. Atomaria	Switzerland	Cercyon, Leach.

CASSIDA.

1. V	riridis I	Sweden	Cassida, Linneus.
2. N	Iurræa	England	
3. N	lebulosa	England	
4. N	lobilis	England	
5. V	7ibex	Germany	
6. N	Maculata	England	
7. S	Spinifex	S. America	Selenis, Hope.
8. B	Bicornis	S. America	Tauroma, Hope.
9. C	Cruciata	Brazils	Aspidimorpha, Hope.
10. E	Bifasciata	S. America	Erotylus, Fabricius.
11. F	Flava	America	Omoplata, Hope.
12. P	Purpurea	America	Thyreaspis, Hope.
13. I	Leucophæa	S. America	Cassida? Linneus.
14. N	Marginata	Cayenne	Omoplata, Hope.
15. F	Reticularis	Cayenne	Mesomphalia, Hope.
16. V	Variegata	Cayenne	Oxynodera, Hope.
		•	

Species.	Country.	Modern Genera
17. Grossa	Cayenne	Calaspis, Hope.
18. Clatrata	East Indies	Cassida, Linneus.
19. 7-guttata	East Indies	Cassida? Linneus.
20. Exclamationis	St. Vincent's	Cyphomorpha, Hope.
21. Jamaicensis	Jamaica	Aspidimorpha, Hope.
22. Cyanea	Brazils	Mesomphalia, Hope.
23. Marginata	West Indies	Omoplata, Hope.
24. Inæqualis	Cayenne	Mesomphalia, Hope.
25. Supposita	S. America	Mesomphalia?
26. Lateralis	Cayenne	Mesomphalia, Hope.
27. Discoides	Cayenne	
28. Petiveriana	Asia	Corydia, Serville.
29. Bipunctata	East Indies	Cassida, Linneus.
30. Bipustula	Cayenne	Mesomphalia, Hope.
31. Angustata	Indies	Cassida? Linneus.

COCCINELLA.

1. Marginata	Brazils	Coccinella, Linneus.
2. Surinamensis	Surinam	Œgithus, Fabricius.
3. Sanguinea	Surinam	Coccinella, Linneus.
4. Impunctata	Europe	
5. Annulata	Germany	
6. Unipunctata	England	Cercyon, Leach.
7. 2-punctata	England	Coccinella, Linneus.
8. 3-punctata	Europe	
9. 4-punctata	Germany	,
0. Hebræa	Europe	
1. 5-punctata	England	
12. 6-punctata	Sweden	
13. Trifasciata	Lapland	
4. Hieroglyphica	Sweden	
15. 7-punctata	England	
16. 9-punctata	England	
17. 10-punctata	England	
18. 11-punctata	France	
19. 12-punctata	Europe	
20. 13-punctata	England	
21. 14-punctata	England	
22. 16 punctata	England	
23. Ocellata	England	

Species.	Country.	Modern Genera
24. 18-punctata	England	Coccinella, Linneus.
25. 19-punctata	England	
26. 22-punctata	England	
27. 23-punctata	England	
28. 24-punctata	England	
29. 25-punctata	England	
30. Conglobata	England	
31. Conglomerata	England	
32. Guttatopuncta	England	
33. 10-guttata	England	
34. 14-guttata	England	
35. 16-guttata	England	
36. 18-guttata	England	
37. 20-guttata	Europe	
38. Oblongoguttata	England	
39. Obliterata 🍙	Europe	
10. Impustulata	England	
11. Cacti	Brazils	Chilocorus, Leach.
12. 2-pustulata	England	
13. 4-pustulata	England	
14. 6-pustulata	England	Coccinella, Linneus.
45. 10-pustulata	England	
46. 14-pustulata	England	
17. 16-pustulata	Europe	
18. Pantherina	Sweden	
19. Tigrina	England	

CHRYSOMELA.

1	Gigantea	Cavenne	Erotylus, Fabricius
	0	•	Litty rus, Tuon tetas
2.	Gibbosa	Cayenne	
3.	5-punctata	Cayenne	
4.	Gottingensis	Suecia	Chrysomela, Linneus.
5.	Tanaceti	England	Galleruca, Geoffroy.
6.	Hæmorihordalis	Carniola	Phytodecta, Kirby.
7.	Graminis	Oxford	Chrysomela, Linneus.
8.	Ænea	England	Melasoma, Dilwynn.
9.	Alni	Worcester	Adimonia, Schrank.
10.	Betulæ	London	Phædon, Megerle.
11.	Hæmoptera	England	Chrysomela, Linneus.
12.	Occidentalis	N. America.	Phædon, Megerle?

Species.	Country.	Modern Genera.
13. Cerasi	Germany	Spartophila, Chevrolat.
14. Padi	Paris	Cyphon, Fabricius.
15. Minutissima	Sweden	Trichopteryx, Kirby?
16. Armoraciæ	England	Phædon, Megerle.
17. Cerealis	N. Wales	Chrysomela, Linneus.
18. Fastuosa	Essex	Phædon, Megerle.
19. Speciosa	France	Chrysomela, Linneus.
20. Halensis	England	Adimonia, Schrank.
21. Hypochæridis	England	Phædon, Megerle.
22. Vulgatissima	London	
23. Vitellinæ	England	Phytodecta, Kirby.
24. Polygoni	England	Gastroeides, Hope.
25. Pallida	Italy	Phytodecta, Kirby.
26. Staphylæa	England	Chrysomela, Linneus.
27. Polita	London	
28. Lurida	Paris	
29. Clavicornis	Cayenne	Erotylus, Fabricius.
30. Populi	England	Melasoma, Dilwynn.
31. Viminalis	England	Phytodecta, Kirby.
32. 10-punctata	Sweden	
33. Variolosa	Africa	Clythra, Frbricius.
34. Lapponica	Lapponia	Melasoma, Dilwynn.
35. Undulata	Java	Phyllocharis, Dalman.
36. Boleti	England	Diaperis, Fabricius.
37. Collaris	Germany	Melasoma, Dilwynn.
38. Sanguinolenta	England	Chrysomela, Linneus.
39. Marginata	Yorkshire	
40. Marginella	London	Phædon, Megerle.
41. Castanea	Surinam	Chrysomela?
42. Analis	France	Chrysomela, Linneus.
43. Coccinea	Essex	Endomychus, Paykull.
44. Philadelphica	Pensylvania	Polyspila, Hope.
45. 3-maculata	S. America	Chrysomela, Illiger.
46. Americana	Barbary	Chrysomela, Linneus.
47. Lineola	America	Polyspila, Hope?
48. Æstuans	Cayenne	Doryphora, Illiger.
49. Sacra	Palestine	Phytodecta, Kirby?
50. Minuta	England	Hydrobius, Leach?
51. Oleracea	England	Haltica, Illiger.
52. Bicolor	American Isles	Ædionychis, Latreille.
	England	Macronema, Megerle.

Species.	Country.	Modern Genera.
54. Hyoscyami	Essex	Macronema, Megerle.
55. Atricilla	Hertford	Thyamis, Stephens.
56. Erythrocephala	Sweden	Haltica, Illiger.
57. Modeeri	England	
58. Helxines	Essex	
59. Exsoleta	London	Macronema, Megerle.
60. Nitidula	England	Haltica, Illiger.
61. Trifasciata	Europe	
62. Nemorum	England	
63. Rustica	England	Mantura, Stephens.
64. Pulicaria	Hammarby	Thyamis, Stephens.
65. Rufipes	Sweden	Haltica, Illiger.
66. Fuscicornis	England	
67. Holsatica	England	Thyamis, Stephens.
68. Hemisphærica	England	Scirtes, Latreille.
69. Surinamensis	Surinam	Haltica, Illiger.
70. S-litera	Surinam	
71. Æquinoctialis	Cayenne	
72. Cyanea	America	Clythra, Laicharting?
73. Tridentata	Sweden	Clythra, Laicharting.
74. Gorteriæ	P. B. S.	Cryptocephalus, Fabricius.
75. Aurita	Germany	
76. 4-punctata	Europe	Clythra, Laicharting.
77. 4-maculata	Suffolk	
78. 2-punctata	Europe	Cryptocephalus, Fabricius.
79. 8-guttata	Spain	
80. 4-pustulata	Europe	Mycetophagus, Fabricius.
81. Scopolina	Austria	Clythra, Laicharting.
82. Moræi	England	Cryptocephalus, Geoffroy.
83. Bilineata	England	
84. Nitens	France	
85. Barbareæ	Barbary	
86. Sericea	England	
87. Labiata	Paris	
88. Coryli	Essex	
89. Pini	Shropshire	
90. Bothnica	Sweden	
91. Cordigera	Europe	
92. 6-punctata	France	
93. 10-maculata	Europe	
94. 14-punctata	East Indies	Podontia, Dalman.

Species.	Country.	Modern Genera.
95. Longimana.	Sweden	Clythra, Laicharting.
96. Obscura	France	Adoxus, Kirby.
97. Merdigera	England	Lema, Fabricius.
98. Stercoraria	Africa	
99. Nymphææ	England	Galleruca, Geoffroy.
100. Cupræa	Sweden	
.01. Calmariensis	England	
02. Tenella	England	
103. 4-maculata	Suffolk	Auchenia, Marsham.
104. Cyanella	Europe	Lema, Fabricius.
105. Melanopa	Europe	
106. Flavipes	England	Luperus, Geoffroy.
107. Tomentosa	Carolina	Galleruca, Geoffroy.
108. Punctatissima	Surinam	Doryphora, Illiger.
109. 8-punctata	Surinam	Unknown.
110. 12-punctata	France	Lema, Fabricius.
111. Phellandrii	England	Helodes, Paykull.
112. Asparagi	England	Lema, Fabricius.
113. Campestris	Barbary	
114. Sulphurea	Suffolk	Allecula, Fabricius.
115, Cervina	England	Atopa, Paykull.
116. Caraboides	England	Melandrya, Fabricius
117. Ceramboides	England	Cistela, Fabricius.
118. Murina	Europe	
119. Hirta	England	Lagria, Fabricius.
120. Pubescens	Germany	
121. Inda	E. Indies	Sagra, Fabricius.
122. Elongata	Germany	Tillus, Olivier.
	, comming	amas, stoto,
	HISPA.	
1. Atra	England	Hispa, Linneus.
2. Testacea	France	
3. Bihamata	East Indies?	Dichræa, Hope.
4. Muticus	England	Sarrotrium, Fabricius.
	BRUCHUS	S.
1. Pisi	N. America	Bruchus, Linneus.
2. Theobromæ	East Indies	
2 (2) 114	T. C. C.	

Isle of France

3. Gleditsiæ

Caryoborus, Schonherr.

Species,	Country.	Modern Genera.
4. Bactris	Cayenne	Caryoborus, Schonherr.
5. Granarius	England	Bruchus, Linneus.
6. Seminarius	England	
7. Pectinicornis	Barbary	

CURCULIO.

1. Palmarum	Cayenne	Curculio, Linneus.
2. Indus	East Indies	
3. Hemipterus	Cayenne	Sphenophorus, Schonherr,
4. Alliariæ	England	Rhynchites, Herbst.
5. Cyaneus	England	Orobitis, Germar.
6. Craceæ	England	Apion, Herbst.
7. Campanulæ	Wales	Ceutorhynchus, Germar.
8. Badensis	Germany	Otiorhynchus?
9. Æquatus	England	Rhynchites, Herbst.
10. Aterrimus	England	Apion, Herbst.
11. Cerasi	England	Rhinodes, Schonherr.
12, Pruni	England	
13. Acridulus	England	Notaris, Germar.
14. Purpureus	Sweden	Rhynchites, Schonherr?
15. Frumentarius	England	Apion, Herbst.
16. Granarius	England	Sitophilus, Schonherr.
17. Dorsalis	England	Gymnetron, Schonherr.
18. Melanocardius	East Indies?	Sphenophorus, Schonherr
19. Pini	England	Pissodes, Germar.
20. Lapathi	England	Cryptorhynchus, Illiger.
21. Cupreus	England	Rhynchites, Herbst.
22. Scaber	England	Otiorhynchus, Germar.
23. T-album	England	Baridius, Schonherr.
24. Ruficollis	England	Salpingus, Illiger.
25. Quercus	England	Orchestes, Illiger.
26. Polygoni	Sweden	Phytonomus, Schonherr.
27. Viscariæ	England	Sibinia, Germar.
28. 2-punctatus	Germany	Ellescus, Megerle.
29. 4-maculatus	England	Nedyus, Stephens.
30. 5-maculatus	Germany	Tychius, Germar.
31. Pericarpius	England	Rhinoncus, Schonherr.
32. Spenglerii	Brazils	Diaprepes, Schonherr.
33, Vittatus	Europe	Prepodes, Schonherr.

Species.	Country.	Modern Genera.
34. Paraplecticus	England	Lixus, Fabricius.
35. Anguinus	England	
36. Ascanii	Austria	
37. Algirus	Algiers	Brachycerus, Fabricius.
38. Bacchus	England	Rhynchites, Herbst.
39. Betulæ	England	
40. Populi	England	
41. Beccabungæ	England	Gymnetron, Schonherr.
42. Alni	England	Orchestes, Illiger.
43. Salicis	England	Tachyerges, Schonherr.
44. Fagi	England	Orchestes, Illiger.
45. Segetis	Sweden	Sitophilus, Schonherr.
46. Pomorum	England	Anthonomus, Germar.
47. Ovalis	England	Nedyus, Stephens.
48. Carbonarius	England	Thamnophilus, Schonherr.
49. Mucoreus	Indies	Unknown.
50. Pusio	Surinam	Cratosomus, Schonherr.
51. Vaginalis	Cayenne	
52. Stigma	Cayenne	Cryptorhynchus, Schonherr
53. Depressus	America	?
54. Annulatus	Brazils	Cholus, Schonherr.
55. Dispar	Cayenne	Arrhenodes, Steven.
56. Anchorago	1	Brentus, Fabricius.
57. Abietis	Cayenne	Hylobius, Germar.
58. Germanus	England England	Molytes, Schonherr.
59. Nucum		Balaninus, Germar.
60. Rumicis	England	Hypera, Germar.
61. Scrophulariæ	England	Cionus, Clairville.
62. Druparum	England	Anthonomus, Germar.
63. Violaceus	Sweden	Rhinodes, Schonherr.
	Sweden	Tychius, Germar.
64. 5-punctatus 65. Hispidus	Sweden	Trachodes, Schuppell.
66. Pedicularius	Sweden	Anthonomus, Germar.
67. Tortrix	England	Erirhinus, Schonherr.
	England	
68. Ligustici	England	Otiorhynchus, Germar.
69. Ovatus 70. Cervinus	England	Polydroma Common
	Sweden	Polydrosus, Germar.
71. Oblongus	England	Nemoicus, Dilwynn.
72. Pyri	England	Phyllobius, Germar.
73. Argentatus	England	G. A
74. Argyreus	Indies	Cratopus, Schonherr?

Species.	Country.	Modern Genera.
75. Regalis	St. Domingo	Prepodes, Schonherr.
76. Viridis	Austria	Chlorophanus, Dalmann.
77. Speciosus	Indies	Rhigus?
78. Ruficornis	Europe	Polydrosus, Schonherr.
79. Albinus	England	Anthribus, Fabricius.
80. Lineatus	England	Sitona, Germar.
81. Incanus	Europe	Brachyderes, Schonherr.
82. Chloropus	Sweden	Sitona, Germar?
83. Rufipes	Europe	Brachyderes, Schonherr.
84. Nebulosus	Sweden	Cleonus, Schonherr.
85. Sulcirostris	England	
86. Ater	England	Rhyncolus, Germar.
87. Emeritus	P. B. S.	Brachycerus, Fabricius.
88. Barbarus	Barbary	
89. Capensis	P. B. S. ?	Hipporhinus, Schonherr.
90. Verrucosus	P. B. S.	
91. Cornutus	P. B. S.	Brachycerus, Fabricius.
92. 16-punctatus.	W. Indies	Cyphus, Schonherr.
93. Granulatus	Cayenne	Entimus, Germar.
94. Abbreviatus	Martinique	Sphenophorus, Schonherr?
95. Apterus	P. B. S.	Brachycerus, Schonherr.

ATTELABUS.

1. Coryli	England	Apoderus, Olivier.
2. Avellanæ	Germany	
3. Curculionoides	England	Attelabus, Linneus.
4. Surinamensis	Surinam	Casnonia, Latreille.
5. Pensylvanicus	Pensylvania	
6. Melanurus	Upsal	Odacantha, Paykull.
7. Betulæ	England	Rhynchites, Schonherr.
8. Formicarius	England	Thanasimus, Latreille.
9. Sipylus	Asia Minor	Trichodes, Fabricius.
10. Apiarius	England	
11. Mollis	England	Opilus, Latreille.
12. Ceramboides	Sweden	Upis, Fabricius.
13. Buprestoides	Europe	Spondylis, Fabricius.

CERAMBYX.

Species.	Country.	Modern Genera.
1. Longimanus	Cayenne	Acrocinus, Illiger.
2. Trochlearis	Brazils	
3. Cervicornis	Cayenne	Macrodontia, Serville.
4. Armillatus	Cayenne	Enoplocerus, Serville.
5. Imbricornis	N. America	Prionus, Geoffroy.
6. Faber	Switzerland	Ergates, Serville.
7. Coriarius	England	Prionus, Geoffroy.
8. Melanopus	Carolina	Mallodon, Serville.
9. Thomæ	Isle of St. Thomas	Solenoptera, Serville.
10. Cinnamomeus	St. Domingo	Stenodontes, Serville.
II. Festivus	Brazils	Chlorida, Serville.
12. Depsarius	Suecia	Tragosoma, Serville.
13. Atratus	Ceylon	Prionus, Geoffroy.
14. Lineatus	Jamaica	Solenoptera, Serville.
15. Spinibarbis	Brazils	Mallodon, Serville.
16. Bifasciatus	American Isles	Pyrodes, Serville.
17. Planatus	Europe	Uleiota, Latreille.
18. Barbicornis	Cayenne	Lophonocerus, Latreille.
19. Ammiralis	Surinam	Hamaticherus?
20. Batus	Brazil	Plocæderus, Serville.
21. Rubus	Java	Lamia, Fabricius.
22. Araneiformis	Cayenne	Lagocheirus, De Jean.
23. Sentis	India	Lamia, Fabricius.
24. Farinosus	Brazils	Tæniotes, Serville.
25. Ferrugineus	India	Hamaticherus?
26. Depressus	Brazils	Steirastoma, Serville.
27. 4-maculatus	Brazils	Eburia, Serville.
28. Glaucus	America	Oreoda, Serville.
39. Nebulosus	England	Pogonocherus, Megerle.
30. Hispidus	England	
31. Desertus	America	Exocentrus, De Jean.
32. Succinctus	Surinam	Trachyderes, Dalman.
33. Virens	Jamaica	Callichroma, Latreille.
34. Moschatus	England	Cerambyx, Linneus.
35. Alpinus	Switzerland	Rosalia, Serville.
36. Capensis	P. B. S.	Ceroplesis, Serville.
37. Ædilis	England	Œdilis, Serville.
38. Sutor	England	Monohammus, Megerle.

Species.	Country.	Modern Genera.
39. Cerdo.	England	Hamaticherus, Megerle.
40. Auricomus	Cayenne	Callichroma, Latreille.
41. Textor	England	Pachystola, De Jean.
42. Tristis	England	Morimus, Serville.
43. Fuliginator	Germany	Dorcadion, Dalman.
44. Coquus	Canada	Lamia?
45. Cursor	Switzerland	Toxotus, Megerle.
46. Lamed	Switzerland	Pachyta, Megerle.
47. Meridianus	Switzerland	Toxotus, Megerle.
48. Noctis	Switzerland	
49. Inquisitor	France	Rhagium, Fabricius.
50. Kœhleri	Germany	Purpuricenus, Ziegler.
51. Pedestris	Spain	Dorcadion, Dalman.
52. Carcharias	England	Saperda, Fabricius.
53. Juvencus	America	Saperda?
54. Surinamus	Surinam	Achryson, Serville.
55. Scalaris	England	Saperda, Fabricius.
56. Cardui	England	Agapanthia, Serville.
57. Populneus	England	Saperda, Fabricius,
58. Linearis	England	Oberea, Megerle.
59. Cylindricus	England	Saperda, Fabricius.
60. Oculatus	England	Oberea, Megerle.
61. Ramphygeus	Brazils	Eburia, Serville.
62. Irroratus	American Isles	Elaphidion, Serville.
63. Zonarius	America	Stenochorus, Fabricius
64. Curculionides	Germany	Mesosa, Megerle.
65. Serraticornis	Suecia	Calopus, Fabricius.
66. Hispicornis	America	Callidium, Fabricius.
67. Rusticus	France	
68. Luridus	Suecia	Tetropium, Kirby.
69. Femoratus	Germany	Callidium, Fabricius.
70. Violaceus	England	
71. Auratus	America	Callidium?
72. Stigma	Cayenne	Megaderus, De Jean.
73. Striatus	Germany	Asemum, Esch choltz.
74. Variabilis	England	Callidium, Fabricius.
75. Testaceus	England	
76. Bajulus	England	Hylotrupes, Serville.
77. Fennicus	England	Callidium, Fabricius.
78. Liciatus	Suecia	Clytus, Fabricius.
79. Undatus	Austria	Callidium, Fabricius.

Species.	Country.	Modern Genera.
80. Sanguineus	England	Callidium, Fabricius.
81. Castaneus 82. Cantharinus	Europe England	Obrium, Megerle.
83. Ebulinus	France	Certallum, Megerle.

LEPTURA.

1. Aquatica) Sweden	Donacia, Fabricius.
2. Melanura	Sweden	Stenura, De Jean.
3. Rubra	Switzerland	Leptura, Linneus.
4. Sanguinolenta	England	Leptura, Linneus.
5. Testacea	England	
	1 0	
6. Revestita	England	
7. Virens	England	
8. Sericea	Europe	Donacia, Fabricius.
9. 4-maculata	Europe	Pachyta, Megerle.
10. Interrigationis	Sweden	
11. 6-maculata	Austria	
12. 4-fasciata	England	Stenura, De Jean.
13. Attenuata	France	Strangallia, Serville.
14. Nigra	England	Stenura, De Jean.
15. Virginea	France	Pachyta, Megerle.
16. Collaris	England	
17. Rustica	N. America?	Clytus, Fabricius.
18. Mystica	England	
19. Alni	England	Callidium, Fabricius.
20. Detrita	Paris	Clytus, Fabricius.
21. Arcuata	England	
22. Verbasci	Paris	
23. Arietis	England	
24. Præusta	England	Tetrops, Kirby.
25. Linearis	Indies	Oberea, Megerle.

NECYDALIS.

1. Major	Suecia	Molorchus, Fabricius.
2. Minor	England	
3. Umbellatarum	England	
4. Cœrulea	England	Ischnomera, Stephens.
5. Atra	Austria	Stenopterus, Illiger.
6. Rufra	England	

Species.	Country.	Modern Genera.
7. Glaucesceus	Surinam	Stenopterus, Illiger.
8. Flavescens	Europe	
9. Podagrariæ	England	Oncomera, Stephens.
10. Simplex	Europe	Oncomera? [vois.
11. Brevicormis	Guinea	Atractocerus, Palisot-Beau-

LAMPYRIS.

1. Noctiluca	England	Lampyris, Auctorum.
2. Corusca	Russia	Photinus, Laporte.
3. Splendidula	Germany	Lampyris, Auctorum.
4. Pyralis	N. America	Photinus, Laporte.
5. Marginata	America	
6, Hespera	America	Aspisoma, Laporte.
7. Ignita	America	
8. Lucida	America	Photinus, Laporte.
9. Phosphorea	America	
10. Mauritanica	Barbary	Lampyris, Auctorum.
11. Italica	Italy	Luciola, Laporte.
12. Chinensis	Asia	
13. Minuta	England	Cyphon, Paykull.
14. Latissima	Guinea	Lycus, Fabricius.
15. Rostrata	P. B. S.	
16. Bicolor	Africa	Charactus, De Jean.
17. Sanguinea	England	Lycus, Fabricius.
18. Coccinea	England	Pyrochroa, Fabricius.

CANTHARIS.

1.	Sanguinolenta	Tranquebar	Cissites, Latreille.
2.	Fusca	England	Telephorus, Degeer.
3.	Livida	England	
4.	Rufa	England	
5.	Obscura	England	
6.	Lateralis	England	
7.	Ænea	England	Malachius, Fabricius.
8.	Bipustulata	England	
9.	Pedicularia	England	
10.	Fasciata	England	
11.	Biguttata	England	Malthinus, Latreille.
12.	Minima	England	

Species.	Country.	Modern Genera.
13. Cardiacæ	England	Malachius, Fabricius.
14. Albicans	Germany	
15. Testacea	England	Telephorus, Degeer.
16. Atra	England	
17. Pectinata	S. America	Lycus, Fabricius.
18. Serrata	S. America	
19. Tropica	Cayenne	Calopteron, Laporte.
20. Pectinicornis	Europe	Pyrochroa, Fabricius.
21. Violacea	Guinea	Ischnomera, Stephens.
22. Cærulea	England	Œdemera, Olivier.
23. Viridissima	England	Ischnomera, Stephens.
24. Virescens	Europe	
25. Dermestoides	Europe	Hylecætus, Latreille.
26. Navalis	Paris	Lymexylon, Fabricius
27. Melanura	England	Ischnomera, Stephens.

ELATER.

1.	Flabellicornis	Sierra Leone	Tetralobus, Serville.
2.	Speciosus	Ceylon	Alaus, Eschcholtz.
3.	Oculatus	N. America	
4.	Noctilucus	Brazils	Pyrophorus, Illiger.
5.	Phosphoreus	American Isles	
6.	Porcatus	S. America	Chalcolepidius, Illiger.
7.	Ligneus	Cayenne	Semiotus, Eschcholtz.
8.	Striatus	Cayenne	Chalcolepidius, Serville.
9.	Bipustulatus	England	Elater, Auctorum.
10.	Brunneus	France	Sericosomus, Serville.
11.	Syriacus	Syria	Elater, Auctorum?
12.	Cruciatus	Austria	Selatosomus, Stephens.
13.	Linearis	Suecia	Campylus, Fischer.
14.	Ruficollis	England	${\bf Cardiophorus,}\ {\bf \it Eschcholtz.}$
15.	Lineatus	England	Agriotes, Eschcholtz.
16.	Mesomelus	England	Campylus, Fischer.
17.	Aterrimus	England	Ectinus, Eschcholtz.
18.	Castaneus	Austria	Ctenicerus, Latreille.
19.	Livens	England	Campylus, Fischer.
20.	Ferrugineus	England	Ludius, Latreille.
21.	Sanguineus	England	Elater, Auctorum.
22.	Balteatus	England	
23.	Marginatus	England	Cataphagus, Stephens.

Species.	Country,	Modern Genera.
24. Sputator	England	Agriotes, Eschcholtz.
25. Obscurus	England	
26, Tristis	England	Elater, Eschcholtz.
27. Fasciatus	England	Lepidotus, Eschcholtz.
28. Murinus	England	
29. Tessellatus	Englaud	Ctenicerus, Latreille.
39. Germanus	England	Selatosomus, Stephens.
31. Æneus	England	
32. Pectinicornis	England	Ctenicerus, Latreille.
33. Niger	England	Athous, Eschcholtz.
34. Minutus	England	Limonius, Eschcholtz.
35. Pulchellus	England	Hypnoidus, Stephens.
96. Tetrastichon	Africa	Buprestis, Auctorum.
37. Buprestoides	England	Melasis, Olivier.
38. Dermestoides	England	Throscus, Latreille.

BUPRESTIS.

1.	Gigantea	Cayenne	Euchroma, Serville.
2.	8-guttata	France	Ancylocheira, Eschcholtz.
3.	Ignita	East Indies	Chrysochroa, Carcel.
4.	Stricta	S. America	Pelecopcephalus, Serville.
5.	Sternicornis	Bengal	Sternocera, Eschcholtz.
6.	Mariana	Europe	Chalcophora, Serville.
7.	Chrysostigma	Europe	Chrysobothris, Eschcholtz.
8.	Rustica	Europe	Buprestis, of Authors.
9.	Austriaca	Austria	Eurythyria, Serville.
10.	Aurulenta	Europe	Anthaxia, Eschcholtz.
11.	Tenebrionis	Europe	Capnodis, Eschcholtz.
12.	Fascicularis	P. B. S.	Jalodis, Eschcholtz.
13.	Hirta	P. B. S.	*************************************
14.	Rubi	France	Agrilus, Megerle.
15.	Nitidula	Europe	Anthaxia, Eschcholtz.
16.	Bimaculata	East Indies	Strigoptera, De Jean.
17.	9-maculata	Barbary	Ptosima, Serville.
18.	Tristis	East Indies?	Buprestis?
19.	Ænea	S. France	Dicerca, Eschcholtz.
20.	Cuprea	P. B. S.	 .
21.	Nobilis	Cayenne	Actenodes, De Jean.
22.	4-punctata	France	Anthaxia, Eschcholtz.

Species.	Country.	Modern Genera.
23. Minuta	England	Trachys, Fabricius.
24. Minuta	England	
25. Viridis	England	Agrilus, Megerle.
26. Atra	Germany	?
27. Festiva	Barbary	Lampra, Megerle.
28, Linearis	America	Agrilus, Megerle
29. Granularis	England	Helophorus, Leach.

TENEBRIO.

1. Gigas	Surinam	Iphthinus, De Jean.
2. Molitor	England	Tenebrio, Auctorum.
3. Chalybeus	England	Helops, Fabricius.
4. Mauritanicus	England	Alphitobius, Stephens.
5. Culinaris	England	Stene, Kirby.
6. Barbarus	Mauritania	Trogosita, Fabricius.
7. Fossor	England	Clivina, Latreille.
8. Cursor	Suecia	Scarites, Fabricius.
9. Erraticus	Europe	Uloma, Megerle?
10. Pallens	England	Antherophagus, Megerle
11. Depressus	Suecia	Pytho, Fabricius.
12. Minutus	Upsal	Latridius?
13. Quisquilius	England	Crypticus, Latreille.
14. Gigas	Spain	Blaps, Fabricius.
15. Mortisagus	England	
16. Grossus	Africa	Morica, De Jean.
17. Muricatus	Spain	Pimelia, Fabricius.
18. Gibbus	England	Zabrus, Clairville.
19. Cœruleus	Africa	Helops, Fabricius.
20. Rostratus	England	Cychrus, Fabricius
21. Collaris	France	Elenophorus, Megerle.
22. Angulatus	Egypt	Pimelia, Fabricius.
23. Linearis	Sweden	Unknown.
24. Spinosus	Spain	Akis, Fabricius.
25. Caraboides	England	Cychrus, Fabricius.
26. Silphoides	Barbary	Morica, De Jean?
27. Rugosus	England	Timarcha, Megerle.
28. Variabilis	Tangiers	Calcar, De Jean.
29. Lævigatus	Africa	Timarcha, Megerle.
30. Latipes	Africa	

Species.	Country.	Modern Genera.
31. Tibialis	Africa	Gonopus, Fischer.
32. Femoralis	England	Pedinus, Latreille,
33. Striatulus	Spain	Tentyria, Latreille.

MELOE.

1. Proscarabœus	England	Proscarabæus, Leach.
2. Majalis	Spain	Meloe, Linneus.
3. Vesicatorius	England	Lytta, Fabricius.
4. Syriacus	Austria	
5. Cichorii	China	Mylabris, Fabricius.
6. 4-punctata	Europe	Zonitis, Fabricius.
7. Capensis	P. B. S.	Mylabris, Fabricius.
8Chrysomeloides	Surinam	Lytta? Fabricius?
9. Bimaculatus	Suecia	Apalus, Fabricius.
10. Afer	Barbary	Œnas, Latreille.
11. Algiricus	Algiers	Lydus, Megerle.
12. Schæfferi	Germany	Cerocoma, Fabricius.
13. Marci	Suecia	Hylecætus, Latreille.
14. Monoceros	England	Monocerus, Megerle.
15. Floralis	England	Anthicus, Fabricius.
16. Antherinus	France	

MORDELLA.

1. Paradoxa	England	Ripiphorus, Fabricius.
2. Aculeata	England France	Mordella, Linneus.
3. Humeralis	England England	
4. Frontalis	England	Anaspis, Geoffroy.
5. Thoracica	Paris	
6. Flava	England	

STAPHYLINUS.

1.	Hirtus	England	Emus, Leach.
2.	Murinus	England	Trichoderma, Stephens.
3.	Maxillosus	France	Creophilus, Kirby.
4.	Erythropterus	England	Staphilinus, Linneus.
5.	Politus	England	Philonthus, Leach.
6.	Rufus	Germany	Oxyporus, Fabricius.
7.	Lunulatus	England	Bolitobius, Leach.

Species.	Country.	Modern Genera.
8. Riparius	France	Pœderus, Auctorum.
9. Obtusus	Germany	Tachyporus, Gravenhorst.
10. Lignorum	Europe	
11. Silphoides	England	Tachinus, Gravenhorst.
12. Subterraneus	France	
13. Flavescens	Europe	
14. Elongatus	England	Lathrobium, Gravenhorst.
15. 2-guttata	Sweden	Stenus, Fabricius.
16. 2-pustulatus	England	Stenus, Latreille.
17. Cantharellus	Sweden	Stenus?
18. Littoreus	England	Conurus, Stephens.
19. Sanguineus	France	Tyrus, Aube.
20. Caraboides	England	Lesteva, Latreille.
21. Chrysomelinus	France	Tachyporus, Gravenhorst.
22. Flavipes	England	Falagria, Leach.
23. Fuscipes	Sweden	Aleochara.
24. Rufipes	England	Tachinus, Gravenhorst.
25. Piceus	Upsal	Oxytelus, Gravenhorst.
26. Boleti	England	Bolitochara, Mannerheim.

COLEOPTERA E MANTISSA PLANTARUM.

SILPHA, LINNEUS.

Country.	Species.	Modern Genera.
Carolinæ	North America	Necrobora, Hope.
	HISPA.	
Sanguinciollis	East Indies	Hispa? Fabricius.
	CURCULIO, L	NNEUS.
Colon	England	Lepyrus, Germar.
Arator	Sweden	Phytonomus, Schonherr.
Scabriculus	Denmark	Trachyphlæus. Germar.

CERAMBYX, LINNEUS.

Species.	Country.	Modern Genera.
Giganteus	Cayenne	Titanus, Serville.
Afer	Guinea	Callichroma, Latreille.
Damicornis	S. America	Stenodontes, Serville.
Trilineatus	Jamaica	Ptychodes, Chevrolat.
Depressus	BUPRESTIS, LIN	NNEUS.
	TENEBRIO, LIN	NEUS.
Lanipes	Austria	Helops, Fabricius.

REMARKS AND ANNOTATIONS

ON THE

SPECIES OF LINNEAN COLEOPTERA.

DERMESTES, Linneus; or HIDE EATER.

- Sp. 1. Lardarius.—This species seems widely dispersed throughout the earth, and in many instances, has been transported in shipping to various parts of the world. A new species from the Himalaya so closely resembles that of Europe, that it is almost impossible to distinguish them apart.
- Sp. 7. Typographus.—Now of the genus Tomicus Latreille. Linneus gives Europe as its true country, while Kalm considers it an American insect, and the same species as that belonging to England. It seems probable that two distinct species have been confounded together.
 - Sp. 10. Poligraphus; read Polygraphus.
- Sp. 11. Piniperda.—These insects occasion great destruction in plantations of Larch. In Shropshire, they are occasionally very abundant. When the trees appear dwarfish and scrubby, I have almost invariably found that Hylurgus Piniperda had taken

up its residence among the young trees; its presence is easily detected by the singular monstrosities which the extremities of the boughs assume. To check the increase of the evil, I suggest, that all the deformed trees exhibiting corkscrew appendages, be cut out of the plantations, and their boughs be immediately committed to the flames. It has been said that the Larch does not suit the soil wherever this evil predominates. I have known, however, on the same ground, other varieties of Larch succeed when those first planted have failed.

- Sp. 14. Hirtus.—I have no doubt that this insect is at present a Dasytes; it appears to be the same species which Fabricius has named Ater; the former name should be retained.
- Sp. 15. Fenestralis.—Now a Corticaria of Marsham. Fabricius has changed the specific name to Fenestratus.
- Sp. 20. Eustatius.—Probably a Phalacrus of Paykull. I find no reference in Fabricius to this insect; not a specimen is to be found at present in the Linnean Cabinet: from the concise description of the Systema, I regard it as a Phalacrus; it appears to be unknown to most Entomologists.
- Sp. 30. *Hemipterus*.—This insect is probably a Carpophilus of Dr. Leach.

PTINUS, Linneus.

Sp. 1. Pectinicornis.—Mr. Stephens has given the appropriate name of Chair-eater to the beetles denominated Ptini. These insects drill holes in our

furniture and commit great destruction, attacking chiefly beech-wood, elder, white poplar, cherry-tree, &c.; they will, however, attack mahogany, particularly if wax has been much used. If the white woods are used for furniture, they should be brushed repeatedly with a hard brush; by striking the wood with a hammer it is easy to perceive if Ptinus or Anobium has made its attacks. If a fine white powder or sawdust falls upon the ground, the furniture is infested by them. If the attack is early discovered, the insects may be made to abandon the wood by repeated hammerings. Furniture, which is seldom moved from its locality, such as wardrobes, chests of drawers, &c. is generally most attacked; that which is in common use, and daily well rubbed, will last years uninjured. The wonderful increase of Ptini and Anobia of late years may be attributed to the great importation of carved woods from the Netherlands, the major part of which is infested to a great extent with the above-mentioned genera.

HISTER, Linneus.

Sp. 1. Maximus.—Now of the genus Oxysternus Erichson; according to my views this should be the Type of Hister; the locality recorded by Linneus is India; East or West is not mentioned. It occurs in Cayenne, and is not very abundant. To investigate this interesting group, the reader is referred to Erichson's Kafer der Mark Brandenburg, where there will be found the ablest account yet published of these mimic beetles.

Sp. 2. Major.—Two localities are mentioned—Barbary and India; the latter is probably incorrect, more than one species may be alluded to.

Byrrhus, Linneus.

These insects are generally known by the name of Pill Beetles, probably from the type of the genus being named Pillula. Linneus includes under the same name sundry species of Anthrenus.

Sp. 5. Vagus.—According to Gmelin's edition of the Systema Naturæ, the above insect appears to be an Anthrenus.

SILPHA, Linneus.

Silpha Linneus includes under that term about 16 modern genera, which will be more particularly alluded to in the Fabrician species belonging to that group.

- Sp. 3. 2-maculata.—According to Schonherr's Synonymia Insectorum, this species is recorded as a Nitidula. I am unacquainted with the insect.
- Sp. 6. Indica.—According to Schonherr, this insect appears to be an Ips. Fabricius names it as Ips grandis, the specific name being properly changed, as it is known to inhabit equinoctial Africa, and neither of the Indies.
- Sp. 7. Americana.—This is the type of Mr. Kirby's sub-genus Necrophila. Vide—Fauna Boreali Americana, page 102, where four distinct species are described. I have been obliged to change

Necrophila to Necrobora, from $\nu \epsilon \kappa \rho \sigma \beta \sigma \rho \sigma \sigma$ mortuos devorans, which latter term is derived from $\nu \epsilon \kappa \rho \sigma \sigma$ and $\beta \sigma \rho \sigma \sigma$. The former word is used by Latreille for another genus of the same family.

Sp. 9. Seminulum.—Dr. Leach is of opinion, that this insect is a Scaphisoma; Mr Stephens, in his Systematic Catalogue, is inclined to consider it as a Cypha of Kirby, one of the genera belonging to the Tachyporidæ.

Sp. 20. Reticulata.—According to Illiger, this insect is only a variety of Silpha Reticulata Linneus.

Sp. 23 Scabra.—Fabricius regards this species as a Trox, (vid.—Syst. Eleut. page 111.) where it is named Arenaria; and the reference to the Systema Naturæ (2. 573. 23.) is given; Illiger however, asserts that it is a Peltis, and quotes Herbst. (Vid.—Col. 5. 179. 23, tab. 51., f. 17.)

Sp. 26. Succincta.—Now a Lycoperdina of Latreille, and is the Lyc. Fasciata of Fabricius; the former name ought to be retained.

Sp. 28. Fusca.—According to Schonherr, this species is only a variety of Phosphuga Atrata; probably it is an immature variety. Mr. Stephens, in his Catalogue, considers it as Lyctus Oblongus. The insect in the Linnean Cabinet is evidently the same species.

Sp. 35. Atomaria.—A Sphæridium of Fabricius, and a Cercyon of Dr. Leach.

CASSIDA, Linneus.

The beetles belonging to this genus are usually called Shield or Tortoise Beetles; they are exceedingly numerous, and appear to have attracted little attention compared with other groups, although the singularity of form, both of the larvæ and perfect insects, are well worthy of investigation. They are herbivorous in their habits. Some of the species are diaphanous; others again are ornamented with various colors, spots, fasciæ, &c Many of them while alive, are enriched with gold and silver markings, which disappear when dead; these tints may be partially restored by immersing them in scalding water.

- Sp. 9. Cruciata.—Now of the genus Aspidomorpha, Hope; the characters of the new genera created at the expence of the original Cassida, will be found more fully treated of among the Fabrician Cassidoidea.
- Sp. 10. Bifasciata.—I have little doubt that this species is a Thyreaspis, one of the new genera I have given the characters of: Vid. further remarks on the Fabrician Cassidæ.
- Sp. 17. Grossa.—This is the largest species of Cassida known. I separate it from others under the name of Calaspis, from $Ka\lambda os$ and $A\sigma \pi us$. The details will be found under the Fabrician Cassididæ.
- Sp. 19. 7-guttata.—No notice of this species is to be found in Schonherr's Synonymia Insectorum,

nor does it appear in the Systema Eleutheratorum. I record it merely as a Cassida. In Gmelin's Systema, the following note occurs:—" Habitat in India, An Varietas Blattæ Petiverianæ? Brunnich."

Sp. 27. Discoides.—Probably a misprint; read Discoidea.

Sp. 28. Petiveriana.—This insect is a Cockroach, and belongs to the order Dermaptera; it is now ranged under Corydia of Serville, one of the genera of Blattidæ.

Sp. 30. Bipustula.—Probably an error of the press, instead of Bipustulata.

Sp. 31. Angustata.—Probably a true Cassida. This species must not be confounded with Olivier's Angustata, which is only a variety of Selenis Perforata of Fabricius.

Coccinella, Linneus.

The insects belonging to this genus are commonly denominated Lady Birds, we are familiar with them from our childhood; they deserve our attention also in later years; and if we encouraged the breeding of them to some extent, we might find the benefit to be derived from them, in saving annually the devastation occasioned by the hop blight. They should be collected in the Autumn in great numbers by sweeping the herbage, &c. with a hoopnet. In the country we frequently see them congregated together in great numbers behind the window-shutters; many pass the winter in the crevices, and under the bark of trees; others again hybernate in old walls. In the out-houses of our farms, logs

of wood, and damaged bark, which is useless for other purposes, might be heaped together; the insects which are gathered in the autumn should be scattered over it, and there left to select their favorite quarters. In the spring, those which survive the winter, may be gathered together and turned out in the middle of the hop-yards, where they will naturally disperse themselves and attack the blight they are accustomed to feed on.

COCCINELLA, Linneus.

- Sp. 1. Marginata.—This is one of the gigantic species of the genus; it is abundant in the Brazils, and ought to be considered as the type of the genus.
- Sp. 2. Surinamensis.—Now an Ægithus of Fabricius, one of the genera of the Erotylidæ; the remaining species of Coccinella mentioned by Linneus, are most of them well known in England.
- Sp. 6. Unipunctata.—This insect is undoubtedly a Cercyon of Dr. Leach.
- Sp. 15. 7-punctata.—I have received this insect from various parts of Europe, from Africa, Asia, and America; those from the East Indies correspond exactly in every point with our English specimens. After examining minutely more than 300 individuals from the collection of General Hardwicke, and comparing them with double that number of British specimens, I could only rarely admit of a variety; I am inclined to think therefore, that this insect enjoys an universal range. The Coccinellæ

are known at times to migrate. Can we account for the wide range of this insect by migration? I can scarcely imagine that it has been imported into other countries by commerce.

Sp. 41. Cacti.—This insect belongs to Dr. Leach's genus Chilochorus, and inhabits South America, The Coccinella Cacti of Marsham, is evidently a distinct species.

CHRYSOMELA, Linneus.

The genus Chrysomela derives its name from many of the species belonging to it resembling golden apples; some of them, particularly those of the genus Eumolpus, are occasionally worn by the South American ladies, strung like beads into necklaces. The original genus of Chrysomela, (so constituted by Linneus,) included insects of various other families, such as Erotylus, Cyphon, Diaperis, Endomychus, Mycetophagus, Allecula, Melandrya, Cistela, Lagria, Tillus, and others. Later writers, however, have very properly detached from this magazine several well-established genera: much requires to be done in subdividing it more accurately than has yet been attempted. The Chrysomeloidea, as a group, presents us with very varied forms. is probably richer also in species than any other group of our acquaintance, not excepting even the Curculionidea. As to magnitude, they rarely attain to it. Many of the species are gregarious, while others again are solitary in their habits. The whole of them I believe to be herbivorous feeders. Occa-

sionally they abound in incalculable numbers, destroying in their course the produce of our gardens and farms. The well-known Haltica Nemorum, or Turnip Beetle, frequently produces a failure of the crops intended for the sustenance of our cattle in winter. The evil may be early discovered, as the cotyledonous leaves will be found drilled with small holes, the result of which attack is that the plant seldom arrives at perfection; in some instances they are totally devoured. It is no unusual occurrence to re-sow the ground, which I have known done three times, and without any better success. The turnip crop must be considered a very precarious one, one that greatly depends for its success upon rain. To obtain it the ground should be highly manured, the seed should be sown after rain, and if the season is dry, well watered when the plants make their appearance. I have heard it stated that turnips always succeed well near a mixen heap; if such is really the case, may we not attribute the cause either to the excess of manure, or to the smell of it? If to the latter, strong smelling manures, such as decayed fish, might probably be used with advantage, and particularly in those counties adjoining the sea. The reader is referred to the Transactions of the Entomological Society of London for remarks on Haltica Nemorum, by Mr. Henry Le Keugh; also to a second paper on the Ravages of the Turnip Fly, with Experiments, by T. S.-Vol. 2. part the second, page 168.

CHRYSOMELA, Linneus.

- Sp. 1. Gigantea.—Now an Erotylus of Fabricius; the locality stated by Linneus is India. It is found only in the New World, and not in the Old.
- Sp. 5. Tanaceti.—This insect appears to abound chiefly in marshy lands. I have known farmers consider it, when in abundance, as a proof that the soil was cold, and wanted drainage.
- Sp. 8. Ænea.—Linneus says of this species, hanc "præcedenti (sc. Chr. graminis) copula junctam." Vidit D. Muller.
- Sp. 9. Alni.—Now an Adimonia of Schrank. "Hanc antecedenti junctam vidi ipse," speaks Linneus. The above and present instance are the two earliest notices of irregular copulation I believe on record. Several others are to be found mentioned in later entomological publications.
- Sp. 15. Minutissima.—No reference is made in Schonherr's Synonymy to this insect. I am at a loss to conjecture to what genus to apply it, without it is a Trichopteryx of Mr. Kirby.
- Sp. 17. Cerealis.—Still a Chrysomela. It is probable that wherever this species abounds there alpine vegetation will occur. It is taken on Snowdon, at considerable altitude, and I believe will be found also on the Wicklow mountains, in Ireland, if it has not already been discovered there. A species closely allied to Cerealis is sometimes brought to this country in the cork imported into England from Spain.

Sp. 38. Sanguinolenta. — Still a Chrysomela. More than one species under the above name will be found in our British cabinets. Those from Yorkshire differ in sculpture considerably from the specimens taken in the county of Middlesex.

Sp. 41. Castanea.—This insect appears amongst the "species dubiæ" of Schonherr's Synonimy; and if not a Doryphora, belongs to some of the numerous forms of South American Chrysomelidæ.

Sp. 45. 3-maculata. — According to Illiger's Magazine this insect is a Chrysomela; it deviates from the type, and will probably form a sub-genus.

Sp. 46. Americana.—Still a Chrysomela. Why it is called Americana seems doubtful. Linneus gives Barbary as its true locality; Fabricius America and France; and the Baron De Jean adds that of Spain.

Sp. 49. Sacra.—Probably a Phytodecta of Kirby. In Townson's Travels in Hungary, page 170—98. there will be found a reference to this species.

Sp. 69 and 70. Surinamensis.—This and the following species, S-littera, I have given at present as Halticæ. They evidently belong to distinct genera; and to the above insects may also be added Ch. Æquinoctialis, differing also considerably in form.

Sp. 80. 4-pustulata.—According to the Linnean cabinet the above species is a true Mycetophagus of Fabricius.

Sp. 100. Cupræa.—Evidently a mistake of the press; the word should have been printed Capreæ.

Sp. 109. 8-punctata.—This insect occurs among the "species dubiæ" of Schonherr, and reference is given to the Amæn. Acad. 6. p. 394. n. 17.

Sp. 121. Inda.—According to Schonherr Inda belongs to the genus Sagra. I am unacquainted with the species.

Sp. 122. *Elongata*.—This species is evidently a Tillus of Fabricius.

HISPA, Linneus.

The insects of this genus are amongst the most singular and grotesque specimens of our cabinets. Their metropolis appears to be oriental India; several of them belonging to the New World require to be separated from Hispa, and formed into sub-genera.

LINNEAN SPECIES.

Sp. 3. Bihamata.—Evidently one of the genera belonging to Hispidæ. It seems to have been the intention of Linneus to have made this insect the type of a new genus. His ample Latin description, after the species had been described by him, may suffice perhaps instead of others characters.—Vid. page 604.

BRUCHUS, Linneus.

The insects belonging to this genus may properly be designated Seed Beetles. Fortunately in England we are not so much infested by them as the neighbouring countries of the continent. Our crops of pease and beans frequently suffer from their ravages. Nearly 200 species will be found in the different European cabinets. For an account of the genera belonging to Bruchus, the Entomologist is referred to the elaborate work of Schonherr, now in the course of publication.

LINNEAN SPECIES.

- Sp. 1. Pisi.—Still a Bruchus. I am inclined to think that this insect was imported into England, and that originally it inhabited the New World, and not the Old. It has at any rate become naturalized, and causes great destruction to the crops of beans and pease.
- Sp. 7. Pectinicornis.—Still a Bruchus. It is mentioned by Linneus as inhabiting Barbary and China. I have repeatedly taken it alive in England, as well as various other species, which are brought to this country in seeds.

Curculio, Linneus.

This is one of the most numerous and most important groups belonging to the Coleoptera. It is supposed that the species already contained in the different European collections amount to more than four thousand, and this number is evidently far short of what may yet be expected to occur. For ample information respecting families belonging thereto, the reader is referred to the genera and species Curculionidum, by C. H. Schonherr, certainly the most valuable entomological work of

modern times. The accurate descriptions of the species cannot well be surpassed.

LINNEAN SPECIES.

- Sp. 1. Palmarum.—Now of the genus Calandra of Fabricius. The larvæ, or grubs of this insect, are commonly eaten by the natives in the West Indies; it is there denominated Grugru, and by the English it is called Palmworm. Madame Merian informs us that they are roasted by the natives, and esteemed, when properly cooked, rich and delicate eating. Linneus, in a note to this species, adds, "Larvæ assatæ in deliciis Habentur."
- Sp. 8. Badensis.—I am unacquainted with this species, but suspect it to be an Otiorhynchus of modern days.
- Sp. 14. Purpureus.—It is with a doubt that I give the generic name of Rhynchites of Schonherr to this species.
- Sp. 16. Granarius.—Now a Sitophilus of Schonherr. Wheat infested by this beetle was submitted to 135° of Fahrenheit, which entirely destroyed them; it was then sifted and cleansed from these noxious insects. The bread was not much the worse; and the seed, which had been subjected to the heat, when sown, came up very freely.—For an interesting notice on the Corn Weevil, the reader is referred to Mr. W. Mills' Memoir, published in the first volume of the Entomological Transactions, at page 241.
 - Sp. 18. Barbicornis.—Linneus mentions Asia as

the country from whence this insect was received. It is evidently a South American species, and inhabits Cayenne.

Sp. 19. Pini.—A Pissodes of Germar. Linneus informs us, "Vidi copula junctas, C. Pini et Abietis." Now, according to the modern arrangement of the genera of this family, the former belongs to Pissodes of Germar, the latter to an Hylobius of the same author. In the catalogue of the Baron De Jean nearly fifty genera intervene. The above arrangement therefore must be extremely artificial, at least if there is any truth in the assertion that only species of the same genus will copulate. Here is evidence to contradict that assertion; and other instances might be adduced to corroborate the authority of Linneus, viz. that insects of different genera will mingle. As to any result arising from it, that appears to be, according to my views, altogether improbable. Such opinions I have heard brought forward, certainly not substantiated; and should they be, what genus of authors will stand, probably not one.

Sp. 34. Paraplecticus.—Now a Lixus of Fabricius. The following short notes are attached to this species,—" Larva intra caulem, sæpe sub aqua hæret," which circumstance I can substantiate; "Equis Paraplegia caussari dicitur, antidotum stercus suis." With regard to the latter remarks, I am not aware that they have of late been observed, and therefore introduce them here with the hopes of ascertaining the fact.

Sp. 49. Mucoreus.—I cannot give any information respecting this insect. If it comes from the New World, it is likely to be an Heilipus,

Sp. 53. *Depressus*.—I have recorded this species as a Cryptorhynchus; it may however be an Heilipus.

Sp. 74. Argyreus. — This species may be a Cratopus of Schonherr. There are several Linnean Curculionidæ, unknown to the above assiduous writer. As a copious supplement may shortly be expected, some of the doubtful species will no doubt be ascertained.

Sp. 77. Speciosus.—It is with doubt that I record this species as a Rhigus. There seems to be a difficulty respecting its true locality, I regard it as belonging to the New World.

Sp. 94. Abbreviatus.—I suspect that this insect may be a Sphenophorus of Schonherr.

ATTELABUS, Linneus.

This is certainly the most imperfect of all the genera established by Linneus; as under the name of Attelabus, one of the Curculionidea, we meet not only with Carabidæ and Tillidæ, but with Upis belonging to the Tenebrionidæ, and Spondylis, which is a longicorn beetle. As the species offer nothing worthy of remark, I pass on to the Longicorns, comprehended by Linneus under the term of Cerambyx.

CERAMBYX, Linneus.

The long-horned beetles may be remarked as insects almost unrivalled in size; indeed, they are only surpassed in magnitude by some few of the Mantidæ; as to variety of form, they are not very remarkable, having generally cylindrical bodies, and delicately attenuated limbs. Their antennæ are sometimes pectinated, offering a considerable difference with regard to their structure. The thorax and elytra are frequently armed with spines, and from the presence or absence of armature, many of the genera have derived their names; nearly the whole of the family, in their earlier stages, exist in timber, under the form of white worms closely resembling maggots, the head being usually yellow or brown. In the Old World as well as the New, their grubs have afforded a rich repast to the civilized epicurean, and no less dainty relish to the African Bushman; they are eaten also, at the present day, by white and black people in various parts of the world. The grub of Prionus Coriarius is generally believed to have been the Cossus of the Romans. The Makokko beetle is highly rated as a luxury in Surinam. The Montac worm is a favorite at the Mauritius. In Africa, the larva of Omacantha Gigas when roasted, forms an article of food; and in Asia, various species of Lamiadæ, are eaten by the natives of Travencore and Ceylon. It is not by yielding food only that these insects are serviceable to man; they are in tropical countries extremely useful—they tend to diminish the excess of luxuriant vegetation. As pioneers, they perforate in all directions the monarchs of the forest; the rains during the Monsoon lodge in their excavations and tunnels, and soon produce decay in the heart of the tree. The white ants and other insects follow in their track, and soon reduce them to an almost impalpable powder; and really without these most useful insects abounded, vegetation in a rich and generous soil would soon overspread the land, and nothing but an interminable forest would every where predominate. To the longicorn beetles then, we are greatly indebted for keeping in check an exuberant vegetation. It is time however, to allude more particularly to the species mentioned by Linneus.

LINNEAN SPECIES.

- Sp. 1. Longimanus.—The locality mentioned by De Geer, is India, and by Linneus, America; it evidently belongs to the New World, and occurs abundantly in Cayenne.
- Sp. 7. Coriarius.—Now a Prionus of Geoffroy; according to Amoreux, the larvæ of this species were antiently eaten by the Romans under the name of Cossus.
- Sp. 13. Atratus.—Probably a true Prionus.—Vide—Gronovius, tab. 14, fig. 9.
- Sp. 17. Planatus—Now an Uleiota of Latreille, who has changed the specific name to Flavipes.
- Sp. 19. Ammiralis.—Probably an Hamaticherus; it is doubtful if Linneus ever saw this insect, it was

described merely from a drawing sent to him from Surinam by L'Ammiral. It seems that Schonherr considers this insect as a Saperda: the description given by Gmelin induces me to regard it as one of Stenochoridæ.

- Sp. 25. Ferrugineus.— An insect closely resembling this species I have lately received from the vicinity of Bombay: it appears to be an Hammaticherus of Serville.
- Sp. 26. Depressus.—The true locality of this species is South America, and not Coromandel, as reported by Degeer.
- Sp. 34. Moschatus.—As I regard this insect as the type of Cerambyx, I retain that name, which appears to have been abandoned by the French writers. Monsieur Serville considers it as belonging to his genus Aromia.
- Sp. 37. Ædilis.—Monsieur Serville applies the name of Ædilis as the type of the genus, and has consequently changed the specific name to Montana. As the insect is more abundant in the plains, I suggest the adoption of Vulgaris, instead of Montana.
- Sp. 44. Coquus.—In Gmelin's Systema and in Schonherr's Synonymia Insectorum, this insect is ranged under the genus Lamia. I am totally unacquainted with the species, and record it therefore as a Lamia with a doubt.
- Sp. 53. Juvencus.—This insect is probably a Saperda. The concise description given by Gmelin leads me to regard it as such; first from the thorax being unarmed, and secondly as it is compared in

the Systema of that author with Saperda Carcharias, which it rivals in magnitude. There is no notice of this species in Olivier's work.

- Sp. 54. Surinamus.—Now the type of Monsieur Serville's genus Achryson. Fabricius named different varieties of this insect,—Pallens, and Circumflexum, and Olivier, changed Surinamus to Surinamensis.
- Sp. 61. Ramphygeus.—Now an Eburia of Serville. Fabricius has changed the specific name to 4-maculata. I am inclined, however, to retain the Linnean name.
 - Sp. 63. Zonarius.—I am totally unacquainted with this insect. I suspect it belongs to the Stenochoridæ, although I am in doubt to what modern genus I can assign it, it may be an Elaphidion of Monsieur Serville. I record it as a Stenochorus.
 - Sp. 66. Hispicornis.—This species I regard as a sub-genus allied to Callidium. Schonherr makes it a Stenochorus, Gmelin a Calopus; for the present I give it as a Callidium.
 - Sp. 68. Luridus.—Now a Tetropuim of Mr. Kirby. The type of this sub-genus is Callidium triste of Fabricius. The Baron de Jean has, in his last catalogue of 1837, given the manuscript name of Isarthron, comprehending under it various species. It is no unusual occurrence to find various insects ranged under barbarous Greek and Latin names, when their generic characters are unpublished. I think that nearly half of the genera

designated by De Jean as distinct, have names applied to them without any of the characters being published; I adopt therefore the name of Tetropium, published by my friend the Rev. William Kirby, in his Fauna Boreali Americana, where the details will be found accurately described; a work certainly not sufficiently appreciated in our own country as it ought to be: fault has been found with it by those who know little of exotic forms. If Mr. Kirby has formed his types of genera from specimens in his own collection, and has not the opportunity of knowing what has been already published by others (as he lives almost entirely in the country), it only corroborates the views of those Entomologists who have preceded him. There can be little doubt that Mr. Kirby is too profound in science to adopt visionary theoretical views. The Fauna Boreali Americana is the publication of an Entomologist, who is an octogenarian, and I have no hesitation in stating that few naturalists living, if any, at Mr. Kirby's extraordinary age, have their faculties less impaired. Where is the individual that could publish, in this country, such a Fauna? That it has errors no one will doubt, (what work has not?) Let those however who find the greatest fault look to their own inferior publications, and then consider that some merit is due to a veteran in science; one whose name will certainly be as devotedly cherished in England as Latreille is deservedly in France, " ferat palmam qui meruit."

Sp. 71. Auratum.—Schonherr regards this species as a Cerambyx; Gmelin ranks it as a Callidium, and compares it with Cal. Violaceum. With the latter authority I am inclined to agree.

Sp. 76. Bajulus.—Now an Hylotrupes of Serville. I have received this insect from New Holland. Linneus considers it as European, Kalm regards it as a North American insect. I do not presume to state that originally it was an English species; that it is now naturalized and abundant about timber-yards cannot be doubted. The Australian specimens accord entirely with those I have taken in this country; at least I have been unable to detect any specific reference.

Sp. 78. Liciatus.—Now a Clytus of Fabricius. The insect is named by Fabricius Hafniensis, and as Liciatus is certainly the same species I adopt the Linnean name.

Sp. 81. Castaneus.—This insect, if I remember rightly, is a Monacantha of Kirby, one of the Stenochoridæ; Schonherr refers to Panzer's edition of Voet. 3, page 46. 75. t. 17. I have been unable to obtain a sight of the above work.

Sp. 83. Ebulinus. — Probably a Certallum of Megerle. In Gmelin's Systema, at page 1856, this insect is compared with Cer. Iatalicus in regard to its form. By some writers, Italicus is considered only a variety of Certallum ruficolle, It must here be stated that another species, named Ebulinus, belongs to the modern genus Dorcasomus.

LEPTURA, Linneus.

The genus Leptura, according to the species described in the Systema of Linneus, is a welldefined family. It is true that some species of Donacia and Callidium will be found united with them: it is nevertheless one of the best characterized of all the genera established by the above author, and by later writers. Pachyta, and other various forms, are still considered as justly belonging to the family. It seems almost peculiar to Northern Europe and America; some species, however, will be found extending far into South America, and one or two denominated as belonging to Toxotus, will appear in catalogues as inhabiting Madagascar. They deviate certainly from the typical genera. The metropolis of Leptura may justly be considered Northern Europe or Northern America. Many of our English specimens have their exact representatives in the United States, and by various Entomologists, some species are considered identically the same. Some appear to be found in both hemispheres.

LINNEAN SPECIES.

Sp. 6. Revestita.—This insect is certainly the Lep. villica of Fabricius. It is remarkable that the Baron De Jean, and other French writers, quote Fabricius repeatedly, while they neglect the Systema of Linneus. Schonherr also, in his Synonymia Insectorum, makes the name of Revestita secondary

to Villica. I am inclined to retain the Linnean name before the Fabrician.

Sp. 8. Sericia.—A typographical error; no doubt in place of Sericea. There can be little doubt that this insect belongs to the genus Donacia.

Sp. 17. Rustica.—This insect appears to be a Clytus. The locality of North America seems doubtful.

Sp. 25. Linearis.—The last species of the longicorn beetles, mentioned in the Systema, belongs to a genus closely allied to Saperda. It is in De Jean's catalogue called an Oberea of Megerle, and is one, I believe, of the numerous genera named by that individual, without any published characters.

NECYDALIS, Linneus.

The generic term of Necydalis has been entirely abandoned by some writers on Entomology. No mention is made of it in the Baron De Jean's last catalogue, a work in which other old Linnean names are too readily given up, whilst others are adopted in their room. The insects included under the term Necydalis, in the Systema, are few in number, not exceeding eleven. The singular form of Atractocerus has been associated with them, and certainly appears quite mislocated.

LINNEAN SPECIES.

Sp. 1. Major.—Now a Molorchus of Fabricius. If the latter term is used instead of the Linnean

Necydalis, we must abandon the term of Stenopterus adopted by Illiger.

Sp. 7. Glaucescens.—This species appears to be only a variety of Stenopterus rufus of Illiger.

LAMPYRIS, Linneus.

Under the above term are comprehended various insects, which are called Glow-worms. There will be found amongst the species mentioned by Linneus nearly a third part of them belonging to other genera, which cannot be considered as true Lampyridæ, as they possess no luminous properties. The European species are few in number, while those of the tropics are numerous; some of them indeed of considerable size. In Italy the Glow-worm is called by the English Firefly, and by the natives of the country Luciola. The latter name is adopted generically by Comte de Castelneau, and Italica may be considered as its type.

LINNEAN SPECIES.

Sp. 13. Minuta. — This is now a Cyphon of Paykull, and one of the genera belonging to the family Cyphonidæ of Mr. Stephens. The Cyphon Pallidus of Fabricius appears to be only a variety of minuta of Linneus; the remaining species belong at present to Lycus, and other allied genera. I proceed therefore with the next genus, namely, Cantharis.

Cantharis, Linneus.

The above name should only be applied to the true vesicatory insects; I therefore adopt the term used by Degeer, namely, Telephorus. Nearly the whole of the species detailed by Linneus belong to the Malacododermata. There are about forty different indigenous British species: the exotic ones are considerably more numerous. They prey chiefly on insects for food; they will however sometimes attack vegetable as well as animal food. Little has been done in subdividing the family into genera. The Baron De Jean, in his last catalogue, gives various generic names, without detailing their characters; I am therefore obliged to object to their adoption.

LINNEAN SPECIES.

- Sp. 1. Sanguinolenta.—This remarkable insect belongs to the family Horiadæ, and is of the genus Cissites of Latreille. It occurs at Bombay, Madras, and Ceylon, from which places I have occasionally received it.
- Sp. 19. Tropica.—This insect now belongs to the genus Calopteron, Laporte. The species of it differ considerably from Dictyoptera of Latreille; the generic details will be found published in the Hist. Nat. des Animaux—Articulees, page 261.
- Sp. 21. Violacea.—I consider this insect to be an Ischnomera of Stephens. It has never fallen under my notice. Guinea appears to be the locality given to it.

ELATER, Linneus.

The insects belonging to the above genus are usually in our country termed Skipper, or Click Beetles. They are exceedingly numerous, and more than a thousand species will be found in the different European cabinets. The tropical species are many of them of considerable magnitude, and compared with the Buprestidæ they must yield to them in splendour and colouring, although some of them are richly metallic, and are diversified with singular markings. The larva, of one of these beetles belonging to the genus Cataphagus, commits great ravages on our crops. They are chiefly rootfeeders, and are known to farmers under the name of Wireworms. In some years they have greatly damaged the wheat, in others the hop plants. 1838, the potatoe crop in the counties of Salop. Hereford, and Worcester, were reduced nearly to a third of the usual annual produce. The most effectual method of getting rid of them is to employ children to handpick them, having previously attracted them to baits, by placing potatoe slices near their haunts. The larvæ, when collected. should be destroyed by scalding water, and may then be given to poultry, or thrown away.

LINNEAN SPECIES.

Sp. 1. Flabellicornis.—Now a Tetralobus of Serville. Several species have been confounded with

the above insect. There appear to be two distinct genera belonging to the family, if not more; first, those species which differ in their antennæ, and have their elytra at the apex rounded; and secondly, those which have the wings at their extremity acuminated: seven species have fallen under my inspection. The locality mentioned by Linneus is India, now it is evidently from Africa, and not from Asia.

- Sp. 2. Speciosus.—Now an Alaus of Escheholtz. I have received it from Ceylon, and also from Madras.
- Sp. 7. Ligneus.—Now a Pericallus of Serville, and a Semiotus of Eschcholtz. The latter name should be adopted, as Pericalus is previously used by Mr. W. Sharp MacLeay, in his Annulosa Javanica. Semiotus of De Jean's catalogue, should probably be written as Semeiotus.
- Sp. 11. Syriacus. I am totally unacquainted with this species, and record it as an Elater with a doubt.
- Sp. 12. Cruciatus.—Now a Selatosomus of Stephens. I have received several specimens of this species from North America, and after comparing them with our European specimens, I cannot discover the slightest difference.
- Sp. 35. Pulchellus.—Now an Hypnoidus of Stephens. Eschcholtz has given to it the generic name of Hypolithus, which term has previously been used, and must therefore be abandoned.

Sp. 36. Tetrastichon.—This insect, according to my views, is a true Buprestis. Mr. Kirby, however, considers it as a Perotis of Megerle.

Sp. 38. Dermestoides.—This insect is the same species as Elater clavicornis, Oliv. and is the type of Latreille's genus Throscus.

Buprestis Linneus.

According to the Systema, Cicindela intervenes between Elater and Buprestis; and as the two former have been treated on, we will proceed with the latter. The Buprestoidea comprehend various families: it is probable that there are 1500 species in the continental collections. Many of them are large, many again diminutive; the majority are adorned with gold, and various colours. In metallic splendour they equal the Eumolpidæ. In the East Indies we meet with the giant Sternocera, and brilliant Chrysochroa; in Africa with nearly a similar representative as to form in the genus Julodis; the latter is remarkable for its dense clothing. In Australia we find various other forms peculiar to that comparatively unexplored continent; more than a century of species from that locality have already been described by me, and many others have since been added to my collection. The New Holland species are characterised by gaudy colours, the predominating being chiefly orange and crimson.

LINNEAN SPECIES.

Sr. 1. Gigantea.—In the Systema, Asia as well

as America is given as its native country. The form is peculiar to the New World, and is never found in the Old.

- Sp. 4. Stricta.—Probably a Pelecopeephalus of Serville. Gmelin mentions the locality of South America as well as India, Iregard it as belonging to the former.
- Sp. 8. Rustica.—All species of Buprestidæ allied to Rustica should retain the name of Buprestis. Escheholtz has given them the name of Ancylocheira, and Mr. Kirby that of Anoplis.
- Sp. 10. Aurulenta.—The locality of Linneus is Carolina; it belongs to Europe, and not America. It appears that the Bup. aurulenta of Linneus is the Decora of Fabricius.
- Sp. 18. Tristis.—Probably a true Buprestis? In the Eleutheratorum the locality is, habitat in Indiis. Schonherr imagines the East Indies; I regard it as a species from the Cape of Good Hope.
- Sp. 23. and 24. Minuta.—By some mistake this species was twice described in the Systema Naturæ; it belongs at present to the genus Trachys.
- Sp. 26. Atra.—Probably an Agrilus, and only a dark variety of Agrilus Viridis. As Dyticus and Carabus are treated of already in my former Fasciculus, I pass onwards to Tenebrio.

TENEBRIO, Linneus.

The genus Tenebrio, according to the Systema, is one of the most faulty of any attempted by Linneus. He has thrown together insects of various

families, merely because they have their elytra united together, consequently we find several anomalies. We meet with Carabidæ, Scaritidæ, Antherophagus belonging to Engidæ, and Trogosita one of the Xylophaga; and in addition to the above we have to mention also Timarcha, decidedly one of the Chrysomelidæ: it appears therefore that Tenebrio was a Magazine genus, and must be considered in that light in the Linnean arrangement.

LINNEAN SPECIES.

- Sp. 2. Molitor.—In England the larvæ of these beetles are called Meal-worms: they abound in granaries, bakehouses, &c.; in kitchens frequently they breed in great numbers under the hearth-stones; from the last circumstance I am inclined to regard it as originally exotic; it has probably been introduced by commerce. As we find other species of the genus are imported occasionally from the East Indies and New Holland, so formerly perhaps was the above species.
- Sp. 3. Chalybeus.—The locality mentioned by Linneus is Guinea. The insect is an European species, and has been taken in England.
- Sp. 6. Barbarus.—From examining this species in the Linnean cabinet, I give it as a Trogosita.
- Sp. 8. Cursor.—In the tables I have recorded this insect as a Scarites of Fabricius. It is probably an immature species of Dyschirius.
 - Sp. 9. Erraticus.—I consider this insect to be a

species of Megerle's genus Uloma: Schonherr doubts it being a true Tenebrio.

- Sp. 12. Minutus.—I know not to what genus this insect can be applied, without it is a Latridius or Corticaria.
- Sp. 18. Gibbus.—A note in Schonherr's Synonymia Insectorum leads me to consider this species as a Zabrus.
- Sp. 23. Linearis.—In Schonherr's Synonimy this insect is ranged under the genus Tenebrio, with the following note appended to it—"An hujus generis?" I consider it as unknown to modern Entomologists.
- Sp. 28. Variabilis. There is great perplexity and doubt relating to this species. According to Latreille it is a Moluris. Illiger considers it the same as Pimelia Chrysomeloides of Herbst., and probably it is the same as P. Scabra of Fabricius. If it is the Pim. Variolaris of Olivier, it is an Adesmia. The Baron de Jean regards it as a Calcar, and I feel inclined to think that he is right in his conjectures.
- Sp. 31. Tibialis.—I was inclined to consider this species as an Acanthomera of Lattreille; from a reference in my MSS., nearly obliterated, I have reported it as a Gonopus of Dr. Fischer. I am unable to give the authority, as the name was written in pencil, and is now nearly obliterated.

Meloe, Linneus.

All the species belonging to this genus are vesi-

catory insects; they are used for medicinal purposes in parts of Europe instead of the Cantharides. My friend Dr. Leach, in the 11th volume of the Linnean Transactions, published a Monograph of our British species. It has been stated that Meloe was confined to Europe and its islands; that opinion is erroneous, as I have received some from North as well as South America. The larvæ of these insects are supposed to be parisitical on the Hymenoptera, and Monsieur Serville is reported to have corroborated the statements of Degeer from actual observation. Monseiur Latreille, Mr. Kirby, and other Entomologists, doubt the parasitical nature of the larvæ of these Meloes. Mr. Newport has lately directed his attention to the subject, and we may hope therefore for a solution of a question which still remains undecided, "adhuc sub judice lis est."

LINNEAN SPECIES.

- Sp. 1. Porscarabæus.—According to Dr. Leach this is the type of the genus Proscarabæus, the specific name therefore must be changed. He has given it that of Vulgaris.
- Sp. 8. Chrysomeloides.—This insect is recorded by Schonherr among the species Dubiæ of the genus Lytta; in Gmelin's edition it ranks under that of Mylabris. I undoubtedly prefer the authority of Schonherr, although in the tables I give it as a Lytta, with a query?
- Sp. 13. Marci.—This insect appears to be only a variety of Hylecætus dermestoides of Fabricius.

Sp. 14. Monoceros.—Now the type of the genus; the specific name I change to Vulgaris. Other writers give the generic name of Notoxus to include the insects belonging to it. I cannot adopt it, as it is used previously by Fabricius himself for one of the genera of Tillidæ.

Mordella, Linneus.

The species of Mordella mentioned in the Systema belong only to three genera. Ripiphorus is a parasite, found in the wasp's nest, and the remaining species are taken abundantly on the umbelliferæ and on other plants. As I have no observations to make on the Linnean species, I pass onwards to the genus Staphilinus.

STAPHILINUS, Linneus.

Under the term Staphilinus will be found the whole of the Brachelytra, commonly called in England Rove Beetles. The species belonging to our British Isles are probably not far from a thousand, about 700 of which have been described. Among them there are very decidedly marked families. It is generally regarded as a carnivorous group, and it is true that some of the larger species feed on carrion; the great majority of them, however, are vegetable feeders. They abound in decayed fungi and rotten wood; others occur in numbers in the recent droppings of cattle, and frequent the dung-heap, around which many of them live. Minute as many of these insects are,

they have nevertheless engaged the attention of various European Entomologists, and it may justly be said that their metropolis is situate in the Northern regions. This genus of Linneus included only twenty-six species. It was early dismembered by Fabricius, who constituted two other genera, namely, Oxyporus and Pæderus; writers have since successfully cut up the group, and arranged them into families. The genera known at present amount nearly to one hundred, and the species in our cabinets greatly exceed a thousand. Although much has been done in regard to the European species, little attention has been paid to exotics; those of Asia, Africa, and America, are comparatively unknown. It is to be hoped that Gravenhorst and Erichson will, ere long, give us their observations on the species belonging to those countries which have hitherto been greatly neglected.

LINNEAN SPECIES.

Sp. 10. Lignorum.—I consider this insect as a Tachyporus of Gravenhorst.

Sp. 13. Flavescens.—Probably a Tachinus. The Staphilinus Flavescens of Fabricius, must not be confounded with this insect. Gravenhorst, whose authority is very valuable, gives us the following note on this species—"Stap. Flavescens, Linneus, in Faun. Suec. No. 850; huc non pertinere videtur, nam similis est Stap. subterraneo (Tachyporo subterraneo)—Confer T. humeralis M. p. 137."

Sp. 17. Cantharellus.—Probably a Stenus, or a genus closely allied to it.

Sp. 19. Sanguineus.—This species, according to Mr. Stephens, is a Bryaxis of Dr. Leach. Monsieur Aube considers it as belonging to his genus Tyrus. The few remaining Staphilinidæ require no observations.

OBSERVATIONS

ON THE

LINNEAN COLEOPTERA,

MENTIONED IN THE MANTISSA PLANTARUM.

The Curculio named Scabricul appears to be a misprint, instead of Scabriculus. It undoubtedly belongs to the genus Trachyphlæus of Germar. Ptychodes trilineatus of Linneus, is the same insect which Fabricius has called Saperda vittata: the original specimens are in my collection, and they evidently belong to Monsieur Chevrolat's genus Ptychodes. The last insect I have to allude to, is Buprestis depressus: it appears to be a Polycesta of Solier, and most certainly belongs to the New World, and not to the Old; the locality of the East mentioned by Forskal, is therefore erroneous: it may probably have been imported from the Brazils in shipping.

REMARKS

C42 (

ON THE

COLEOPTERA

DESCRIBED BY LINNEUS IN THE SYSTEMA NATURÆ.

IN concluding my Observations on the LINNEAN COLEOPTERA, I take the present opportunity of stating my views respecting what we owe to Linneus as a Naturalist generally, and as an Entomologist in particular. From circumstances over which I have no controul, it is probable that I may not be able to treat of the remaining Orders in the same way I have done the Coleoptera; but should leisure be allowed me, most willingly will I attempt it.

It has long been my fixed opinion, that a thorough acquaintance with the writings of Linneus and Fabricius is of the first importance to the Entomologist. Let any individual be well acquainted with species, he may then, without much difficulty, form his genera and families. One of the prevailing errors of the day is a love of creating genera, any difference, however slight, is considered sufficient; and it is to be regretted that exotic forms are rarely, if ever,

taken into consideration. In comparing our indigenous species with those of other countries, it is easy to trace the gradations from one family to another; it is however difficult to decide, in many instances, to what modern genus an insect really belongs; and this arises partly from individuals describing insects without having access to extensive collections. Some writers however hold different views, and there are those who look to groups and and almost entirely disregard species. This is something like a geologist, who would disregard mineralogy and think it unnecessary to be acquainted with the rudiments of that science. But to proceed to the Linnean Entomology.

The Systema Naturæ of Linneus, in my humble opinion, is a work which has contributed more to the immortality of the individual who gave it to the world, and to the advance of the science of Natural History, generally, than any other that can be mentioned; it is undoubtedly the grandest, and by far the most important, of all the works of Linneus. It is not my intention here to enter into a review of all the classes of the Systema Naturæ; I shall restrict myself entirely to the Entomology. I cannot however avoid expressing my admiration of the grasp of mind which conceived the plan, and of the perspicuous and judicious manner in which Linneus methodized the whole: later writers have undoubtedly improved on it, but like the story of Columbus and the egg, they need the merit of originality and invention. The Entomological branch of Natural

History had been so much neglected before the time of Linneus, that little instruction was known; Science generally was in a state of confusion; some few had attempted to detail the Anatomy of Insects, while others had elucidated their metamorphosal characters. The compilations of Aldrovandus and Mouffet may be considered as the chief entomological works of that period, containing much that was valuable, much that was useless. Our countryman Ray it is true, had published his Methodus Insectorum, a very surprising work, (one that will long remain a monument of what devotion to science, and great assiduity, can accomplish;) it was however insufficient for general classification and arrangement, and imperfect in some of its minor points; it needed also the happy invention of Trivial names, and consequently it gave way to the Linnean compendium, entitled the Systema Naturæ. Far be it from me to decry the merits of the illustrious Ray; it is evident to the Naturalist, that had not Ray and his cotemporaries acted as the pioneers of science, Linneus must naturally have been too much engrossed with details; his progress therefore must have been obstructed, if not arrested, and his success in consequence have been problematical.

The Systema Naturæ as a whole, may justly be considered as a most useful catalogue of nature's works. The introduction of specific names was certainly a happy invention of its author, and tended greatly to ensure its success. The arrangement must be considered artificial, and did we view it in any

other light, erroneous would be our judgment. Fault has been found with the subdivisions of animals into five gradations, namely, those of Kingdom, Class, Order, Genus, and Species; in these points I cannot agree with his opponents, as these divisions greatly tend to simplify an artificial classification, although it must be remarked, that in reality none of these gradations actually exist.

With respect to Nomenclature and Orismology, Linneus has been accused of introducing into his writings a variety of terms not warranted by classical authority. In supporting him on this point, it is only necessary to look to the lengthy and tedious descriptions of animals published by authors antecedent to his time. Some of his terms may not be accurately derived from the Greek or Latin, they are however generally so, and sufficiently expressive of the objects intended, and when compared with Fabricius as a writer, or with other authors of that period, he appears quite as the Cicero of his age, while Fabricius is little better than a barbarian. Let any one compare the names of the Orders of the two writers, and then decide on the merits of their respective orismology. As to the Linnean style, it is nervous, expressive, and concise, but in many instances it is too laconic. It will generally be admitted that Linneus had a happy command of language, and no man used it for purposes more successfully. The accuracy and precision of his descriptions rendered Natural History an easy and delightful study, which previously could only have

been regarded as irksome, laborious, and unprofitable; the publication of the Systema, therefore, first rivetted attention, and consequently almost necessarily ensured its success. As to the arrangement of the Entomology of the Systema, it would not be fair or just to compare it rigorously with our latter and more modern Systems. It certainly has its merits. Linneus commences with the Lamellicorns and terminates with the Staphilinidæ; such views have been adopted by others, and are still acknowledged by various European writers. The Latreillian arrangement, commencing with Cicindela and Carabus, is not at all consonant with my views; and as I have expressed them in the preface of the second Fasciculus, I shall not now recapitulate them. It may be remarked, en passant, that the Latreillian System, which by some has been de nominated the more natural system, has its errors, and what system, I ask, has not? Linneus cannot be accused of so outrageously violating the Natural System, as the Prince of Entomologists, and others of the French school have been, by separating the Dyticoidea from the Hydrophiloidea. Their system is, in the above instance, artificial in the extreme.

Let us, however, look to the last Catalogue of the Baron De Jean, the attached pupil of his illustrious Master, and then form an opinion. Between the Hydrocanthares and Palpicornes, (both of them true aquatic groups,) we find the Brachelytra, the Sternoxa, Malacordermata, Tilloidea, and Clavicornea, comprehending a vast number of terrestrial

genera, and containing probably more than 5,000 catalogued species of the present day. We then arrive again at the Aquatic Coleoptera by genera, which may properly be termed Sub-aquatic. Is such an arrangement natural?—certainly not. Linneus, Fabricius, and Olivier, three illustrious Entomologists of different countries, yet of the same period, followed in this instance the natural arrangement; later writers have unfortunately changed these views, and it is with pleasure and satisfaction therefore I record, that our countryman Stephens (no unimportant authority in such matters) has returned to the original Linnean arrangement, and in his wake I willingly follow, as he is, in the language of Barrington, thoroughly an "Out-door Naturalist." It would be a great gain to Entomology if the same writer (when he has finished the publication of our indigenous species) could bestow some of his attention on Exotics.

Other systems soon followed that of the illustrious Swede. Degeer was the first eminent author who trod the path traced by Aristotle and Linneus, the organs of locomotion, (chiefly those of flight) united with the structure of the mouth, being the characteristics belonging to it. Fabricius followed Degeer in introducing the manducatory system derived principally from the organization of the mouth; and had internal anatomy as well as general external form been attended to, it would most likely at the present day have remained unquestioned.

Latreille, whose system has in a great measure

superseded that of Fabricius, next claims a remark. Its chief merit is derived from taking into its consideration the general external structure of insects, regarding every structure of form which appeared prominent, it has received the name of the Eclective System Clairville, Dr. Leach, Mr. William Sharpe MacLeay, successively gave to the world the result of their researches, containing much invaluable matter. The last author relied greatly on the metamorphosal character of insects, and formed his important groups from the larval state of insects. In the Horæ Entomologicæ will be found embodied his opinions, a truly philosophical work-one evincing a great acquaintance, not with Entomology only, but with the classes and orders of the Vertebrata as well as the Invertebrata. The Eclective System, united with the Metamorphosal characters proposed by Mr. MacLeay, required only another addition to perfect it; that has happily been suggested by Mr. Newport in the proposed adoption of the internal anatomy, comprehended under the nervous system. As far as I am capable of judging, the proposed system if rightly followed out, is likely to prove the best of clues to thread the intricate mazes of natural arrangement.

We see then, from the foregoing observations, that Entomological Systems, like specious theories, have been adopted and abandoned; others doubtless will arise, enjoy an ephemeral reputation, and then fade and be forgotten. The system of Linneus

on the contrary, can never entirely be obliterated. His was nearly the only beacon which shed abroad its useful light when all around was enveloped in mist and ignorance; others of greater magnitude may arise on the horizon, and partially obscure the splendour of his radiation. His, will however, still continue to shine in the splendid galaxy of science, contributing much individually to the general diffusion of light, and owing little to other emanations.

CONTINUATION

OF

FABRICIAN COLEOPTERA.

Vid. Vol. I. p. 83.

HISTER, FABRICIUS.

	Fabrician Species.	Country.	Genera of Authors.
1.	Major	Africa	Hister, Linneus.
2.	Inæqualis	Germany	
3.	Unicolor	England	
4.	Bissexstriatus	Austria	
5.	12-striatus	Germany	
6.	Impressus	Denmark	
7,	Nitidulus	Germany	Saprinus, Klug.
8.	Angulatus	S. America	Omalodes, De Jean.
9.	Glabratus	Germany	Sphærites, Duftschmidt
10.	Semipunctatus	Barbary	Saprinus, Klug.
11.	Acuminatus	S. France	Scaphisoma?
12.	Scaber	Spain	Hister, Linneus.
13.	Cyaneus	New Holland	Saprinus, Klug.
14.	Bicolor	P. B. S.	
15.	Brunneus	S. Europe	Hister, Linneus.
16.	Lunatus	Germany	
17.	Sinuatus	Germany	
18.	Purpurascens	England	
19.	Cruciatus	Barbary	Saprinus, Klug.
20.	2-pustulatus	East Indies	Hister, Linneus.
21.	Pulchellus	Tranquebar	Saprinus, Klug.
22.	Erythropterus	Tranquebar	Hister, Linneus?
23.	. Bimaculatus	England	
24.	. 4-maculatus	England	
25.	Æneus .	France	Saprinus, Klug.
26.	. Metallicus	Germany	
27	. 4-guttatus	East Indies?	
00	. Detritus	New Holland	

Fabrician Species.	Country.	Genera of Authors.
29. Abbreviatus	N. America	Hister, Linneus.
30. Pygmæus	England	Dendrophilus, Leach.
31. Sulcatus	England	Onthophilus, Leach.
32. Striatus	S. France	

9. GENUS HISTER, LINNEUS.

33. Rotundatus	Germany	Saprinus, Erichson.
34. Minutus	Germany	Abræus Leach.
35. Fulvicornis	S. America	Epierus, Erichson.
36. Planus	S. Europe	Hololepta, Paykull.
37. Depressus	England	Platysoma, Leach.
38. Corticalis	S. America	Phylloma, Klug.
39. 4-dentatus	S. America	Hololepta, Paykull.
40. Maxillosus	N. America	Oxysternus, Godet.
41. Oblongus	Sweden	Platysoma, Leach.
42. Picipes	Germany	Teretrius, Erichson.
43. Cæsus	Germany	Plegaderus, Klug.

12. GENUS CHELONARIUM, FABRICIUS.

1. Atrum	S. America	Chelonarium, Fabricius.
2. Punctatum	S. America	to the same to

13. GENUS BYRRHUS, LINNEUS.

1.	Gigas	Austria	Byrrhus of Authors.
3.	Elongatulus	Austria	Trogoderma, Latreille.
9.	Semistriatus	England	Simplocaria, Marsham.
13.	Minutus	Germany	Abræus, Leach.

14. ANTHRENUS, FABRICIUS.

1. Pimpinellæ	England	Anthrenus of Authors.
2. Gloriosæ	East Indies	
10. Pubescens	Germany	Trinodes, Latreille.
11. Hirtus	England	
12. Serraticornis	Santa Cruz	Macroprion, Hope.
13. Denticornis	Santa Cruz	
14. Glabratus	Austria	Anthrenus, Fabricius.

16. BOLITOPHAGUS, FABRICIUS.

Fabrician Species.	Country.	Genera of Authors.
1. Cornutus	Carolina	Bolitophagus, Fabricius.
2. Crenatus	Germany	
3. Agricola	Germany England Austria	
4. Armatus	Austria	Bolitophagus.

17. GENUS OPATRUM, FABRICIUS.

1.	Griseum	Italy	Asida, Latreille.
2.	Fuscum	Spain	
3.	Obscurum	P. B. S.	Opatrum, Fabricius?
4.	Porcatum	Barbary	Asida, Latreille.
5.	Sabulosum	England	Opatrum, Fabricius.
6.	Gibbum	England	Heliophilus, De Jean.
7.	Depressum	East Indies	Opatrum, Fabricius.
8.	Lævigatum	New Zealand	
9.	Crenatum	East Indies	
11.	Arenarium	P. B. S.	
12.	Pictum	Austria	Leichenum, De Jean.
13.	Oblongum	Tranquebar	Opatrum? Fabricius.
14.	Clathratum	Cayenne	Opatrinus, De Jean.
15.	Planum	Siberia	Pedinus? Latreille.
16.	Simplex	P. B. S.	Opatrum, Fabricius.
17.	Granulatum	Barbary	Asida, Latreille.
18.	Subterraneum	East Indies	Scleron, Hope.
19.	Ferrugineum	Java	· · ·
20.	Orientale	East Indies	and the second s
21.	Tibiale	England	Microzoum, De Jean.
22.	Strigatum	Tranquebar	Opatrum, Fabricius.
	Hispidum	Sumatra	
24.	Sericeum	Sumatra	Scleron, Hope.
25.	Ovatum	S. America	Trichoton, Hope.
26.	Canaliculatum	Tranquebar	Scleron, Hope.
27.	Minutum	Sweden	Helophorus, Leach.
-	Pusillum	Hungary	Opatrum, Fabricius.

18. GENUS ERODIUS, FABRICIUS.

Fabrician Species.	Country.	Genera of Authors.
1. Testudinarius	P. B. S.	Zophosis, Latreille.
2. Gibbus	Arabia	Erodius, Fabricius.
3. Planus	P. B. S.	Zophosis, Latreille.
4. Muricatus	P. B. S.	
5. Minutus	Tanger	

19. GENUS SCAURUS.

1. Atratus	Egypt	Scaurus, Fabricius.
2. Striatus	S. France	
3. Sulcatus	S. France	Ditomus, Bonelli.
4. Punctatus	Spain	Scaurus, Fabricius.

21. GENUS SEPIDIUM.

1. 3-cuspidatum	Arabia	Sepidium, Fabricius.
2. Variegatum	Barbary	
3. Cristatum	Barbary Arabia	
4. Reticulatum	P. B. S.	Trachynotus, Latreille.
5. Rugosum	P. B. S.	Somaticum, Hope.
6. Vittatum	P. B. S.	Hipomelus, De Jean.

22. GENUS PIMELIA, FABRICIUS.

1.	Striata	P. B. S.	Moluris, Latreille.
2.	Unicolor	P. B. S.	
3.	Flavicollis	P. B. S.	Epiphysa, De Jean.
4.	Gibba	Africa	Moluris, Latreille.
5.	Lævigata	Hungary	Gnaptor, Megerle.
6.	Globosa	P. B. S.	Pimelia, Fabricius.
7.	Glabrata	Germany	Gnaptor, Megerle.
8.	Hispida	Alexandria	Trachyderma, Latreille.
9.	Longipes	Egypt	Stenochara, Solier.
10.	Rustica	P. B. S.	Pimelia, Fabricius?
11.	Muricata	S. France	
12.	Tuberculata	P. B. S.	Acanthomera, Latreille.
13.	Morbillosa	P. B. S.	Stenochara, Solier.
14.	2-punctata	Italy	Pimelia, Fabricius.
15.	Scabra	P. B. S.	Moluris, Latreille.

Fabrician Species.	Species.	Genera of Authors.
16, Grossa	Barbary	Morica, De Jean.
17. Angulata	Alexandria	Pimelia, Fabricius.
18. Echinata	P. B. S.	Cryptochyle, Latreille?
19. Dentipes	P. B. S.	Acanthomera, Latreille.
20. Dentata	P. B. S.	Stenochara, Solier.
21. Orenata	Sapphi	?
22. Porcata	P. B. S.	
23. Maculata	P. B. S.	Cryptochile, Latreille.
24. Serrata	P. B. S.	Stenochara, Solier?
25. Minuta	P. B. S.	Cryptochile, Latreille.
26. Gemmata	. Guinea	Amatodes, De Jean.
27. Canaliculata	Guinea	
28. Costata	P. B. S.	Cryptochile, Latreille.
29. Rugosa	Egypt	Stenochara, Solier.
30. Variolaris	Senegal	Macropoda, Solier.
31. Pygmæa	Sweden	Georyssus, Latreille.

23. GENUS EURYCHORA, FABRICIUS.

1. Ciliata | P. B. S. | Eurychora, Fabricius.

24. GENUS AKIS, FABRICIUS.

Spinosa		
Pillona	Spain	Akis, Fabricius.
Acuminata	Spain	
Reflexa	Egypt	
Collaris	S. France	Elenophorus, Megerle.
Lineata	Siberia	Platyope, Fischer.
Leucographa	Saxony	
Glabra	Egypt	Heliodromus, Brulle.
Punctata	Tangier	Lophoma, Solier.
Abbreviata	Senegal	Thalpophila, Solier.
Angustata	S. France	Tagenia, Latreille.
Orbiculata	S. France	Tentyria, Latreille.
Lævigata	East Indies	Hyperops, Solier.
Filiformis	Barbary	Tagenia, Latreille.
	Lineata Leucographa Glabra Punctata Abbreviata Angustata Orbiculata Lævigata	Lineata Siberia Leucographa Saxony Glabra Egypt Punctata Tangier Abbreviata Senegal Angustata S. France Orbiculata S. France Lævigata East Indies

25. GENUS PLATYNOTUS, FABRICIUS.

Fabrician Species.	Country.	Genera of Authors.
1. Reticulatus	Bombay	Platynotus, Fabricius.
2. Excavatus	Madras	
3. Crenatus	Bombay	
4. Dilatatus	Isle St. Thomas	Selenepistoma, Solier.
5. Variolosus	Africa	Heteroscelis, Latreille.
6. Lævigatus	Morocco	Gnaptor, Megerle.
7. Undatus	Cayenne	Eleodes, Eschcholtz?
8. Serratus	P. B. S.	Machla, Herbst.
9. Rugosus	Mauritania	Heteroscelis?
0. Dentipes	P. B. S.	Heteroscelis, Latreille?
1. Morbillosus	Austria	Asida, Latreille.
2. Granulatus	P. B. S.	Platynotus, Fabricius?

26. GENUS BLAPS, FABRICIUS.

1. Gages	Portugal	Blaps. Fabricius.
2. Sulcata	Egypt	
3. Mortisaga	England	
4. Obtusa	England	
5. Spinipes	Hungary	Pelorus, Bonelli.
6. Calcarata	P. B. S.	Acanthomera, Latreille.
7. Tenebrosa	Germany	Zabrus, Clairville.
8. Buprestoides	P. B. S.	Tentyria, Latreille.
9. Dermestoides	Saxony	Pedinus, Latreille.
10. Emarginata	Morocco	Pandarus, Megerle.
11. Tristis	Barbary	
12. Femoralis	Germany	Pedinus, Latreille.
13. Tibialis	P. B. S.	Gonopus, Fischer.
14. Crenata	Coromandel	Platynotus, Fabricius.
15. Glabra	England	Crypticus, Latreille.
16. Punctata	S. American Isles	Blapstinus, De Jean.
17. Clathrata	Cayenne	Opatrinus, De Jean.
18. Metallica	Carolina	?

27. GENUS TENEBRIO, FABRICIUS.

1. Gigas 2. Punctulatus	Cayenne East Indies	Nyctobates, Guerin. Tenebrio, Linneus?
		Odontopus, Silbermann.

Fabrician Species.	Country.	Genera of Authors
4. Sulcatus	Guinea	Nyctobates, Guerin.
5. Curvipes	Germany	Tenebrio, Fabricius.
6. Serratus	Guinea	Priopus, Hope.
7. Digitatus	Sierra Leone	Chiroscelis, Lamarck.
8. Molitor	England	Tenebrio, Fabricius.
9. Obscurus	Germany	
10. Impressus	Java	Nyctobates, Guerin.
11. Nitidulus	East Indies	
12. Lævigatus	Equin. Africa	Upis, Fabricius.
13. Variolosus	Cayenne	Nyctobates, Guerin.
4. Abbreviatus	Indies	Toxicum, Latreille?
5. Depressus	Carolina	Tenebrio, Fabricius.
6. Cornutus	Smyrna	Tauroceras, Hope.
7. Variabilis	Tanger	Calcar, De Jean.
8. Æruginosus	Sumatra	Tenebrio, Fabricius?
9. Scaber	Sumatra	
0. Sanguinipes	New Holland	
1. Culinaris	Germany	Stene, Kirby.
22. Brunneus	America	Uloma, Megerle?
3. Ferrugineus	Tanger	Isocerus, Megerle.
4. Pallens	England	Antherophagus, Knoch.
5. Cadaverinus	England	Phaleria, Latreille.
6. Retusus	S. America	Uloma, Megerle.
7. Mauritanicus	England	Alphitobius, Stephens.
8. Chrysomelinus	S. Europe	
9. Villosus	Europe	Genus unknown

28. GENUS TROGOSITA, FABRICIUS.

1.	Retusa	Sumatra	Uloma, Megerle.
2.	Varia	Guinea	Temnoscheila, Gray.
3.	Cærulea	S. France	Temnoscheila, Westwood.
4.	Gigas	Guinea	Trogosita, Fabricius.
5.	Picipes	Guinea	Boros, Herbst.?
6.	Caraboides	England	Trogosita, Fabricius.
7.	Thoracica	Lapponia	Bius, De Jean.
8.	2-pustulata	Cayenne	Trogosita, Fabricius.
9.	Virescens	N. America	Temnoscheila, Westwood.
0.	Elongata	Sumatra	Colydium, Fabricius.
1.	Bicolor	N. America	Languiria, Latreille.

Fabrician Species.	Country.	Genera of Authors.
12. Filiformis	Sweden?	Colydium, Fabricius.
13. Calcar	Madeira	Calcar, De Jean.
14. Taurus	Guinea	Toxicum, Latreille.
15. Quadricornis	Sumatra	
16. Vacca	S. America	Uloma? Fabricius.
17. Metallica	S. America	Temnoscheila, Westwood
18. Ænea	Brazils	
19. 4-guttata	S. America	Trogosita, Fabricius.
20. Bidens	France	
21. Femorata	N. America	Helops? Fabricius.
22. Sulcata	France	Colydium, Fabricius.
23. Ferruginea	England	Stene, Kirby.
24. Cornuta	Spain	Novum Genus.
25. Maxillosa	S. America	
26. Mandibularis	Pomerania	Prostomis, Latreille.

29. GENUS HELOPS, FABRICIUS.

S. Europe	Helops, Fabricius.
Sumatra	Stenochia, Kirby.
Senegal	Præugena, Castelneau.
S. America	Camaria, Serville.
Brazils	Stenochia, Kirby.
England	Helops, Fabricius.
N. America	
Guinea	Præugena, Castelneau.
Guinea	-
S. America	?
Equin. Africa	Helops, Fabricius.
S. America	Cnodalon, Latreille.
Guinea	Amarygmus, Dalman.
P. B. S.	
Sumatra	
Tanger	Mycetocharis? Latreille?
American Isles	Helops, Fabricius.
West Indies	Stenochia, Kirby.
P. B. S.?	Acanthomera, Latreille.
S. America	Strongylium, Kirby.
S. America	
Brazils	Novum Genus.
East Indies	Imatismus, De Jean.
	Sumatra Senegal S. America Brazils England N. America Guinea Guinea S. America Equin. Africa S. America Guinea P. B. S. Sumatra Tanger American Isles West Indies P. B. S.? S. America S. America Brazils

Fabrician Species.	Country,	Genera of Authors.
24. Laevis	Saxony	Ditylus, Fischer
25. Equestris	Brazils	Prostenus, Latreille
26. Morio	Amer. Isles	Tenebrio, Fabricius
27. Nigrita	Tranquebar	Opatrinus, De Jean.
28. Dentatus	Guinea	Opartrinus ?
29. Sinuatus	Guinea	Nyctobates, Guerin.
30. Punctatus	Guinea	
31. Cuprarius	Java	Amarigmus, Dalmann
32. Picicornis	Madeira	Hegeter, Latreille.
33. Rufipes	New Holland	Helops? Fabricius.
34. Longipes	Equin. Africa	Eupezus, De Jean.
35. Capensis	P. B. S.	Eurynotus, Kirby.
36. Striatus	Guinea	
37. Ater	Leipsic	Prionychus, Solier.
38. Planus	N. America	Opatrum? Fabricius.
39. Pimelia	Austria	Læna, Megerle
40. Obliquatus	Carolina	Penthe, Newman.
41. Hottentotta	France	Helops? Fabricius.
42. Dentipes	Coromandel	Acanthopus, Latreille.
43. Spinipes	America	?
44. Undatus	Cayenne	Pyganisia, Castelneau.
45. Æthiops	S. America	Helops, Fabricius.
46. Quisquilius	England	
47. Ruficollis	Saxony	
48. Cyaneus	Hafniæ	Helodes, Paykull.

30. GENUS MELANDRYA, FABRICIUS.

1. Serrata	Germany	Melandrya, Fabricius.
2. Canaliculata	Saxony	
3. Barbata	Saxony	Serropalpus, Paykull.
4. Repanda	Brazils	Goniadera, Perty.

51. GENUS CLERUS, FABRICIUS.

1. Mutillarius	France	Clerus, Fabricius.
2. Dubius	N. America	
3. Ichneumoneus	N. America	
4. Sphegeus	N. America?	
5. Formicarius	England	
6. 6-guttatus	America	

Fabrician Species.	Country.	Genera of Authors.
7. Spinosus	S. America	Priocera, Latreille?
8. 4-maculatus	Germany	Clerus, Fabricius.
9. Unifasciatus	England	Tilloides, Castelneau.

52. GENUS TILLUS, FABRICIUS.

1. Elongatus	England	Tillus, Fabricius.
2. Damicornis	England N. America	Enoplium, Latreille.
3. Weberi	N. America	
4. Ambulans	England	Tillus, Fabricius.
5. Serraticornis	S.France	Enoplium, Latreille.

53. GENUS TRICHODES, FABRICIUS.

1. 8-punctatus	France	Trichodes, Fabricius.
2. Tricolor	Equin. Africa	Trichodes?
3. 2-fasciatus	Siberia	Trichodes, Fabricius.
4. Sipylus	Greece	
5. Ammios	Spain	Pachyscelis, Hope.
6. Apiarius	England	Trichodes, Fabricius.
7. Alvearius	England	
8. Cyaneus	East Indies	Cylidrus, Latreille.
9. Crabroniformis	Asia Minor	Trichodes, Fabricius.

54. GENUS CORYNETES, FABRICIUS.

1. Violaceus	England	Corynetes, Fabricius.
2. Rufipes	England	
3. Ruficollis	England	
4. Abdominalis	Sierra Leone	
5. Sanguinicollis	Saxony	Enoplium, Latreille.

55. GENUS NOTOXUS, FABRICIUS.

1.	Porcatus	New Holland	Notoxus, Fabricius.
2.	Violaceus	Van Dieman's Land	
3.	Mollis	England	Opilus, Latreille.
4.	Indicus	East Indies	Notoxus, Fabricius?
5.	Chinensis	China	

56. GENUS ANTHICUS, FABRICIUS.

Fabrician Species.	Country.	Genera of Authors.
1. Monoceros	England	Monocerus, Megerle.
2. Cornutus	S. France	
9. Rhinoceros	Germany	
4. Monodon	Carolina	
5. Ruficollis	S. America	Anthicus, Fabricius.
6. Fulvicollis	East Indies	Anthelephila, Hope.
7. Abdominalis	S. America	Anthicus, Fabricius?
8. Fuscipennis	S. America	Novum Genus.
9. Fasciatus	S. America	Clerus, Fabricius.
0. Thoracicus	Carolina	Anthicus? Fabricius.
1. 2-punctatus	Germany	Crypta, Kirby.
2. Pedestris	Italy	Anthicus, Fabricius.
3. Antherinus	England	
4. 3-fasciatus	S. America	
5. Floralis	England	Aderus, Westwood.
6. Bicolor	S. America	Scydmænus, Fabricius
7. Limbatus	Denmark	Anthicus, Fabricius.
8. Hirtellus	Germany	
9. Populneus	Germany	Xylophilus, Latreille.
0. Minutus	Europe	Bryaxis, Knoch.
1. Helwigii	Germany	Scydmænus, Latreille.
2. Sanguineus	England	Bryaxis, Knoch.
3. Dresdensis	Saxony	Pselaphus, Herbst.

57. GENUS PSOA, FABRICIUS.

1. Viennensis		Psoa, Fabricius.
2. Americana	S. America	Languiria, Latreille.

58. GENUS CANTHARIS, FABRICIUS.

ı.	Fusca	England	Telephorus, De Geer.
2.	Livida	England	
3.	Dispar	Germany	
4.	Abdominalis	S. France	
5.	Analis	Hungary	
6.	Viridescens	P. B. S.	
7.	Obscura	England	

Fabrician Species.	Country.	Genera of Authors.
8. Carolina	N. America	Telephorus, Degeer.
9. Nigricans	Germany	
10. Pellucida	Germany	
11. Ruficornis	Sumatra	
12. Limbata	Jamaica	
13. Rubens	Germany	
14. Lateralis	England	
15. Smaragdula	P. B. S.	
16. Tristis	France	
17. Lugubris	Amboina	
18. Atra	Sweden	
9. Marginata	N. America	Callianthia, De Jean.
20. Brunnicollis	Carolina	Telephorus, Degeer.
21. Flavicollis	Sumatra	
22. Diadema	M. America	Podabrus, Fischer.
23. 2-maculata	Pensylvania	Callianthia, De Jean.
24. Pallipes	Germany	Telephorus, Degeer.
25. Barbara	Barbary	
26. Haemorrhoidalis	Prussia	
27. Pallida	Denmark	
28. Ruficollis	England	
29. Nigripennis	S. America	
30. Flavipes	China	
31. Melanocephala	Coromandel	
32. Dimidiata	P. B. S.	
33. 2-punctata	Leipsic	
34. Laeta	Italy	
35. Fulvicollis	Sweden	
36. Lincola	East Indies?	
37. Abbreviata	S. America	Malthinus, Latreille.
38. Brevipennis	S. America	
39. Manca	S. America	
10. 2-vittata	P. B. S.	Telephorus, Degeer.
11. Longicornis	S. America	Ischnomera, Stephens?
42. Nigripes	England	
43. Melanura	England	
44. Pectoralis	Sumatra	Ischnomera?
15. Vittata	Carolina	Neydalis?
46. Nitidula	Germany	Telephorus, Degeer.
47. Lineata	Amer. Isles	Ischnomera, Stephens?
18. Bicolor	England	Telephorus, Degeer.

Fabrician Species.	Country.	Genera of Authors.
49. Nigra	Germany	Dasytes, Fabricius.
50. Pulicaria	Germany	Malachius, Fabricius.
51. Minima	Europe	Malthinus, Latreille.
52. Testacea	England	Telephorus, Degeer,
53. Biguttata	England	Malthinus, Latreille.
54. Cardiacea	England	Malachius, Fabricius.

59. GENUS MALACHIUS, FABRICIUS.

1. Pulcher	Guinea	Malachius, Fabricius.
2. Laetus	Sumatra	
3. Aeneus	England	
4. 2-pustulatus	England	
5. Rufus	Paris	
6. Marginellus	England	
7. Elegans	England	
8. Viridis	England	
9. Sanguinolentus	England	
10. Ruficollis	England	. ,
11. 4-maculatus	N. America	
12. Viridipennis	P. B. S.	
13. Cyaneus	Spain	
14. Thoracicus	England	
15. Angulatus	Austria	
16. Abdominalis	Mogador	Malachius?
17. Praeustus	England	Malachius, Fabricius
18. Pedicularius	England	
19. Pulicarius	Denmark	
20. Fasciatus	England	
21. Limbatus	Tanger	
22. Equestris	England	
23. Flavipes	Saxony	
24. Albifrons	Paris	
25. Rufipes	S. America	
26. Labiatus	Carolina	
27. Concolor	Austria	
28. Nitidulus	Barbary	

60. GENUS MELYRIS, FABRICIUS.

Fabrician Species.	Country.	Genera of Authors.
1. Abdominalis	East Indies?	Melyris, Fabricius.
2. Viridis	P. B. S.	
3. Bicolor	Cario	Melyris?
4. Nigra	Tanger	Zygia, Fabricius.
5. Lineata	P. B. S.	Melyris, Fabricius.

61. GENUS DERMESTES, FABRICIUS.

1. Lardarius	England	Dermestes, Linneus.
2. Carnivorus	New Holland	
3. Cadaverinus	St. Helena	
4. Macellarius	Germany	Attagenus, Latreille.
5. Megatoma	Germany	
6. Pellio	England	
7. Undatus	Paris	
8. Trifasciatus	England	Megatoma, Herbst.
9. 20-guttatus	Saxony	Attagenus, Latreille.
10. Tigrinus	Italy	Dermestes?
11. Bicolor	Austria	Dermestes, Linneus.
12. Vulpinus	England	
13. Felinus	Van Deimen's Land	
14. Hirticollis	Barbary	Dermestes ?
15. Murinus	England	Dermestes, Linneus.
16. Tessellatus	England	
17. Lycoperdi	Germany	Cryptophagus, Herbst
18. Frontalis	Germany	
19. 2-punctatus	Germany	Crypta, Kirby
20. Fimertarius	Sweden	Cryptophagus, Herbst
21. Fumatus	England	Mycetæa, Kirby.
22. Tomentosus	England	Byturus, Latreille.
23. Fuscus	Denmark	Throscus, Latreille.
24. Adstrictor	England	
25. Suturalis	Austria	Sylvanus, Latreille.
25. 6-dentatus	Germany	
26. Lunatus	England	Biphyllus, De Jean.
27. Unidentatus	England	Sylvanus, Latreille.
28. 2-dentatus	Germany	
29. Nigripes	Saxony	Attagenus, Latreille.

Fabrician Species.	Country.	Genera of Authors.
30. Obscurus	Germany	Cryptophagus, Herbst.
31. Testaceus	Belgium	Cryptophagus?
32. Scaber	New Holland	Pristoderus, Hope.
33. Chinensis	China	Coxelus?
34. Subterraneus	China	Cryptophagus, Fabricius
35. Scanicus	Sweden	Engis, Latreille.
36. Limbatus	New Zealand	Novum Genus.
37. Fenestratus	England	Corticaria, Marsham.
38. Variabilis	Sweden	Cis, Latreille.
39. Serra	England	Tiresias, Stephens.
40. Cellaris	England	Crytptophagus, Herbst.
41. Crenatus	Denmark	
42. Minutus	Denmark	
43. Pedicularius	England	Cateretes, Herbst.
44. Urticae	England	
45. Brachypterus	Germany	
46. 2-pustulatus	Sweden	

62. GENUS ANOBIUM, FABRICIUS.

1. Tesselatum	England	Anobium, Fabricius.
2. Striatum	England	
3. Reticulatum	Austria	
4. Rufipes	England	
5. Castaneum	Paris	
6. Pertinax	England	š
7. Boleti.	Germany	Cis, Latreille.
8. Molle	England	Anobium, Fabricius.
9. Paniceum	England	
10. Abietis	England	
11. Planum	Denmark	Anobium? Fabricius.
12. Capense	P. B. S.	
13, Minutum	Italy	
14. Micans	England	Cis, Latreille.
15. Nitidum	England	

63. GENUS PTINUS, FABRICIUS.

1. Pubescens	Paris	Hedobia, Ziegler.
2. Germanus	England	Ptinus, Linneus
3. Rufipes	England	

¿ Fabrician Species.	Country.	Genera of Authors.
4. Longicornis	France	Luperus, Geoffroy.
5. Elegans	England	Ptinus, Linneus.
6. Fur	England	
7. Imperialis	England	
8. Crenatus	England	
9. Latro	England	
0. Denticornis	England	Xyletinus, Latreille.
1. Serricornis	N. America?	Xyletinus? Latreille.
2. Spinicornis	Sandwich Isles	Mastigus, Illiger.
3. Sulcatus	Canary Isles	Mezium, Leach.
4. Scotias	England	Gibbium, Kugellan.

64. GENUS SARROTRIUM, FABRICIUS.

ı.	Muticum	1	England	1	Sarrotrium,	Fabricius.

65. GENUS PTILINUS, FABRICIUS.

1. Mystacinus	New Holland	Rhipicera, Latreille.
2. Pectinicorn	nis England	Ptilinus, Fabricius.
3. Flavescens	England	Drilus, Olivier.
4. Pectinatus	England	Xyletinus, Latreille.
5. Serratus	Germany	

66. GENUS DORCATOMA, FABRICIUS.

1.	${\bf Dresdense}$	England	Dorcatoma, Fabricius.
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67. GENUS, MELASIS, FABRICIUS.

1. Flabellicornis	England	Melasis, Fabricius.
2. Mystacina	P. B. S.	Rhipicera, Latreille.

69. GENUS NECROPHORUS, FABRICIUS.

1. Germanicus	England	Necrophorus, Fabricius.
2. Humator	England	
3. Grandis	N. America	

Fabrician Species.	Country.	Genera of Authors.
4. Mediatus	Carolina	Necrophorus, Fabricius.
5. Velutinus	Carolina	
6. Marginatus	N. America	Curtoscelis, Hope.
7. Vespillo	England	
8. Mortuorum	England	Necrophorus, Fabricius.

70. GENUS SILPHA, FABRICIUS.

1	Surinamensis	Surinam	Necrodes, Wilkin.
	Littoralis	England	recrodes, within.
	Livida	Germany	
	Micans	P. B. S.	Silaha Fahaisias
		India	Silpha, Fabricius,
	Indica		Ips, Schonherr.
	Americana	Pensylvania	Necrobora, Hope.
	Thoracica	England	Oiceoptoma, Leach.
8.	Laevicollis	New Holland	Genus Novum.
9.	Marginalis	N. America	Thanatophilus, Leach.
10.	Rugosa	England	
11.	Lapponica	Lapponia	
12.	Atrata	England	Phosphuga, Leach.
13.	Pedemontana	Piedmont	
14.	Inæqualis	N. America	Thanatophilus, Leach.
15.	Lunata	Austria	Silpha, Fabricius.
16.	Laevigata	England	
17.	Obscura	England	
18.	Reticulata	England	
19.	Opaca	England	
20.	Sinuata	England	Thanatophilus, Leach.
21.	4-punctata	England	Silpha, Fabricius.
22.	Dentata	Sweden	Peltis, Fabricius.
23.	Limbata	England	Nitidula, Fabricius.
24.	Undata	Saxony	
25.	Minuta	Germany	Anthobium, Leach.

71. GENUS PELTIS, FABRICIUS.

1. Grossa	Sweden	Peltis, Fabricius.
2. Ferruginea	England	
3. Oblonga	Germany	
4. Limbata	England	Thymalus, Latreille.

72. GENUS IMATIDIUM, FABRICIUS.

Fabrician Species.	Country.	Genera of Authors.
1. 3-maculatum	S. America	Imatidium, Fabricius.
2. Fasciatum	Cayenne	
3. Thoracicum	Brazils	
4. Lineola	Cayenne	
5. Sanguineum	S. America	Imatidium ?

GENUS 73. NITIDULA, FABRICIUS.

1. Grossa	Carolina	Nitidula, Fabricius.
2. 2-pustulata	England	
3. 4-pustulata	England	
4. Obscura	England	
5. Abbreviata	New Zealand	Nitidula? Fabricius.
6. Marginata	England	Cerophora, Laporte.
7. Aestiva	England	Nitidula of Authors.
8. Pallida	East Indies	Nitidula ?
9. Obsoleta	Europe	Nitidula, Fabricius.
10. Ferruginea	England	Strongylus, Herbst.
11. Cornuta	S. America	Psilotus, Fischer.
12. Strigata	England	Cryptarcha, Shuckhard
13. Imperialis	England	
14. 10-guttata	England	Nitidula, Fabricius.
15. Varia	England	
16. Sordida	England	
17. Punctata	Sumatra	?
18. Flexuosa	S. France	Carpophilus, Leach.
19. Bicolor	Denmark	Nitidula?
20. Colon	England	Nitidula, Fabricius.
21. Limbata	Saxony	-
22. Haemorrhoidalis	England	
23. Discoides	England	
24. Pediculiaria	England	Meligethes, Kirby.
25. 6-pustulata	Germany	Ips, Fabricius?
26. Fasciata	Holsatia	Rhyzobius, Stephens.
27. Litura	Saxony	
28. Ænea	England	Meligethes, Kirby.
29. Viridescens	England	
30. Hemiptera	Sierra Leone	Ips, Fabricius.

Fabrician Species.	Country.	Genera of Authors.
31. Humeralis	P. B. S.	Nitidula, Fabricius?
32. Rupta	S. America	Ips, Fabricius?
33. Quadrata	Cayenne	Carpophilus, Leach?
34. Cadaverina	N. America	Nitidula, Fabricius?
35. Macroptera	S. America	Ips, Fabricius?
36. Dimidiata	Brazils	Ips, Fabricius.
37. Truncata	Germany	Cateretes, Herbst.
38. Rufipes	England	Meligethes, Kirby.

	75. GENUS COCCINELLA, FABRICIUS.			
1.	Marginata	Brazil	Coccinella, Fabricius.	
2.	Limbata	Hamburgh		
3.	Marginella	America	Coccinella?	
4.	Diaphana	Denmark?	Novum Genus?	
5.	Pubescens	East Indies	Heterocerus, Fabricius?	
6.	Abietis	N. Europe	Scymnus, Herbst.	
7.	Immaculata	American Isles	Coccinella, Fabricius.	
8.	Unicolor	East Indies	Control Contro	
9.	Coccinea	S. America	Novum Genus?	
10.	M-nigrum	Denmark	Coccinella, Fabricius.	
11.	Discolor	East Indies	Annual Control of Cont	
12.	Cineta	East Indies		
13.	Sanguinea	Cayenne		
14.	Impunctata	Sweden	Coccinella, Linneus.	
15.	Dimidiata	Coromandel	Chilochorus, Leach.	
16.	Margine punctata	Europe	Coccinella, Linneus.	
17.	Lineola	New Holland		
	Dorsimacula	East Indies	Coccinella?	
19.	Unifasciata	Hamburgh	Coccinella, Linneus.	
	Annulata	Europe		
21.	Trilineata	America		
22.	Vittata	Guinea	Micraspis, Chevrolat.	
	Suturalis	East Indies	Coccinella, Linneus.	
	Limbata	P. B. S.		
	Striata	Guinea		
	Oblongo punctata	England		
	Abbreviata	N. America		
	6-lineata	Siberia		
	2-punctata	England		
30.	3-punctata	Germany		

Fabrician Species.	Country.	Genera of Authors
31. Hieroglyphica	England	Coccinella, Linneus.
32. Rivularis	Sweden?	
33. Tricincta	China	
34. Arcuata	China	
35. Catenata	Amboina	
36. Reticulata	Pacific Isles	
37. Undata	P. B. S.	Coccinella?
38. Flexuosa	Hamburgh	
39. Cingulata	Tranquebar	
10. Inæqualis	New Holland	
11. Varians	India	
12. Trifasciata	Lapponia	
43. Interrupta	East Indies	Selenitis, Hope.
14. 2-fasciata	P. B. S.	Epilachna, Chevralot.
45. 4-notata	Denmark	Lasia, Hope.
46. 4-maculata	Saxony	Coccinella, Linneus.
47. 5-punctata	England	
48. 5-maculata	Paris	
19. 6-punctata	England	
50. Glacialis	N. America	
51. 6-maculata	East Indies	Selenitis, Hope.
52. 7-punctata	England	Coccinella, Linneus.
53. 7-maculata	Madeira	
54. 7-notata	Saxony	
55. 8-punctata	England	
56. Transversalis	Coromandel	
57. 8-maculata	East Indies?	
58. 8-notata	Pacific Isles	
59. 9-maculata	New Holland	
60. 9-notata	N. America?	?
61. 9-punctata	England	
62. 10-punctata	England	
63. 10-maculata	N. America	
64. Innuba	East Indies?	
65- Dilatata	China	
66. 11-punctata	Europe	
67. 11-maculata	Spain	Epilachna, Chevrolat.
68. 12-punctata	France	35' ' 67 7 .
69. Variegata	D D C	Coccinella, Linneus.
70. Chrysomelina	France	Epilachna, Chevrolat.
71. Borealis	N. America	

Fabrician Species.	Country.	Genera of Authors.
72. 12-notata	Australia	Coccinella, Linneus.
73. Cassidea	N. America	Novum Genus.
74. 13-maculata	Sweden	Coccinella, Linneus.
75. Dispar	Senegal	Epilachna, Chevrolat.
76. 13-punctata	France	Coccinella, Linneus.
77. Laeta	Mogador	
78. Versicolor	China	Novum Genus.
79. 14-maculata	Saxony	Coccinella, Linnens.
80. Ocellata	Austria	
81. 16-punctata	Paris	
82. 16-maculata	Germany	
83. 16-notata	Amboina	
84. 18-punctata	N. Europe	
85. 19-punctata	Paris	
86. 20-punctata	England	
87. 22-punctata	England	Lasia, Hope.
88. 22-maculata	Guinea	Coccinella, Linneus.
89. 23-punctata	England	
90. 24-punctata	England	Lasia, Hope,
91. 34-maculata	Tranquebar	Coccinella, Linneus.
92. 28-punctata	Java	Epilachna, Chevrolat.
93. Conglomerata	Tyrol	Coccinella, Linneus.
94. Conglobata	England	
95. Confluens	S. America	
96. Lineola	American Isles	
97. Tricolor	American Isles	
98. Detrita	New Holland	Paropsis, Olivier.
99. Strigata	Tanger	Chilochorus, Leach?
100. 2-guttata	England	Coccinella, Linneus.
101, 8-guttata	Kamschatka	
102. 10-guttata	England	
03. Bis 6-guttata	Sweden	
104. 12-guttata	Cayenne	
105. 14-guttata	England	
106. Bis 7-guttata	Germany	
107. 15-guttata	Germany	
108. 16-guttata	England	
109, 18-guttata	Paris	
110. 20-guttata	England	
111. Oblongo-guttata	England	Chilochorus, Leach?
112. Impustulata		

Fabrician Species.	Country.	Genera of Authors.
113. Ænea	S. America	Novum Genus.
114. Nitidula	American Isles	Chilocorus, Leach?
115. Flavipes	England	Scymnus, Herbst.
116. Nigrita	Tranquebar	Coccinella Linneus?
117. Parvula	England	Scymnus, Herbst.
118. Discoidea	Germany	
119. Floralis	American Isles	
120. Biverrucata	England	
121. Villosa	Cayenne	Nilio, Latreille.
122. Analis	England	Seymnus, Herbst.
23. Thoracica	American Isles	Personal State of the State of
24. Marginella	Tanger	Coccinella, Linneus?
25. Hæmorrhoidalis	Hamburgh	Lasia, Hope.
26. Oculata	N. America	Coccinella, Linneus.
127. Cacti	Brazil	Chilocorus, Leach.
28. 2-pustulata	England	
29. Lateralis	England	Coccinella, Linneus.
30. Variabilis	England	
31. Rufipes	England	Scymnus, Herbst.
32. Morio	England	
33. Frontalis	England	
34. Dentipes	Carolina	Coccinella, Linneus.
35. 4-pustulata	England	Chilocorus, Leach.
36. 4-verrucata	Paris	,
37. Fasciata	S. America	Coccinella, Fabricius.
38. Divisa	S. America	-
39. Bis-pustulata	Europe	Seymnus, Herbst.
40. Arctica	Lapponia	Coccinella, Fabricius.
41. Erythrocephala	Denmark	000000000000000000000000000000000000000
42. 6-pustulata	England	Coccinella, Linneus.
43. Bis 3-pustulata	S. America	
44. 6-verrucata	S. America	Chilocorus, Leach?
45. 8-pustulata	S. America	Coccinella, Linneus.
46. Lunata	St. Helena	Selenitis, Hope.
47. 10-pustulata	England	Coccinella, Linneus.
48. Bis 5-pustulata	S. America	,
49. Bis 6-pustulata	Hamburgh	
50. 12-pustulata	Europe	
51. 12-verrucata	P. B. S.	Epilachna, Chevrolat.
52. 14-pustulata	England	Coccinella. Linneus.
53. Gut-pustulata	New Holland	

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Fabrician Species.	Country.	Genera of Authors.
154. Felina	N. America	Coccinella, Linneus.
155. Pantherina	England	
156. Pardalina	P. B. S.	Chrysomela?
157. Ursina	N. America	
158. Argulata	Africa	Epilachna, Olivier.
159. Vulpina	P. B. S.?	Selenitis, Hope.
160. Leonina	New Holland	Coccinella, Linneus.
161. Tigrina	Austria	
162. Canina	P. B. S.	Epilachna, Chevrolat.

76. GENUS CASSIDA, FABRICIUS.

	76. GEN	US CASSIDA, F.	ABRICIUS.
1.	Viridis	England	Cassida, Linneus.
2.	Thoracica	Germany	gament debutters to response agreement and
3.	Equestris	England	Name and Address of the Original Parks of th
4.	Prasina	England	
5.	Affinis	England	
6.	Vibex	England	
7.	Azurea	France	
8.	Sanguinolenta	England	
9.	Cruenta	East Indies	Cassida?
10.	Austriaca	Austria	Cassida, Linneus.
11.	Nebulosa	England	
12.	Echinata	New Holland	Hoplionota, Hope.
13.	Atrata	Austria	Cassida, Linneus.
14.	Murræa	England	
15.	Vittata	Hungary	Cyphomorpha, Hope.
16.	Ferruginea	Germany	the same of the sa
17.	Brunnea	Cayenne	
18.	Unicolor	East Indies	Cassida, Linneus.
19.	Scalaris	Sumatra	Thyreaspis, Hope.
20.	Marginella	Brazil	Cassida, Linneus.
21.	Punctaria	Sumatra	Thyreaspis, Hope.
22.	Cincta	Africa	?
23.	Ornata	East Indies	Cassida, Linneus?
24.	Hebraea	Cayenne	Thyreaspis, Hope.
25.	Indaica	Cayenne	
26.	Obscura	East Indies	?
27.	Tristriata	Surinam	
28.	Zona	S. America	
29.	Morio	S. America	

Fabrician Species.	Country.	Genera of Authors.
30. Brachiata	S. America	Thyreaspis, Hope.
31. Aurulenta	S. America	
32. Purpurea	S. America	
33. Cyclops	S. America	
34. Annulus	Cayenne	
35. 6-notata	East Indies	
36. Bifasciata	S. America	Thyreaspis?
37. Quadrata	S. America	
38. Reticulata	S. America	
39. 6-punctata	Cayenne	
10. Interrupta	New Holland	Aspidimorpha, Hope?
11. 8-punctata	Siam	Prioptera, Hope.
12. Scripta	P. B. S.	Aspidimorpha?
43. Gibba	Cayenne	Cyphomorpha, Hope.
4. Deusta	New Holland	Cassida, Linneus.
45. Clathrata	East Indies	
46. Cribraria	America	Cyphomorpha, Hope.
17. Nobilis	England	Cassida, Linneus.
48. Bicolor	N. America	Thyreaspis, Hope.
49. Taeniata	New Holland	Hoplioptera, Hope.
50. Trivittata	New Cambridge	Cassida, Linneus.
51. Margaritacea	England	
52. Cruciata	Brazil	Aspidimorpha, Hope.
53. Aurichalcea	Carolina	Thyreaspis, Hope.
54. Crux	Cayenne	Aspidimorpha, Hope.
55. 11-punctata	Cayenne	Thyreaspis, Hope.
59. 13-punctata	Sumatra	Aspidimorpha, Hope.
60. Sinuata	East Indies	Prioptera, Hope,
61. Arcuata	Cayenne	Thyreaspis, Hope.
62. Clavata	N. America	Aspidimorpha, Hope.
63. 2-notata	Cayenne	?
64. Micans	Sumatra	
65. Elevata	Sumatra	
66. 2-tuberculata	Cayenne	Aspidimorpha?
67. Tuberculata	Sierra Leone	Aspidimorpha, Hope.
68. Dilatata	S. America	Omoplata, Hope.
69. Suturalis	Brazil	
70. 2-guttata	Cayenne	Aspidimorpha, Hope.
71. Miliaris	St. Helena	
72. Adhaerens	Pacific Isles	
73. 2-maculata	Guinea	

Fabrician Species.	Country.	Genera of Authors.
74. Punctata	P. B. S.	Aspidimorpha, Hope.
75. Adspersa	Guinea	
76. Marginata	S. America	Omoplata, Hope.
77. 4-pustulata	Cayenne	Aspidimorpha?
78. Dorsata	Siam	Aspidimorpha, Hope.
79. 5-fasciata	Guinea	4
80. St. Crucis	Sierra Leone	
81. Jamaicensis	Jamaica	
82. Chinensis	China	Thyreaspis, Hope?
83. Exaltata	S. America	Aspidimorpha?
84. Cyanea	S. America?	No. of the Contract of the Con
85. Spinifex	Cayenne	Selenis, Hope.
86. Bicornis	Cayenne	Tauroma, Hope.
87. Taurus	Cuba	
88. Bidens	Brazil	Batonota, Hope.
89. Gibbosa	Brazil	Mesomphalia, Hope.
90. Truncata	Cayenne	Selenis, Hope.
91. Flava	S. America	Omoplata, Hope.
92. Leucophaea	S. America	?
93. Transversa	Cayenne	Novum Genus.
94. Reticulata	Cayenne	Mesomphalia, Hope.
95. Variegata	Cayenne	Oxynodera, Hope.
96. Punctum	New Holland	Aspidimorpha, Hope.
97. Trifasciata	Cayenne	Novum Genus.
98. Retiformis	Cayenne	Mesomphalia, Hope.
99. Venosa	S. America	
100. Nervosa	Brazil	Pæcilaspis, Hope.
01. Varians	S. America	Pæcilaspis?
102. Annulata	S. America	Mesomphalia.
103. Grossa	Cayenne	Calaspis, Hope.
104. Lineata	P. B. S.?	Cyphomorpha?
105. Exclamationis	S. America	Cyphomorpha, Hope.
106. Flavo maculata	S. America	Mesomphalia, Hope.
107. Irrorata	S. America	Omoplata, Hope.
108. Inaequalis	Cayenne	Mesomphalia, Hope.
109. Lateralis	Cayenne	
10. Palliata	Cayenne	Oxynodera, Hope.
111. Variolosa	Brazil	Desmonota, Hope.
112. Discoidea	Cayenne	Mesomphalia, Hope.
113. 2-pustulata	Cayenne	
114. Discors	Cayenne	
	1	

Fabrician Species.	Country.	Genera of Authors,
115. Cuprea	Cayenne	Mesomphalia, Hope.
116. 6-pustulata	Brazil	
117. 12-pustulata	Cayenne	Pæcilaspis, Hope.
118. 16-punctata	Brazil	
119. 2-punctata	East Indies	Thyreaspis, Hope.

77. GENUS ADORIUM, FABRICIUS.

1. 2-punctatum	East Indies	Adorium, Fabricius.
2. Palliatum	New Holland	
3. Testaceum	Sumatra	
4. Lividum	Sumatra	
5. Vittatum	New Holland	
6. Concolor	Bengal	

78. GENUS COLASPIS, FABRICIUS.

1.	Testacea	Brazil	Colaspis, Fabricius.
2.	Crenata	Cayenne	
3.	Glabrata	Cayenne	
4.	Flavicornis	Cayenne	
5.	Luteicornis	Amer. Isles	
6.	Crotonis	S. America	
7.	Rufipes	P. B. S.	
8.	Viridis	Carolina	
9.	Tricolor	Virginia	
10.	Ænea	S. America	
11.	Fulvipes	S. America	
12.	Cuprea	S. America	
13.	Obscura	S. America	
14.	Fulva	S. America	Novum Genus?
15.	Barbara	Barbary	Colaspidema, Laporte.
16.	Ferruginea	S. America	Colaspis, Fabricius.
17.	Nitidula	S. America	Eumolpus, Fabricius.
18.	Nigricornis	S. America	Colaspis, Fabricius.
19.	Laevigata	S. America	
20.	Marginata	S. America	
21.	Metallica	East Indies	
22.	Ruficornis	S. America	
2 3.	Brunnea	America	
24.	Suilla	Carolina	

	Fabrician Species.	Country.	Genera of Authors.
25.	Saliens	East Indies	Haltica, Illiger.
26.	Gibba	Cayenne	
27.	Quercata	Carolina	Eumolpus, Fabricius?

79. GENUS EUMOLPUS, FABRICIUS.

1.	Ignitus	Cayenne	Eumolpus, Fabricius.
2.	Nitidus	East Indies	
3.	Asiaticus	Russia	
4.	Cyaneus	S. America	Corynodes, Hope.
5.	Pretiosus	Germany	Eumolpus, Fabricius.
6.	Auratus	Pensylvania	
7.	Compressicornis	Guinea	Corynodes, Hope.
8.	Antennatus	Java	
9.	Splendidus	Tranquebar	Colaspisoma, Laporte.
10.	Sumptuosus	Trinidad	Eumolpus, Fabricius.
11.	Glabratus	Surinam	Novum Genus
12.	Modestus	East Indies	Colaspisoma, Laporte.
13.	Metallicus	Amboina	?
14.	Hirtus	Sumatra	Adoxus, Kirby.
1 5.	Dentipes	Sumatra	Eumolpus, Fabricius.
16.	Æneus	East Indies	
17.	Nigritus	S. America	
18.	Nitidulus	S. America	-
19.	Obscurus	Austria	Adoxus, Kirby.
20.	Vitis	France	
21.	Atratus	America	
22.	Variabilis	S. America	Eumolpus Fabricius.
23.	Ruficollis	S. America	!
24.	Femoratus	S. America	!
25	Aerugineus	Italy	Calaspidea, Laporte.
26.	Arenarius	Germany	Novum Genus.

80. GENUS CHRYSOMELA, FABRICIUS.

1. Punctatissima	Cayenne	Doryphora, Illiger.
2. Pustulata	Cayenne	
3. Tenebricosa	England	Timarcha, Megerle.
4. Rugosa	Barbary	, ———
5. Morio	Van Dieman's Land	Paropsis, Olivier.
6. Coriaria	England	Timarcha, Megerle.

Fabrician Species.	Country.	Genera of Authors.
7. Surinamensis	Surinam	Eumolpus, Kugellan.
8. 3-maculata	N. America	Chrysomela, Fabricius.
9. Vittata	Cayenne	
10. Gibbosa	S. America	?
11. 8-maculata	Surinam	Doryphora, Illiger.
2. Submarginata	Senegal	
13. Conjugata	Surinam	
4. Trifasciata	Surinam	
15. Suturalis	Cayenne	
16. Pulcra	N. America	Chrysomela, Linneus.
17. Cruciata	S. America	
18. 12-guttata	S. America	1
19. Thoracica	Guinea	
20. Affinis	Barbary	
21. Striata	P. B. S.	Polysticta, Hope.
22. Alternans	P. B. S.	
23. Australasiae	New Holland	Paropsis, Olivier.
24. Globus	S. America	Lamprosoma, Kirby.
25. Varicornis	S. America	
26. Amethystina	S. America	
27. Testacea	S. America	
28. Bractea	S. America	
29. Orbicula	S. America	
30. Micans	Sumatra	Amarygmus, Dalmann
31. Centaurei	England	Chrysomela, Linneus.
32. 3-vittata	S. America	
33. Flavicans	Saxony	Spartophila, Chevrolat.
34. Litura	England	
35. Nigrita	Paris	Chrysomela, Linneus.
36. Goettingensis	Sweden	
37. Hottentotta	England	
39. Æthiops	Germany	
39. Bicolor	Austria	
40. Lusitanica	Portugal	Malacoptera, Hope.
41. Rufipes	New Holland	Paropsis, Olivier.
42. Ferruginea	Equin. Africa	Adorium, Fabricius.
43. Bankii	England	Chrysomela, Linneus
44. Metallica	Styria	Timarcha, Megerle.
45. Lamina	Austria	Chrysomela, Linneus
46. Obscurata	Germany	
47. Raphani	Sweden	Gastroeidea, Hope.

Fabrician Species.	Country.	Genera of Authors.
48. Calcarata	Germany	Chrysomela, Linneus.
49. Punctulata	Germany	Chrysomela?
50. Morbillosa	Germany	Chrysomela?
51. 10-pustulata	St. Domingo	Chrysomela, Linneus.
52. Adonidis	Austria	Phædon, Megerle.
53, Clavata	East Indies ?	Clythra?
54. 14-punctata	East Indies	Podontia, Dalmann.
55. 14-guttata	P. B. S.	Polysticta, Hope.
56. Ebraea	P. B. S.	
57. Sapphirus	New Holland	Lina, Megerle.
58. Graminis	England	Chrysomela, Linneus.
59. Fulgida	England	
60. Bifrons	Italy	
61. Cuprea	Germany	Melasoma, Dilwynn.
62. Tristis	France	Chrysochloa, Hope.
63. Haemoptera	England	Chrysomela, Linneus.
64. Varians	England	
65. Violacea	Germany	page 1
66. Semistriata	Brazils	
67. Amboinensis	Amboina	Paropsis, Olivier.
68. Populi	England	Melasoma, Dilwynn.
69. Tremulae	England	
70. Grossa	S. France	Chrysomela, Linneus.
71. Staphylaea	England	
72. Fervida	Java	Galleruca, Fabricius.
73. Polita	England	Chrysomela, Linneus.
74. Lunata	Unknown	
75. Livida	England	
76. Linea	P. B. S.	Polysticta, Hope.
77. Exclamationis	N. America	Polyspila, Hope.
78. Stolida	N. America	Chrysomela, Linneus.
79. Nigricornis	New Holland	Phyllocharis, Dalmann.
80. Collaris	Germany	Melasoma, Dilwynn.
81. Salicis	Sweden	
82. Senegalensis	Senegal	Phædon, Megerle.
83. Viminalis	Sweden	Phytodecta, Kirby.
84. Cyanipes	New Holland	Phyllocharis, Dalmann.
85. Cyanicornis	New Holland	
86. 10-punctata	Styria	Phytodecta, Kirby.
87. 6-punctata	Austria	Spartophila, Chevrolate
88. 6-notata	Spain	

Fabrician Species.	Country.	Genera of Authors.
89. Aegrota	Spain	Spartophila, Chevrolat.
90. Pallida	England	Phytodecta, Kirby.
91. Notata	P. B. S.	Polysticta, Hope.
92. Rumicis	Spain	Spartophila, Chevrolat
93. Vulpina	P. B, S.	Polysticta, Hope.
94. Crassicornis	New Holland	Novum Genus
95. Lapponica	Lapland	Melasoma, Dilwynn.
96. Interrupta	N. America	
97. Cayennensis	Cayenne	?
98. Marmorata	Cayenne	Polyspila, Hope.
99. Scripta	N. America	Melasoma, Dilwynn.
00. Undulata	East Indies	Phyllocharis, Dalman.
01. 18-guttata	New Holland	
02. Polygoni	England	Gastroeidea, Hope.
03. Russica	Russia	
04. Brunnea	New Zealand	Colaspis, Fabricius.
05. Cerealis	Wales	Chrysomela, Linneus.
06. Megerlei	Germany	
07. Americana	Italy	
08. Festiva	America	
09. Fastuosa	England	
10. Splendidula	Sumatra	
11. Gloriosa	Italy	Chrysochloa, Hope.
12. Speciosa	S. France	
13. Limbata	England	Chrysomela, Linneus.
14. Carnifex	Italy	
15. Sanguinolenta	England	1
16. Marginata	England	Phædon, Megerle.
17. Schach	Austria	Chrysomela, Linneus.
18. Analis	France	
19. Aucta	England	Phædon, Megerle.
20. Mediata	Java	Chrysomela, Linneus.
21. 20-punctata	Italy	Melasoma, Dilwynn.
22. Marginella	Sweden	Helodes, Fabricius.
23. Hannoverana	Hanover	
24. Aducta	Paris	Chrysomela, Linneus.
25. 5-punctata	Hamburgh	Lema, Fabricius.
26. Dimidiata	S. America	Chrysomela, Linneus.
27. Scutellata	England	Cacicula, Megerle.
28. Pectoralis	England	
29. Lineola	America	Polyspila, Hope?

Fabrician Species.	Country.	Genera of Authors.
130. Sacra	Palestine	Phytodecta, Kirby.
131. Haemorrhoidalis	England	
132. Fucata	Italy	
133. Aenea	England	Melasoma, Dilwyn.
134. Bulgharensis	Russia	
135. Philadelphica	Pensylvania	Polyspila, Hope.
136. Armoraciae	England	Phædon, Megerle.
137. Cochleariae	England	
138. Pallipes	Denmark	Phædon?
139. Sophiae	Saxony	Colaspidema, Laporte.
140. Discoidea	N. America	Haltica, Illiger.
141. Javanica	Java	
142. Picta	Tranquebar	Scirtes, Latreille.
143. Aestuans	S. America	Haltica, Illiger.
144. Calida	American Isles	
45. Indica	East Indies	
46. Varicornis	S. America	
47. Fulvicollis	P. B. S.	
148. Napi	Germany	Macronema, Megerle.
49. Hyoscyami	England	
50. Nigripes	England	Haltica, Illiger.
151. Nitidula	England	
52. Helxines	England	
.53. Fulvicornis	England	
54. 3-fasciata	Europe	
155. Modeeri	England	
156. Semiænea	England	Mantura, Stephens.
57. Erythrocephala	Sweden	Haltica, Illiger.
58. Relicta	Cayenne	
159. Testacea	England	Sphæroderma, Stephens
60. Globosa	S. America	Haltica, Illiger,

81. GENUS CRIOCERIS, FABRICIUS.

1. 2-tuberculata	Equin. Africa	Crioceris, Fabricius,
2. 2-dentata	Equin. Africa	
3. Bispinosa	Africa	
4. Fulva	New Cambridge	
5. Bicolor	Java	
6. Cyanipes	Java	Phylocharis, Dalmann.
7. Melanocephala	New Holland	Crioceris, Fabricius.

Fabrician Species.	Country.	Genera of Authors.
8. Detrita	American Isles	Crioceris, Fabricius?
9. Obsoleta	S. America	Novum Genus.
0. Cyanipennis	Brazil	Phyllotrupes, Hope.
11 Innuba	American Isles	
2. 3-punctata	American Isles	
3. Modesta	S. America	
4. Olivacea	S. America	
15. 3-fasciata	S. America	
16. Capitata	Cayenne	
17. 5-maculata	S. America	
18. Abrupta	Brazil	
19. Nigricornis	England	Adimonia, Laicharting
20. Æruginea	Africa	Phyllotrupes, Hope.
21. Viridula	S. America	
22. Ruficollis	S. America	
23. Elata	S. America	
24. Laeta	S. America	Crioceris, Fabricius.
25. Marginalis	S. America	?
26. 2-vittata	S. America	Phyllotrupes, Hope.
27. Vittata	Carolina	
28. Glabrata	Germany	Orsadacna, Latreille,
29. Impressa	Sumatra	Novum Genus.
30. Cerasi	England	Orsadacna, Latreille.
31. Ocreata	Guadeloupe	Phyllotrupes, Hope.
32. Ferruginea	New Cambridge	Crioceris, Fabricius.
33. Pallida	East Indies	Haltica, Illiger.
34. Lusca	Sumatra	Crioceris, Fabricius.
35. Variegata	Cayenne	
36. Thoracica	St. Domingo	Phyllotrupes, Hope.
37. Denticornis	American Isles	Crioceris, Fabricius.
38. Albicornis	St. Domingo	
39. 12-punctata	Carolina	Phyllotrupes, Hope.
40. Fucata	American Isles	
41. Aulica	P. B. S.	Melyris, Olivier.
42. Cuprea	New Cambridge	Crioceris, Fabricius.
43. Oculata	New Holland	Lema, Fabricius.
44. Bioculata	P. B. S.	Crioceris, Fabricius.
45. Ebraea	Cayenne	
46. Caminea	N. America	
47. Pallens	Unknown	
48. 2-fasciata	Unknown	

Fabrician Species.	Country.	Genera of Authors.
19. Equestris	Cayenne	Lema, Fabricius.
50. 4-notata	Sumatra	Crioceris, Fabricius.
1. Triangulum	S. America	
2. Humeralis	New Cambridge	
3. 4-punctata	New Cambridge	
4. Rufipes	England	Luperus, Geoffroy.
55. Flavipes	England	
66. Adusta	Germany	Auchenia, Herbst?
57. Subspinosa	England	Zeugophora, Kunze.
8. Cyanocephala	New Holland	Crioceris, Fabricius?
9. Liciens	Brazil	Phyllotrupes, Hope.
0. Cantharoides	England	Orsadacna, Latreille.
1. Betulae	Lapponia	Phædon, Megerle.
2. Lineola	Germany	Orsadaena, Latreille.
3. Pygmaea	Cayenne	Crioceris, Fabricius.
4. Minuta	P. B. S.	Cryptocephalus?
5. Ephippium	S. America	Thyamis, Stephens?
6. Emarginata	S. America	Haltica, Illiger.
7. Collata	Carolina	
8. Fulvipes	England	
9. Fuscipes	France	
0. Ruficornis	Germany	
1. Anglica	England	Macronema, Megerle.
2. 4-pustulata	England	Thyamis, Stephens.
3. 2-pustulata	Carolina	Haltica, Illiger.
4. S. Littera	Surinam	
5. Atricilla	England	Thyamis, Stephens.
6. Sisymbrii	England	
7. Nasturtii	England	
8. Dorsalis	England	
9. Phthisica	S. America	Thyamis?
80. Exoleta	England	Macronema, Megerle.
31. Laevigata	Tangiers	
32. Volkameriae	America	Haltica, Illiger.
33. Copalina	Carolina	
34. St. Crucis	St. Cruz.	
35. Holsatica	England	Thyamis, Stephens.
36. Tabida	England	
37. Euphorbiae	England	Haltica, Fabricius.
88. Atra	Germany	
99. Nemorum	England	
0. Brassicae	France	

Fabrician Species.	Country.	Genera of Authors.
91. Surinamensis	Surinam	Haltica? Illiger.
92. Rubi	England	Mantura, Stephens.
93. Hortorum	S. America	Haltica, Illiger.
94. Porvula	S. America	
95. Vittata	Carolina	

82. GENUS HELODES, FABRICIUS.

1. Phellandrii	England	Helodes, Paykull.
2. Campestris		Lema, Fabricius.
3. Violacea	Barbary England	Helodes, Paykull.
4. Elongata	P. B. S.	Novum Genus.
5. Porrecta	P. B. S.	

83. GENUS LEMA, FABRICIUS.

1. 4-pustulata	Siam	Lema, Fabricius.
2. Impressa	Siam	
3. Unipunctata	Java	
4. Semipunctata	Sumatra	
5. Armata	Guinea	
6. Cyanipennis	Sumatra	
7. Praeusta	East Indies?	
8. Albicornis	S. America	
9. Merdigera	England	-
10. Retusa	Cayenne	
11. Brunnea	England	
12. 12-punctata	England	
13. Tranquebarica	Tranquebar	
14. 14-punctata	Austria	
15. Ruficollis	Cayenne	
16. Melanura	Tranquebar	
17. Asparagi	England	
18. Atrata	S. America	
19. Nigricornis	Cayenne	
20. 5-punctata	Germany	
21. Coromandeliana	East Indies	
22. Solani	N. America	
23. Cyanella	England	
24. Cornuta	Carolina	
25. Cyanea	East Indies	

Fabrician Species.	Country.	Genera of Authors.
26. Bicolor	East Indies	Lema, Fabricius.
27. Melanopa	England	
28. Unifasciata	New Holland	
29. 2-fasciata	New Holland	
30. Nigripes	New Holland	
31. Obscura	S. America	
32. Vittata	S. America	Megascelis, Latreille.
33. Cuprea	S. America	
34. Nitidula	S. America	
35. Striata	S. America	?
36. Varia	S. America	Petauristes, Latreille.
37. Posticata	S, America	

84. GENUS GALLERUCA, FABRICIUS

	04. GENU	S GALLERUCA,	, FABRICIUS.
1.	2-maculata	America	Galleruca, Fabricius.
2.	Testacea	P. B. S.	
3.	Pallipes	Sumatra	***************************************
4.	Rosea	Sumatra	-
5.	Fasciata	America	
6.	Ruficollis	England	Phædon, Megerle.
7.	Littoralis	Europe	Galleruca, Fabricius.
8.	Trenquebarica	Tranquebar	
9.	Unicolor	Sumatra	
10.	Sumatrae	Sumatra	
11.	Cajennensis	Cayenne	
12.	Nigripennis	Surinam	
13.	Obscura	Guinea	***************************************
14.	Baccharidis	Carolina	
15.	Rustica	England	
16.	Tanaceti	England	
17.	Tricolor	Sumatra	
18.	Marginata	S. America	
19.	Pallicornis	Sumatra	· · · · · · · · · · · · · · · · · · ·
20.	Luteicornis	Sumatra	
21.	Bicolor	Sumatra	
22,	Analis	Sumatra	
23.	Atripennis	Sumatra	
24.	Cruenta	East Indies	
25.	Ferruginea	S. America	
26.	Abdominalis	S. America	

Fabrician Species.	Country.	Genera of Authors.
27. Alni	England	Adimonia, Laicharting
28. Compressicornis	S. America	Novum Genus.
29. Bassiae	East Indies	Galleruca, Fabricius.
30. Lawsoniæ	East Indies	
31. Absinthii	Siberia	
32. Picea	Equin. Africa	
33. Betulae	England	Phædon, Stephens.
34. Tricolor	Indies	Adimonia, Laicharting
35. Sericea	East Indies	Galleruca, Fabricius.
36. 4-maculata	Denmark	Auchenia, Marsham.
37. 6-punctata	P. B. S.	
38. Impressa	Tranquebar	Galleruca, Fabricius?
39. Discoidea	Carolina	Auchenia, Marsham.
40. Limbata	Carolina	
41. Cincta	Tranquebar	Novum Genus.
42. Trilineata	P. B. S.	Galleruca, Fabricius.
43. Triloba	Guinea	
44. Lineola	England	
45. Nymphaea	England	
46. Capreae	England	
47. Avicenniae	S. America	Galleruca? Fabricius.
48. Ruficanda	P. B. S.	Lina, Megerle.
49. Vitellinae	England	Phytodecta, Kirby.
50. Lactucae	Dresden	Diaperis, Fabricius.
51. Palliata	Dresden	Crioceris, Fabricius.
52. Calmariensis	England	Galleruca, Fabricius.
53. Morio	P. B S.	Crioceris, Fabricius?
54. Sanguinea	N. Europe	Galleruca, Fabricius.
55. Marginella	S. America	
56. Notata	N. America	
57. Notulata	N. America	
58. Maura	S. America	Crioceris, Fabricius.
59. Americana	Carolina	Galleruca, Geoffroy.
60. Atomaria	Carolina	
61. Gelatinariae	N. America	
62. Tenella	England	
63. Haemorrhoidalis	New Cambridge	
64. Histrionica	Indies	
65. Varicornis	S. America	
66. Famelica	N. America	Haltica, Illiger.
67. Fasciata	St. Domingo	Ædionychis, Latreille.

Fabrician Species.	Country.	Genera of Authors.
68. Caroliniana	Carolina	Orchestris, Kirby.
69. Equestris	America	Ædionychis, Latreille,
70. Macula	S. America	?
71. 10-guttata	S. America	Ædionychis, Latreille.
72. Nobilitata	Cayenne	
73. 4-fasciata	Cayenne	
74. Sellata	S. America	
75. Abbreviata	Cayenne	Ædionychis, Latreille.
76. Limbata	Tangier	Haltica, Illiger.
77. Thoracica	America	Ædionychis, Latreille.
78. Nitida	S. America	
79. Æquinoctialis	S. America	
80. Albicollis	Cayenne	
81. 4-notata	Cayenne	
82. Bicolor	America	
83. Humeralis	S. America	
84. Lunata	S. America	
85. Collaris	N. America	Orchestris, Kirby.
86. Cyanipennis	St. Domingo	Ædionychis, Latreille.
87. Glabrata	Jamaica	Orchestris, Kirby.
88. Miniata	Carolina	Ædionychis, Latreille.
89. Quercata	Carolina	
90. Conjugata	Carolina	Orchestris, Kirby.
91. Petaurista	Carolina	Ædionychis, Latreille.
92. Oculata	S. America	
93. Coccinea	Guinea	
94. Hectica	S. America	
95. Impressa	Tangier	Crioceris, Fabricius.
96. Marginella	Portugal	Galleruca, Fabricius.
97. Flavicollis	S. America	Ædionychis, Latreille.
98. Obsoleta	S. America	Ædionychis, Latreille.
99. Erucae	Germany	Haltica, Illiger.
00. Cyanea	Sumatra	
01. Pallens	Guadeloupe	?
02. 2-guttata	N. America	
03. 4-guttata	Cayenne	
04. Liturata	Sumatra	
05. Trifasciata	S. America	
06. Geminata	Tangier	
07. Restituta	S. America	
08. Oleracea	England	

Fabrician Species.	Country.	Genera of Authors.
109. Concinna	Carolina	Ædionychis, Latreille.
110. 4-punctata	New Holland	
111. Suturalis	Carolina	
112. Obsidiana	Carolina	
113. Mercurialis	Germany	Haltica, Illiger.
114. Advena	American Isles	Ædionychis, Latreille.
115. Filiformis	S. America	
116. Porrecta	S. America	a-party-management of the second
117. Elongata	N. America	
118. Frontalis	Carolina	

85. GENUS CYPHON, FABRICIUS.

1. Pallidus	England	Cyphon, Fabricius.
2. Lividus	France	
3. Griseus	England	
4. Pubescens	England	
5. Marginatus	England	
6. Melanurus	England	
7. Hæmisphæricus	England	Scirtes, Illiger.
8. Orbiculatus	Carolina	
9. Compressicornis	S. America	
10. Fasciatus	America	Scirtes? Illiger.
11. Testaceus	S. America	?
12. Depressus	S. America	?

86. GENUS ENDOMYCHUS, FABRICIUS.

1. Marginatus	N. America	Endomychus, Fabricius.
2. Coccineus	England	
3. Cruciatus	Sweden	Lycoperdina, Latreille.
4. 4-pustulatus	Germany	
5. Fasciatus	Hungary	
6. Bovistae	England	м-мо-ментического сторомней с

HISTER, Fabricius. HISTERIDÆ, Linneus. HISTEROIDEA, Hope.

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Genera.	Country.	Typical Species.
	(a) DEPRESSA	
1. Hololepta, Paykull.	Austria	H. Plana, Fabricius.
2. Phylloma, Klug.	Cayenne	H. Corticalis, Fabricius.
3. Oxysternus, Godet.	Cayenne	H. Maxillosus, Fabricius.
4. Plæsius, Klug.	Java	H. Javanus, Klug.
5. Placodes, Klug.	Caffraria	H. Caffer, Klug.
6. { Platysoma, Leach. Hololepta, De Jean.	England	H. Depressus, Fabricius.
7. Omalodes, De Jean.	Cayenne	H. Omega, Kirby.
8. Crypturus, Klug.	East Indies ?	H. Ænescens, Klug.
9. Hister, Linneus.	Europe	H. Major, Linneus.
	(b) CONVEXA	
0. Hetærius, Godet.	Europe	H. Quadratus, Paykull,
1. Epierus, Klug.	Etruria	H. Retusus, Illiger.
2. Tribalus, Klug.	P. B. S.	H. Capensis, Paykull.
3. Dendrophilus, Leach.	Europe	H. Punctatus, Paykull.
4. Paromalus, Klug.	Europe	P. Pumilio, Klug,
5. Saprinus, Klug.	Egypt	H. Rotundatus, Paykull.
6. Pachylopus, Klug.	P. B. S.	P. Dispar, Klug.
7. Plegaderus, Klug,	Europe	H. Cæsus, Paykull.
8. Onthophilus, Leach.	England	H. Sulcatus, Fabricius.
19. Abræus, Leach.	England	H. Globulus, Paykull.
•	, ,	, ,
	(c) CYLINDRICA	A.
20. Cylistus, Godet.	N. America	H. Cylindricus, Paykull.
21. Teretrius, Klug.	Europe	H. Picipes, Paykull.
22. Trypanæus, Godet.	S. America	H. Proboscideus, Fabrici

The above genera belong to the Histeroidea and to the sections a, b, & c., family names may be given; the first being denominated Hololeptidæ, the second Histeridæ; for the third, which probably will eventually be considerably increased, I suggest the adoption of the term Cylindridæ, expressive of the form of the genera composing it. Hister evidently is closely related to the Silphidæ, not only in habits, but also from its internal anatomy, as well as its larval form. Mr. MacLeay, in his valuable work, entitled the Annulosa Javanica, maintains a relationship existing with the Lamellicorns; Mr. Kirby also, in the Fauna Boreali Americana, connects Hister on the one hand with the Necrophaga, and on the other with the Philhydridra, Tryponæus of the New World, from its cylindrical form, and other accordances, evinces a relationship with the Xylophaga. Mr. Westwood also states, that the cornuted thorax of the males intimates a connection with Sinodendron and the Lamellicorns; there is therefore an apparent union of Hister with the Coprophagous, as well as the Xylobious Lamellicorns, which might naturally be expected (a).

⁽a) For an account of the various Swedish authors who have written on the Histeroidea, consult Paykull's Monograph, on Hister, and Thunberg's Coleoptera Capensia.—Vid. Mem. St. Petersburg, Vol. 7, (1820) and Gyllenhall.

Of the English writers, see Leach's Zoological Miscellany, Vol. 3, and also a new genus in the Plymouth Transactions, MacLeay's Horæ Entomologicæ, Kirby's Fauna Boreali Americana, Linnean Transactions, Vol. 12.; and the works of Stephens,

CHELONARIUM, Fabricius.

The Baron De Jean is inclined to follow Fabricius in placing Cheloniarum between Hister and Byrrhus; a situation, according to my views, entirely out of place. Mr. MacLeay, in his Annulosa Javanica, ranges it with the Dermestidæ. His observations are worthy of attention, as he felt convinced of the impropriety of locating it as he has done. One specimen which he examined hung in a very mutilated state. Latreille considers it as belonging to a family mediate between Elater and Buprestis, and it is probable that he is right in his suggestions; till we know more, however, of the habits of these insects, as well as their actual larvæ, it would be rash to speak decidedly concerning them. It appears that some species of Chelonarium are found in the New as well as the Old World, the major part of the known species belonging to South America. Two species from the East Indies have fallen under my notice; neither of them accord with Chelonarium Villosum of MacLeay, described in the Annulosa Javanica.

Westwood, and Curtis. The German works are Sturm's Deutsh Fauna, Kugellan in Schneider's Magazine, Germar's Magazine, Vol. 1 and 4, and also his species Novæ Insectorum, Klug's Jahrbucher der Insectenkunde, page 83; and lastly, Erichson's Kafer der Mark Brandenburg Band, Abth 2, page 649. As to the French writers, I need only mention the names of Audouin and Brulle, and Monsieur Laporte de Castelneau. Some writers are inclined to consider Onthophilus as a distinct section; to that opinion I am opposed, and therefore have omitted it.

Byrrhus, Fabricius. Byrrhidæ, Leach.

The following genera compose the family:—

Genera.	Country.	Typical Species.
1. Anthrenus, Fabricius.	England	An. Pimpinellæ, Fabricius.
2. Trinodes, Megerle.	England	An. Hirtus, Fabricius.
3. Aspidiphorus, Ziegler.	Sweden	Nit. Orbiculata, Gyllenhall.
4. Microchætes, Hope.	New Holland	M. Sphæricus, Hope.
5. Nosodendron, Latreille.	England	B. Fascicularis. Fabricius.
6. Byrrhus, Linneus.	England	B. Pillula, Fabricius.
7. Murmidius, Leach.	China	M. Ferrugineus, Leach.
8. Sinplocaria, Curtis.	England	B. Semistriatus, Fabricius.
9. Syncalypta, Dilwynn.	England	B. Arenarius, Sturm.
10. Ephistemus, Westwood.	England	D. Gyrinoides, Marsham.
11. Limnichus, Ziegler.	England	B. Sericeus, Duftschmidt.
12. Oomorphus, Curtis.	England	B. Unicolor, Sturm.
13. Macroprion, Hope.	Santa Cruz	A. Serraticornis, Fabricius.
*14. Ceutocerus, Germar.	Germany	C. Advena, Schuppell.

The above table comprises the genera of Byrrhidæ, a family evidently allied to the Dermestidæ, as well as the Histeroidea. Mr. Kirby, in his Fauna Boreali Americana, ranges the Byrrhidæ along with the Necrophaga, while Mr. Westwood points out the connexion with Anisotoma. With respect to the species mentioned by Fabricius, I have only given four, as there cannot be a doubt respecting the remaining nine described in the Eleutheratorum; I pass on therefore to the genus Anthrenus. It may be here added, that the species named Elon-

^{*} Some Entomologists consider Murmidius and Ceutocerus to be identical. My friend the Comte de Castelneau regards them as distinct.

gatulus may be considered as connecting the families of Byrrhidæ and Dermestidæ.

Anthrenus, Fabricius.

The species twelve and thirteen of the Fabrician Anthrenis belong evidently to a separate genus. They are remarkable for their antennæ, the club being much produced and serrated; I have therefore applied the generic term Macroprion, derived from $\mu\alpha\kappa\rho\sigma$ longus, and $\pi\rho\iota\omega\nu$ serra, to include those species which are allied to Anthrenus serraticornis of Fabricius. They occur at Santa Cruz. Anthrenus gloriosæ probably may be an Attagenus.

Bolitophagus, Fabricius.

Fabricius placed next to Anthrenus the genus Trox, now one of the Lamellicorn families. As it has already been treated of, I proceed to the next genus, namely, Bolitophagus, to which Latreille has applied the term of Eledona. I retain the Fabrician name on the ground of priority. Only four species are recorded by the above author, all of them still belonging to the genus.

OPATRUM, Fabricius.

The insects described by Fabricius and ranged under the genus Opatrum, belong chiefly to two families, namely, the Asididæ and Opatridæ: they are intimately connected, and the following tables will exhibit the genera belonging to them respectively. It must be stated, however, that there are some exceptions, as Opatrum Gibbum, and Clathratum

belong to another family, namely, the Pedinidæ, while Opatrum minutum is an Helophorus.

Asididæ, Castelneau.

Country.	Typical Species.
Mexico	Z. Mexicanus, Hope.
Europe	Op. Griseum, Fabricius.
Mexico	P. Pel. Mexicanus, Solier.
Mexico	Mic. Punctata, Solier.
P. B. S.	Plat. Serratus, Fabricius.
Brazil	Sc. Crenicollis, Kirby
East Indies	Pl. Excavatus, Fabricius.
P. B. S.	Eur. Muricatus, Kirby.
P. B. S.	Plat. Variolosus, Fabricius.
Cuba	N. Echinatum, De Jean.
P. B. S.	Plat. Dilatatus, Fabricius.
	Mexico Europe Mexico Mexico P. B. S. Brazil East Indies P. B. S. P. B. S. Cuba

To the above genera several others might be added, particularly some undescribed types from the East Indies and New Holland. The genera Stenosis, Cardigenius, and Stenomorpha of Solier, ought also to be attached. They are from the New World, and represent there nearly similar corresponding forms, which appear at present to be peculiar to the Old World.

OPATRIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Opatrum, Fabricius.	England	Op. Sabulosum, Fabricius.
2. Scleron, Hope.	East Indies	Op. Orientale, Fabricius.
3. Trichoton, Hope.	Cayenne	T. Cayennense, Hope.
4. Isopteron, Hope.	New Holland	T. Australe, Hope.
5. Microzoon, De Jean.	England	Op. Tibiale, Fabricius.
6. Leichenum, De Jean.	Austria	Op. Pictum, Fabricius.
7. Pilioloba, Solier.	Tucuman	P. Salax, Lacordaire.
8. Crypticus, Latreille.	Paris	C. Glaber, Fabricius.

Such are the genera which, according to my views, belonging to Opatridæ; I am not aware that the echaracters of Sclerum of De Jean, are yet published. I change the termination to on, as being more correct. The following short generic characters will probably suffice to denote a form allied to Opatrum, which appears only to occur in tropical Africa and Asia,

Scleron, Hope.

"Corpus elongatum, elytris thorace duplo longioribus et latidudine æqualibus. Caput rugosum. clypeo fisso, antennis ultimis articulis sensim incrassatis.
Thorax rugosus. Tibiæ anticæ dilatato-trigonæ."
About ten species have fallen under my notice;
two inhabit Africa, and the rest are from the East
Indies.*

TRICHOTON, Hope.

Corpus nitiduliforme, ovatum, convexum, postice subacuminatum, supra et infra pilosum. Antennæ moniliformes, quatuor ultimis articulis extrorsum crassioribus, subæqualibus. *Femora* parum incrassata tibiis quatuor anticis arcuatis postice dilatatis. tibiis posticis rectis, in reliquis Opatro convenit. Habitat in America Meridionali.

The insect above-described, is the only Opatrum belonging to the New World that has fallen under my notice. From the above short description it will be seen at once, that it cannot be ranged with

^{*} Besides the general works containing the Heteromea, consult Opatra Collect. Stevenianæ, in Mem. Soc., Imp. Mosc., volume 7.

those of the Old World; I have named it Trichoton from the Greek word $\tau \rho \iota \chi \omega \tau \sigma s$ Pilosus, placing it in the neuter gender, as according with the original Fabrician genus Opatrum; the specific name of Cayennense is the country from whence it was received.

ISOPTERON, Hope.

Corpus elongatum, elytris thorace triplo longioribus. Caput antice fossula transversa sulcatum postice rotundatum clypeo emarginata;—Thorax fere semicircularis angulis posticis externe fortiter incisis, Scutellum magnum. Elytra antice, et postice fere æqualia. Corpus infra scabrum punctatum femora antica fortiter sulcata, quatuor posticis fere integris, at externo sinuatis. Tibiæ anteriores dentatæ, reliquis inarmatis et elongatis. Habitat in Nova Hollandia.

In concluding my observations on the genera of Opatridæ, I have to remark, that I have adopted the genera of Microzoum, Leichenum, and Piliobola of Solier, feeling satisfied that they form subgenera. The name of Microzoum, however, should be changed to Microzoon; that of Leichenum should I think, be changed, and Piliobola be altogether expunged. I am in doubt if the above genera are published with details or not; if not, it remains with future writers to name them anew.

FABRICIAN SPECIES.

Sp. 3. Obscurum.—On Westermann's authority, I record this species as an Asida.

FABRICIAN SPECIES OF OPATRUM.

- Sp. 6. Gibbum.—This insect belongs at present to a distinct family, which may be named from the Latreillian Pedinus Pedinidæ.
- Sp. 11. Arenarium.—The locality in the Banksian Collection of this species is the Cape of Good Hope, and not Germany, and I am inclined to consider it as correct.
- Sp. 14. Clathratus.—Now an Opatrinus of De Jean, one of the Pedinidæ; it appears also, to be the type of the genus.
- Sp. 15. Planum.—Is a Pedinus of the present day.
- Sp. 24. Sericeum.—I have reported this insect to belong to my genus Scleron. Westermann, however, informs me in his letters, that it is a Pentamerous insect, and allied to the Malacodermata. He does not state the genus.
- Sp. 27. Minutum.—Undoubtedly this insect is an Helophorus of Dr. Leach. The remaining species require no remarks; and therefore, the next genus to comment on is Erodius.

Erodius, Fabricius.

According to various authors, Erodius of Fabricius has been placed at the head of the Melasomata, with what justice I do not attempt to decide; I shall merely give the genera which compose the

family, and leave others to determine its true locality. Some have considered Erodius as belonging to Pimelia, which does not accord with my views, as I regard it as belonging to a distinct family, namely, the Erodiidæ of Solier.

ERODIIDÆ, Solier.

Genera.	Country.	Typical Species.
1. Erodius, Fabricius.	Spain	E. Gibbus, Fabricius.
2. Leptonychus, Chevrolat.	Senegal	L. Erodiodes, Chevrolat.
3. Diodontes, Solier.	Senegal	E. Porcatus, De Jean.
4. Arthrodeis, Solier.	Egypt	E. Rotundatus, De Jean.
5. Anodesis, Solier.	Senegal	E. Cleryi, Buquet.
6. Zophosis, Latreille.	P. B. S.	E. Testidunarius, Fabricius.

The above genera belonging to the Erodidæ, are all, I believe, which are yet published; the second section comprehended by Monsieur Solier under the term Zophosites, evidently requires further subdivision.

- 1. Scaurus, Fabricius.
- 2. Scaurites, Solier.
- 3. Scauridæ, Hope.

Only four insects are included in the Systema Eleutheratorum under the genus Scaurus; from late discoveries, they are greatly increased. I give the tables of the genera (published in the Annales de la Societe Entomologique de France,) by Solier relating to this family.

Scauridæ, Hope.

Genera.	Country.	Typical Species.
1. Scaurus, Fabricius.	Egypt	S. Atratus, Fabricius.
2. Cephalostenus, Solier.	Morea	S. De Jeanii, Solier.
3. Herpiscius, Solier.	P. B. S.	H. Spinolæ, Solier.
4. Leptodes, De Jean.	Turcomania	L. Boisduvalii, Zoubkoff.
5. Polypleurus, Eschcholtz.	N. America?	P. Geminatus, De Jean.

I need only remark on one Fabrician species named Sulcatus, which appears to be a Ditomus of Bonelli, and belonging to the Ditomidæ of Audouin, one of the families pertaining to the Caraboidea; Scarites Bucephalus of Olivier is the same insect; so also is the Carabus Clypeatus of Rossi.*

SEPIDIUM, Fabricius.

The genus Scarites in the Systema Eleutheratorum follows Scaurus, as it has already been treated of in its natural place, I pass onwards to Sepidium, and I feel inclined to consider Sepidium entitled to rank as a family. The following genera belong to it:—

SEPIDIIDÆ, Hope.

Genera.	Country.	Typical Species.
 Sepidium, Fabricius. Trachynotus, Latreille. Oxura, Kirby. 	Arabia P. B. S. P. B. S.	S. 3-cuspidatum, Fabricius. S. Reticulatum, Fabricius. Ox. Setosa, Kirby.

^{*} Figures of the genera Cephalostenus, Herpiscius, Leptodes and Polypleurus, will be found in the 7th volume of the Annales of the French Entomological Society.—Vid. Plates 7 & 8.

Sepidide, Hope. (continued.)

Genera.	Country.	Typical Species.
4. Trachelœum, Hope.	P. B. S.	S. Laticolle, Hope.
5. Echinotus, Klug.	Caffraria	S. Spinicolis, Klug.
6. Crytoderes, Solier.	P. B. S.	S. Curculionum, Thunberg.
7. Somaticum, Hope.	P. B. S.	S. Rugosum, Fabricius.
8. Hipomelus, De Jean.	P. B. S.	S. Vittatum, Fabricius.
9. Vieta, Castelneau.	Senegal	Sep. Vestitum. Klug.

TRACHELŒUM, Mihi.

I have given as a sub-genus a, remarkable insect in my Collection, which accords with none of the genera which have already been described; it is evidently a Sepidium, and approaches Oxura and Trachynotus in some points, and yet differs entirely in the shape of the thorax with any species of Sepidium yet published. I name it therefore, Trachelœum, from the Greek $\tau \rho a \chi \eta \lambda a \iota o s$, its chief characters being derived from the anomalous form of the thorax which in the major part of the above genera, may be regarded as hexagonal; in the present instance, it is quadrilateral, the anterior angles being rounded. The following differences at once distinguish it from other genera belonging to this family.

Thorax fere quadratus angulis anticis rotundatis, posticis gradatim minoribus. Corpus valde convexum. Elytra fortissime sulcata, sutura et lineis ternis elevatis conspicua, lineis neque basin nec apicem attingentibus. Corpus infra contractum, elytris abdomen ambientibus, lateribus fortiter sulcatis, in reliquis Trachynoto convenit.

Somaticus, Hope.

The type of this genus is Sepidium Rugosum of Fabricius, The type of Trachynotus is S. Reticulatum of the same author, and all the species belonging to it, have the body depressed, the elytra scarcely exceeding in width the broadest part of the thorax; in Somaticus the body is greatly enlarged, being nearly twice as broad as the neck; the thorax is convex, as well as the elytra, each of which has an elevated ridge on the centre of disc, commencing at the base of the wings, and terminating gradually before it reaches the apex. On the under side the elytra appear considerably larger than the abdomen, overlapping the body; the sides of the wings are also remarkable for a broad furrow, which extends throughout their length. I have no observations to make on the Fabrician species, and have given Hipomelus of De Jean as one of the genera, but feel doubtful if its characters are yet published. With regard to Vieta of Castelneau, it appears to be too nearly allied to Sepidium to separate it; as however its concise characters are published, I have inserted it. The Sepidium elongatum of Herbst and Olivier has been supposed to come from the East Indies, which is probably erroneous, as I obtained a specimen from Lee's cabinet, labelled as received from the Cape of Good Hope.

PIMELIA, Fabricius.
PIMELITES, Solier.
PIMELIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Platyope, Fischer.	Siberia	Ak. Lineata, Fabricius,
2. Diesia, Fischer.	Bucharia	D. 4-dentata, Fischer.
3. Trigonoscelis, Solier.	S. Russia	Pim. Nodosa, Fischer.
4. Lasiostola, De Jean.	S. Russia	Pim. Pubescens, Pallas.
5. Prionotheca, Solier.	Egypt	Pim. Coronata, Olivier.
6. Pterocoma, Solier.	Siberia	Pim. Piligera, Gebler.
7. Thriptera, Solier.	Egypt	T. Maillei, Solier.
8. Pachyscelis, Solier.	Persia	P. Depressa, Solier.
9. Phymatiotris, Solier.	Morea	Ph. 4-collis, De Jean.
10. Pterolasia, Solier.	Senegal	Pt. Squalida, De Jean.
11. Polpogenia, Solier.	Senegal	P. Asidioides, Solier.
12. Podhomala, Solier.	S. Russia	P. Suturalis, Fischer.
13. Pimelia, Fabricius.	Egypt	P. Angulata, Fabricius.
14. Melanostola, De Jean.	Tripoli	P. Simplex, De Jean.
15. Psammodes, Kirby.	P. B. S.	Ps. Longicornis, Kirby.
16. Epiphysa, De Jean.	P. B. S.	Pim. Flavicollis, Fabricius.
17. Cryptochile, Latreille.	P. B. S.	P. Maculata, Fabricius.
18. Physogaster, Latreille.	Chili	P. Tomentosus, Guerin.
19. Megagenius, Solier.	Barbary	Pim. Frioli, Solier.
20. Macropoda, Solier.	Senegal	Pim. Variolaris, Olivier.
21. Physosterna, Solier.	P. B. S.	Pim. Ovata, Olivier.
Stenochara, Solier,	P. B. S.	Pim. Porcata, Fabricius.
22. Adesmia, Fischer.	Egypt	Pim. Longipes, Fabricius.
23. Metriopa, Solier.	P. B. S.	Pim. Hoffmanseggii, Dup.
24. Oteroscelis, Solier.	Persia	Ades. Pulcherrima, Fischer.

The above genera belong to the Pimelidæ, and to them others might be added. It will be seen at a single glance that the genera are nearly all of them confined to Africa and Southern Russia. No

doubt other forms will occur on the banks of the Indus, and in various parts of Asia. Some rare forms from the vicinity of Poona have lately been brought to this country from that locality. As it is not my intention in this Manual to introduce genera without they are very remarkable in form, I consequently leave many of the Heteromera undescribed. Physogaster probably belongs to another family. Along with the Pimeliæ Fabricianæ will be found some forms pertaining to other Heteromerous families; for instance, such genera as Moluris, Gnaptor, Acanthomera, Morica, and Amatodes. In one instance we have a remarkable deviation from Pimelia, as the species named Pygmæa appears to be a Georyssus of Latreille. For the published characters of Physogaster, Vid. Guerin's Magazine, Vol. 4. Plate 101. It will be seen that I have considered the tribe termed Macropodites by Solier, as being closely allied to Pimelidæ, and cannot well be separated. Stenochara and Adesmia I also consider as one genus, and even Oteroscelis must be united.-For further information, refer to Solier in the 4th volume of the Annales de la Societe de France, page 509.

FABRICIAN SPECIES OF PIMELIA.

- Sp. 1. Striata.—This insect belongs to another family, namely, the Moluridæ.
 - Sp. 3. Flavicollis .- This is now of the genus

Epiphysa of De Jean. It seems to be a mediate form, between the Erodiidæ and the Pimelidæ.

- Sr. 4. Gibba.—I regard this species as a Moluris. The locality in Fabricius is reported to be from India; in Olivier's work both Africa and Asia are mentioned. I obtained this singular form at the purchase of Lee's insects; it approaches somewhat to Moluris, and might be formed into a sub-genus belonging to that family.
- Sp. 6. Globosa.—There is great contention respecting this species. I regard it as a Pimelia; Westermann tells me it is certainly a Moluris.
- Sp. 7. Glabrata.—This insect is probably the other sex of Gnaptor lævigatus.
- Sp. 11. Muricata.—Now a Pimelia. There are two species named Muricata; that mentioned by Linneus appears to be an Adesmia. The Fabrician one is still a true Pimelia.
- Sp. 12. Tuberculata.—I give this species on the authority of Latreille and De Jean as an Acanthomera; the figure however in Herbst's work resembles closely a Pimelia.
- Sp. 15. Scabra.—Now a Moluris of Latreille. In the Banksian Cabinet two distinct insects are labelled with the name of Scabra; the first is a Moluris from the Cape of Good Hope, and the second a true Pimelia from Siberia. There are two specimens of each; one of the latter appears as if it was a manufactured specimen.
- Sp. 27. Canaliculata.—I regard this insect as belonging to the genus Amatodes of De Jean.

Sp. 28. Costata.—According to Westermann this is a Cryptochile of Latreille; and he adds in a note, it is certainly a rubbed specimen of Pim. maculata of Fabricius.

Sp. 31. *Pygmæa*.—Now a Georyssus of Latreille. The generic name given to this species by Illiger is Cathamistes, and is most likely the Trox dubius of Panzer. Refer to the latter author.

Eurychora, Fabricius.

Eurychora is one of the genera belonging to the Akisidæ: only one species is recorded by Fabricius. There are at present in the European cabinets about twenty-five species; the major part of the genera are from Africa; some few of them however, are from Europe.

EURYCHORITES, Solier. EURYCHORIDÆ, Hope.

Genera,	Country.	Typical Species.
1. Eurychora, Fabricius.	P. B. S.	E. Ciliata, Fabricius.
2. Pogonobasis, Solier.	Senegal	E. Opatroides, De Jean.
3. Adelostoma, Duponchel.	Spain	Ad. Sulcatum, Duponchel.
4. Steira, Westwood.	P. B. S.	St. Costata, Westwood.
5. {Notiophygus, Gory.* Dicrossa, Kluy.	P. B. S.	Not. Nigropunctatus, Gory.

^{*} Consult the Monograph du Genre Notiophygus, par M. Gory, Ent. Trans. de France. Vol. 3, p. 452. Only five species are described by him.

AKISITES, Solier.
AKISIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Cacicus, De Jean.	Tucuman	C. Americanus, Lacordaire.
2. Elenophorus, Megerle.	Marseilles	A. Collaris, Fabricius.
3. Morica, De Jean.	Tangiers	A. Planata, Fabricius.
4. Akis, Fabricius.	Spain	A. Acuminata, Fabricius.
5. Cyphogenia, Solier.	S. Russia	A. Aurita, Schonherr.
6. Cryptoglossa, Solier.	Mexico	C. Bicostata, Dupont.
7. Melaphorus, Guerin.	Peru	M. Reichei, Guerin.
8. Evaniosomus, Guerin.	Lima	E. Orbiguyanus, Guerin.

As under Pimelia of Fabricius, we found several genera belonging to modern families, so is it the case with respect to Akis. Platyope of Fischer belongs to the Pimelidæ; Heliodromus, Lophoma, Thalpophila, Tentyria and Hyperops to the Tentyridæ; while the Tageniadæ appear to form altogether a distinct family.

FABRICIAN SPECIES OF AKIS.

- Sp. 6. Lineata.—Now a Platyope of Fischer, and is the same insect apparently as Pimelia lineata of Olivier.
- Sp. 8. Glabra.—Now an Heliodromus of Brulle. The name of Platyscelis has been attached to this and other species; as however it is used for one of the Caraboidea, it is abandoned.

Sp. 13. Lævigata.—Now an Hyperops of Solier. The name of Tetromma is used by Professor Klug, and I believe is anterior to that of Solier's name.

PLATYNOTUS, Fabricius.

Platynotus now belongs to the family of Asididæ. Refer back to page 110, where the genera composing it are mentioned. Some of the species arranged by Fabricius under Platynotus, belong to other families than Asida; for instance, Gnaptor, Eleodes, and Selenepistoma, are arranged with the Blapsidæ, while Heteroscelis is distinct from them all.

FABRICIAN SPECIES OF PLATYNOTUS.

- Sp. 4. Dilatatus.—This is now a Selenepistoma of Wiedemann. The locality given by Fabricius is the Isle of St. Thomas. It is probably from the Cape of Good Hope.
- Sp. 6. Lævigatus.—Now a Gnaptor of Megerle. Tenebrio spinimanus of Pallas is the same insect.
- Sp. 7. Undatus.—Probably an Eleodes of Dr. Escheholtz.
- Sp. 12. Granulatus.—I consider this insect still as a Platynotus. It was originally described from Lunds collection. According to Westermann this species is not now to be found in the Royal Museum at Copenhagen.

BLAPSIDE, *Fabricius*.
BLAPSIDE, *Leach*.
BLAPTOIDEA, *Hope*.

This group may not improperly be divided into two or three families; namely, the true Blapsidæ and the Pedinidæ; others add also the Asididæ, which I consider as more nearly allied to the Opatridæ. The genera are numerous, and the following are all characterized.

BLAPSIDE, Leach.

Genera.	Country.	Typical Sprcies.
1. Blaps, Fabricius.	France	B. Gages, Fabricius
2. Gnaptor, Megerle.	Hungary	P. Lævigata, Fabricius.
3. Leptomorpha, Falderman.	China	Lep. Chinensis, Falderman
4. Eleodes, Eschcholtz.	Chili	El. Dentipes, Eschcholtz.
5. Xysta, Eschcholtz.	Mexico	Xys. Gravida, Guerin.
6. Dolichoderus, Klug.	Madagascar	D. Acuminatus, Klug.
7. Nycteropus, Klug.	Madagascar	Nyc. Ebeninus, Klug.
8. Pseudoblaps, Guerin.	Bengal	Ps. Substriatus, Guerin.
9. Nyctoporis, Eschcholtz.	California	N. Cristata, Eschcholtz.
10. Gonopus, Fischer.	P. B. S.	Blaps Tibialis, Fabricius
11. Anthrasomus, Guerin.	Chili	An. Chevrolatii, Guerin,
12. Misolampus, Latreille.	Portugal	Pim. Gibbula, Herbst.
13. Acanthomerus, Latreille.	P. B. S.	Pim. Gratilla, Herbst.
14. {Heliosteres, Hope. Heliofugus, Guerin.	Chili	Hel. Arenosus, Guerin.
15. Nictipates, De Jean.	Turcomania	Nyc. Carinata, De Jean.
16. Tagona, Fischer.	S. Russia	T. Acuminata, Fischer.
17. Nycterinus, Eschcholtz.	Chili	N. Thoracicus, Eschcholtz.
18. Amatodes, De Jean.	Guinea	Pim. Gemmata, Fabricius.
19. Acanthopus, Megerle.	Italy	Blaps. Caraboides, Germar.
20. Platyscelis, Latreille.	S. Russia	P. Hypolithos, Pallas.

To the above twenty genera several others might be added; the characters of them, however, are not yet published. I most willingly leave the task in the hands of Monsieur Solier, who seems to have studied the Heteromera more thoroughly than any Entomologist living. If some of his differences are not admitted because they are slight, it does not detract from the merit of the writer, who seems to have undertaken a most laborious task, and to have grappled fairly with it. We most sincerely hope to see the completion of the Heteromera, and anxiously wish that health may be allowed him to finish them. Next to the Curculionidæ of Schonherr. the Heteromera of Solier is the most satisfactory undertaking of modern days, with regard to entomological works.

SPECIES OF FABRICIAN BLAPS.

- Sp. 5. Spinipes.—This insect belongs to the genus Pelorus of Bonelli, one of the Zabridæ.
- Sp. 7. Tenebrosa.—Either a Zabrus or a Pelorus of Bonelli. This insect apparently is unknown to the French and English Entomologists.
- Sp. 8. Buprestoides.—I suspect that this insect is a gigantic species of Tagenia, and that its true locality is the East Indies, and not the Cape of Good Hope.—Vid. Pallas Icon. 2. 719. 44.
- Sp. 9. 10. 11. and 12.—Belong to the family of Pedinidæ of Latreille.
 - Sp. 13. Tibialis.—It appears doubtful if this is

the same insect mentioned by Linneus in the Systema. Vide page 678, Sp. 37.

Sp. 14. Crenata.—This insect apparently is a Platynotus.

Sp. 15. Glabra.—Now a Crypticus; one of the Opatridæ.

Sp. 16. 17. and 18.—The first is a Blapstinus of De Jean; Clathratus is an Opatrinus of the same author, and Metallicus most likely belongs to the same genus.

TENEBRIO, Fabricius.
TENEBRIONIDE, Leach.
TENEBRIONIDEA, Hope.

${\it Genera}$.	Country.	Typical Species.
1. Upis, Fabricius.	Russia	T. Ceramboides, Linneus.
2. Calcar, Latreille.	Sicily	C. Elongatus, Herbst.
3. Arthrodaetyla, Klug.	Madagascar	A. Elongata, Klug.
4. Tenebrio, Linneus.	England	T. Obscurus, Linneus.
5. Nyctobates, Guerin.	Brazil	Ten. Gigas, Linneus.
6. Penthicus, Falderman.	Turcomania	Pen. Pinguis, Falderman.
7. Odontopus, Silberman.	Guinea	Odon. Costatus, Silberman.
8. Scotæus, Hope.	Java	Sc. Corallipes, Hope.
9. Heterotarsus, Latreille.	Senegal	H. Tenebroides, Guerin.
10. Plateia, De Haan.	Java	Pl. Orientalis, De Haan.
11. Epitragus, Latreille.	Cayenne	Ep. Fuscus, Latreille.
12. Monomma, Klug.	Madagascar	M. Irroratum, Klug.
13. Baryscelis, Boisduval.	New Holland	B. Laticollis, De Jean.
14. Metallonotus, Gray.	Guinea	M. Denticollis, Gray.
*15. Cyphaleus, Hope.	New Holland	C. Rugosus, Hope,
16. Phymatodes, De Jean.	S. America	L. Tuberculata, Fabricius.
17. Tauroceras, Hope.	Smyrna	T. Cornutus, Fabricius.

^{*} From κυφαλεος, gibbosus.

To the above genera many others might be added, and I think the Chiroscelidæ of some authors cannot be separated from the Tenebrionidæ. The following genera compose the family:

CHIROSCELIDÆ, Gory.

Genera.	Country.	Typical Species.
1. Orthocerus, Latreille.	Paris	Orth, Clavicornis, Linneus
2. Corticus, Latreille.	Dalmatia	C. Celtis, De Jean.
3. Chiroscelis, Lamarck.	Guinea	P. Digitatus, Fabricius.
4. Prioscelis, Hope	Sierra Leone	P. Fabricii, Hope.
5. Toxicum, Latreille.	East Indies	T. Richesianum, Latreille.
6. Phrenapates, Kirby.	Colombia	P. Bennetii, Kirby.
7. Boros, Herbst.	Sweden	Hyp. Boros, Fabricius.

I purposely refrain from adding to the above genera, which might easily be done from the various forms pertaining to the Tenebrionidæ. I have not quoted in the Heteromera various references to works in which much interesting matter is to be found. Monsieur Solier no doubt will, at the conclusion of his task, give us ample references; in the meantime I refer the reader to the Introduction of the modern classification of Insects, (Vol. I., 1839), by J. O. Westwood, Esq., whose Bibliographical References merit great praise, and evince a more thorough acquaintance with Entomological Authors than can be derived from any other systematic work yet published. I have omitted the families of Nyctelidæ, Tentyridæ, and Tagenidæ; for the genera composing them the reader is referred to Solier, in the Annales of the Entomological

Society of France; to the Histoire Naturelle des Animaux Articules, par Laporte de Castelneau; and also to Eschcholtz's Zoologischer Atlas. With respect to the habits and localities of many of the Melasomata, Monsieur Lacordaire has given us several interesting observations in the Ann. Soc. Ent. de France for 1837, vid. page 247.

FABRICIAN SPECIES OF TENEBRIO.

Sp. 6. Serratus.—Now a Prioscelis Mihi, from the Greek, $\pi\rho\iota\omega$ and $\sigma\kappa\epsilon\lambda\sigma$. It will be seen at one glance by referring to the details of Chiroscelis, given among the figures, that Prioscelis differs with the former genus in many points. The Baron De Jean gives the name of Iphius to a species named Serratus by Fabricius; but as no characters are yet published, and the name in his Catalogue, like many others, are merely manuscript names, I cannot adopt them. The following peculiarities will enable any one to separate it from Chiroscelis.

PRIOSCELIS, Hope.

Caput magnum antennis moniliformibus, articulis quinque ultimis magnitudine increscentibus et pubescentibus, ultimo elongato apice conico. Thorax antice et postice latitudini æqualis, lateribus extrorsum convexis. Elytra sicut in Chiroscele. Femora canaliculata bina antica incrassata, denticulata mediis postice foveatis et subdenticulatis, posticis fortiter serratis. Tibiæ anticæ incurvæ sparsim dentatæ. Mediis fere rectis, postice in-

crassatis et dentatis. Posticis valde incurvis, clavatis et intus fortiter serratis. Habitat in Sierra Leona. This remarkable insect I purchased at Lee's sale; it was labelled by Fabricius as a New Genus. The Serratus of the same author is a pigmy compared with it; and as it appears undescribed I name it Fabricii, in honour of that illustrious Entomologist.

PRIOSCELIS FABRICII, Hope.

Long. Lin. 18, Lat. Lin. 7. Ater, thorace glabro, elytris elongatis et striatis, tibiis incurvis et serratis.

Antennæ moniliformes extrorsum crassiores articulis quinque ultimis magnitudine increscentibus et fusco pubescentibus. Caput postice rugosum antice tuberculo fere medio conspicuum. Thorax marginatus glaber. Elytra elongata striatopunctata. Corpus infra nigrum femoribus anticis incrassatis canaliculatis et dentatis Tibiæ anticæ et posticæ incurvæ, mediis fere rectis. In Museo Dom. Hope, Habitat in Sierra Leona. The Iphius serratus of De Jean is quite a distinct species, differing greatly in its thorax, sculpture, and in various other points.

Sp. 7. Digitatus.—Type of the genus Chiroscelis of Lamarck. This species, or one closely allied to it, has been stated to occur in New Holland. I doubt its occurrence in that locality, possessing a very extensive collection from that quarter, and never having received anything at all allied to it. I am inclined to doubt the authority.

- Sp. 12. Lævigatus.—This insect in the Banksian cabinet is an immature specimen. I regard it as an Upis of Fabricius.
- Sp. 14. Abbreviatus.—This insect is compared by Olivier with Ten. Atratus. From the description given by Fabricius I am inclined to consider it as a female of a species of Toxicum. The localities mentioned by Olivier are East Indies and the South of France; if belonging to the former it is a Toxicum, if to the latter, it is probably a Pandarus.
- Sp. 16. Cornutus.—I have thought proper to constitute this insect the type of a distinct genus, which I have denominated Tauroceras, from $Tav\rho os$ and $\kappa e \rho as$. The following brief characters will separate it from Tenebrio or Upis.

TAUROCERAS, Hope.

Caput bicorne antennis moniliformibus. Thorax marginibus crenatis, antice angulis prominentibus, ultimis articulis subrotundatis, seu subcornutis, lateribus serratis. Femora antica crassiora, posticis æqualibus tibiisq: subincurvis, Fæmina differt capite inarmato, thorace angulis anticis fortiter dentatis. The species is already described by Fabricius under the name of Cornutus.

- Sp. 18. Æruginosus.—Still a Tenebrio. Ærugineus and Cyanipes of Weber are merely synonyms of this species.
- Sp. 22. Brunneus.—The figure of this insect in Herbst would lead one to imagine it a species of

Parandra; I am inclined however to consider it either as a Tenebrio or a large species of Uloma. Westermann says it is an Adelphus of De Jean.

Sp. 28. Chrysomelinus.—Apparently this insect belongs to the genus Alphitophagus of Stephens.

Sp. 29. Villosus.—Fabricius says of this insect, "species Mihi, haud rite nota." It probably belongs to a new genus. No reference is made to it in Schonherr that can satisfactorily determine it.

TROGOSITIA, Fabricius.
TROGOSITIDÆ, Mihi.

Genera.	Country.	Typical Species.
1. Trogosita, Fabricius.	Guinea	T. Varia, Fabricius.
2. Temnoscheila, Gray.	S. America	T. Splendens, Gray.
3. Lepidopteryx, Hope.	New Holland	T. Squamosa, Gray.
4. Prostomis, Latreille.	Germany	T. Mandibularis, Fabricius.
5. Anisoceras, Westwood.	P. B. S.	An. Carinatus, Westwood.
6. Passandra, Dalmann.	Guinea	P. Gigas, Fabricius.
7. Bius, De Jean.	Sweden	T. Thoracicus, Fabricius.

To the above genera others might be added, particularly some new forms from New Holland. I have given the name of Lepidopteryx to the genus which contains the species named Squamosa. The details will be found accurately figured in Griffith's Entomology, plate 75, figures 4.

FABRICIAN TROGOSITÆ,

Sp. 1. Retusa.—Now an Uloma of Megerle. The locality of Fabricius is Sumatra; according to De Jean it is from Cayenne.

- Sp. 2. Varia.—According to Westermann this insect is a Temnoscheila of Gray.
- Sp. 5. *Picipes*.—Probably a Boros of Herbst. The locality mentioned in the Systema Eleutheratorum is Guinea; in the Supplement it is changed to Europe.
- Sp. 7. Thoracica. According to the Baron De Jean this is the type of his genus Bius. I am doubtful if the details are yet published; the name should be changed to Bia to agree with the genera of the family.
- Sp. 10. Elongata. Either a Languiria or a Colydium; if from Sumatra it is the former, and if from Europe it is of the latter genus.
- Sp. 11. *Bicolor*.—Illiger regards this insect as a Colydium; Latreille ranks it as a Languiria.
- Sp. 12. Filiforme.—Certainly a Colydium. The Fabrician locality is Sumatra. I have given Sweden with a query attached to it as its country. Is Colydium an Oriental Genus?
- Sp. 13. Calcar.—Now the type of De Jean's genus Calcar. The specific name of elongatus first used by Herbst should be adopted.
- Sp. 17 and 18.—Both of these insects belong to the genus Temnoscheila.
- Sp. 19. 4-guttata.—In the tables I have recorded this insect as a Trogosita; Westermann believes it to be of the same genus.
- Sp. 24 and 25.—These insects belong to a new genus, at present undescribed.

Helopidæ, *Fabricius*. Helopidæ, *Leach*. Helopoidea, *Hope*.

Genera.	Country.	Typical Species.
1. Camaria, Serville.	Brazil	C. Nitida, Serville.
2. Campsia, Serville.	Brazil	C. Irrorata, Dalmann.
3. ${ Blapida, Perty. $	Brazil	B. Okeni, Perty.
4. Spheniscus, Kirby.	Brazil	Sp. Erotyloides, Kirby.
5. Cnodalium, Gray.	S. America	C. Nodosum, Gray.
6. Hegemona, Gory.	Mexico	H. Resplendens, Gory.
7. Pæcilesthus, De Jean.	Brazil	E. Fasciatus, Fabricius.
8. Strongylium, Kirby.	Brazil?	S. Chalconotum, Kirby.
9. Pyganisia, Castelneau.	Cayenne	H. Undatus, Fabricius.
10. Præugena, Gory.	Senegal	P. Marginata, Fabricius.
11. Helops, Fabricius.	England	H. Cæruleus, Fabricius.
12. Hedyphanes, Fischer.	S. Russia	H. Upiodes, Falderman.
13. Amphidora, Esch.	California	Am. Littoralis, Eschch.
14. Penthe, Newman.	N. America	H. Obliquatus, Fabricius.
15. Stenochia, Kirby.	Brazil	Sten. Rufipes, Kirby.
16. Arthromacra, Kirby.	Canada	Arth. Donacioides, Kirby.
17. Cyphonotus, Guerin.	Chili	C. Dromedarius, Gray.
18. Acanthopus, Latreille.	Coromandel	A. Dentipes, Fabricius.
19. Amarygmus, Dalmann.	Java	Am. Æneus, Dalmann.
20. Sphærotus, Kirby.	Brazil	Sp. Curvipes, Kirby.
21. Phytophilus, Guerin.	Chili	P. Helopioides, Guerin.
22. Apocrypha, Esch.	California	Ap. Anthicoides, Eschch.
23. Læna, Latreille.	Vienna	H. Pimelia, Fabricius.
24. Pytho, Latreille.	France	P. Cæruleus, Fabricius.
25. Goniadera, Perty.	Brazil	G. Crenata, Perty.
26. Acropteron, Perty.	Brazil	A. Rufipes, Perty.
27. Lyprops, Hope.	East Indies	L. Chrysophthalmus, Hope.
28. Scotodes, Esch.	Livonia	S. Annulatus, Esch.
29. Atractus, MacLeay.	New Holland	A. Viridis, MacLeay.
30. Prostenus, Latreille.	Brazil	H. Equestris, Fabricius.
31. Meracantha, Kirby.	Canada	Mer. Canadensis, Kirby.

To the above thirty genera several others might be added; till however, Helops is fairly grappled with, and treated of in the way that the Melasomata are by Solier; the above genera may be regarded as giving a very imperfect outline of the various forms composing it. The Helopoidea may be subdivided into the following six families, if not more; namely, the Helopidæ, stelidæ, Cisteliadæ, Serropalpidæ, Ædemeridæ, and Rhinosimidæ; Mr. Kirby adds also the Stenochiadæ. It will be seen from the above short statement that I do not adopt Solier's other divisions of the Heteromera, as I think they may be greatly improved upon, nor am I disposed altogether to abandon the remaining Latreillian divisions named by him Taxicornes, Trachelidæ, and Stenelytra. Of the two arrangements I certainly prefer Latreille's to that of Solier; both however require to be studied with still greater attention, and if it is not saying too much, require reconstructing afresh.

FABRICIAN SPECIES OF HELOPS.

- Sp 3. Metallicus.—Now of the genus Præugena of Laporte de Castelneau. The characters are detailed at page 241 in the Hist. Nat. des Animaux Articules, par Laporte. The true locality is Guinea, and not South America.
- Sp. 4. Æneus.—Now a Camaria of Serville. This insect appears to be the same as Upis ænea of Herbst.

- Sp. 7. *Micans*.—Helops vittatus of Olivier, is a synonym of this species.
- Sp. 10. Excavatus.—This and the former species, if not belonging to Præugena, appear from the description to constitute a sub-genus. De Jean's name of Zophobas is only a manuscript name; and Westerman asserts that Iphthinus excavatus is undoubtedly the same insect.
- Sp. 12. Morbillosus.—Now a Cnodalon of Latreille, who has changed the specific name to Viridis.
- Sp. 13. Cyanipes —I have considered this species as belonging to Amarygmus of Dalmann. Westermann regards it as a Stenochia of Kirby.
- Sp. 15. Cyanicollis. Westermann informs me this insect is a Stenochia; I regard it as an Amarygmus.
- Sp. 16. Abdominalis. The above authority is inclined to make this species a Mycetocharus of Latreille.
- Sp. 18. *Hæmorrhoidalis*.—Now a Stenochia of Kirby. Fabricius mentions India as its locality; Mr. Kirby informs us that it is from the Brazils.
- Sp. 19. Calcaratus. Fabricius says "Habitat in America," believing it to be a true Acanthomera. I change the country, as I suspect it to come from the Cape of Good Hope.
- Sp. 20. Viridis.—According to the Copenhagen collection this species is a Strongylium of Kirby.
 - Sp. 23. Fasciculatus.—In the description of the

species read elytris lævibus, instead of elytris brevibus,

Sp. 28. Dentatus.—Westermann assures me that dentatus is the type of a new genus; it is closely allied to Ipthinus of De Jean, but is distinct.

Sp. 32. *Picicornis*.—An Hegeter of Latreille? Heg. Striatus of Latreille is certainly the same insect according to some authorities.

Sp. 33. Rufipes.—This insect for the present may be recorded as a Helops, although it deviates from the type. The specimen is in too mutilated a state to describe.

Sp. 35, Capensis.—An Eurynotus of Kirby. The specimen in the Royal Copenhagen Museum was given by Paykull himself, according to Westermann's testimony.

Sp. 40. Obliquatus.—The characters of this genus will be found in the 5th Volume of the Entomological Magazine, p. 373, described by Mr. Newman under the name of Penthe Funerea. The specific name of Fabricius should be retained.

Sp. 48. Cyaneus.—This insect, on examination, turned out to be Helodes Violacea.

MELANDRYA, Fabricius.

Melandrya is a genus belonging to the Serropalpidæ. There are only four species recorded by Fabricius, the last of which must be considered as a Goniadera, one of the genera of Helopidæ.

CLERUS, Fabricius.

This Fabrician genus now belongs to the family of Notoxidæ Mihi, the following genera pertaining to it. It seems probable that the Clerus spinosus, of Fabricius, is a Priocera of Latreille.

NOTOXIDE, Hope.

${\it Genera}.$	Country.	Typical Species.
1. Notoxus, Fabricius.	New Zealand	N. Porcatus, Fabricius.
2. Opilus, Latreille.	England	O. Mollis, Linneus.
3. $\begin{cases} \text{Clerus, } Fabricius. \\ \text{Thanasimus, } Latreille. \end{cases}$	England	Mutillarius, Fabricius.
4. Stigmatium, Gray.	Singapore	S. Cicindeloides, Hope.
5. Denops, Steven.	Caucasus	D. Longicollis, Steven.
6. {Trichodes, Fabricius. Clerus, Latreille.	England	T. Apiarius. Linneus.
7. Pachyscelis, Hope.	Barbary	C. Ammios, Fabricius.

Omadius of Laporte and Tenerus of the same author are unknown to me.—Vid. Revue Entp. 141.

It is not my intentoin to add any additional genera to this family, although I possess several new forms. Professor Klug has lately presented to the Academy of Sciences of Berlin a memoir on the systematic distribution of the species composing this group; till it reaches me I defer stating my opinion on this and the allied family of Tillidæ. I have scarcely a remark to make on the Fabrician species, excepting that Clerus spinosus may be the type of a distinct genus.

Tillus, Fabricius.
Tillidæ, Mihi.

${\it Genera}.$	Country.	Typical Species.
1. Cylidrus, Latreille.	Isle of Bourbon	T. Cyaneus, Fabricius.
2. Tillus, Fabricius.	England	T. Elongatus, Linneus.
3. Tilloides, Laporte.	England	T. Unifasciatus Fabricius.
4. Cymatodera, Gray.	Mexico	C. Hopei, Gray.
5. Callitheres, Latreille.	Madagascar	C. Joannisii, Petit.
6. Priocera, Kirby.	Brazil	P. Variegata, Kirby.
7. Axina, Kirby.	Brazil	Ax. Analis, Kirby.
8. Eurypus, Kirby.	Brazil	Eu. Rubens, Kirby.
9. Mydriacis, Schonherr.	Sierra Leone	Myd. Præusta, Schonherr.
10. Epiphlæus, De Jean.	Cayenne	Ep. Pantherinus, De Jean.

To the above genera I might add several from the East Indies and New Holland, which are probably unknown to the Continent; when I receive Professor Klug's Memoir I shall be able probably to contribute some little to a better acquaintance of the species of this neglected family. The genera named Sodamus, Pallenis, and Natalis, have not fallen under my notice, nor am I enabled to give the typical species recorded by Leconte, not having yet seen the publication, which I believe will be found in Silbermann's Entomological Review.

FABRICIAN SPECIES OF TILLUS.

Instead of making any remarks on the species generally, it is only necessary to state that Species 2, 3, and 5, belong at present to Enoplium of Latreille, and the remainder to Tillus.

TRICHODES, Fabricius.

Trichodes belongs to the family of Cleridæ. Fabricius mentions only nine species. One named Ammios I make the type of my genus Pachyscelis, from Παχυς and σκελος, the posterior legs being remarkably incrassated. Species 8 is the type of Latreille's genus Cylidrus. To the Cleridæ may also be added the genera Corynetes, Notostenus, Enoplium, and a new genus named Platynoptera, by Monsieur Chevrolat. As I have no observations to make on the species of the following genera Corynetes and Notoxus, I pass on to Anthicus of Fabricius.

Anthicus, Fabricius. Anthicide, Hope.

Genera.	Country.	Typical Species.
1. Anthicus, Fabricius.	England	An. Antherinus, Linneus.
2. Monoceras, Megerle.	England	Ant. Vulgaris, Hope.
3. Anthelephilus, Hope.	East Indies	Ant. Cyaneus, Hope.
4. Aderus, Westwood.	England	Ad. Boleti, Marsham.
5. Xylophilus, Latreille.	England	Xyl. Populneus, Eschcholtz.
6. Euglenes, Westwood.	England	Eu. Oculatus, Paykull.
7. $\begin{cases} \text{Crypta, } \textit{Kirby.} \\ \text{Psammæchus, } \textit{Boudier.} \end{cases}$	England	Ant. 2-punctatus, Fabricius.
8. Scraptia, Latreille.	England	Sc. Fusca, Latreille.
9. Steropes, Steven.	Caspian Shores	St. Caspius, Steven.

FABRICIAN SPECIES OF ANTHICUS.

Sp. 1. Monoceros.—The attached specific name is now given by Megerle as a generic one; and for the type of the genus, the name of Vulgaris may be applied.

- Sp. 5. Ruficollis.—According to information received from Westermann, the species of Fabrician Anthicus, (numbered 5, 6, 7, and 8,) will eventually belong to a genus mediate between Statyra and Lagria.
- Sp. 6. Fulvicollis.—It seems probable that this insect is an Anthelephilus, Mihi; and if so, the locality will be in the East Indies, and not in South America.
- Sp. 9. Fasciatus.—Westermann informs me by letter that the above species is a minute and pretty species of Clerus.
- Sp. 11. 2-punctatus.—Now a Crypta of Kirby, whose name is prior to that of Boudier. The latter writer has given us the term Psammæchus. In the third volume of the Annales de la Societe Entomologique de France, the generic details will be found, to which is added also a coloured figure of the insect.—Vid. page 367, pl. 7, (b).

Sp. 20, 21, 22, and 23,—Belong to families Scydmænidæ and Pselaphidæ.

PSOA, Fabricius.

There are only two species mentioned by Fabricius of this genus, and from the description of the latter I am inclined to consider it as pertaining to another genus. Westermann informs me that Psoa Americana is a Languiria of Latreille.

CANTHARIS, Fabricius.

The term Cantharis should be retained for those insects which are vesicatory; I have therefore used the term employed by De Geer and Olivier, namely, Telephorus. The following genera compose the family:—

Telephorus, Degeer.
Telephoride, Leach.

Genera.	Country.	Typical Sprcies.
1. { Drilus, Olivier. Cochleoctonus, Mielz.	England Dalmatia	D. Flavescens, Fabricius.
2. Malacogaster, Rossi.	Sicily	Mal. Passerinii, Rossi.
3. {Rhagonychus, Fischer. Ischnomera, Stephens.	Europe England	Tel. Alpinus, Paykull. Isch. Melanura, Fabricius.
4. Telephorus, De Geer.	Europe	Tel. Fuscus, Linneus.
5. Malthacus, Kirby.	N. America	Mal. Puncticollis, Kirby.
6. Brachynotus, Kirby.	Massachusetts	Br. Bennetii, Kirby.
7. Callianthia, De Jean.	N. America	C. Marginata, Fabricius.
8. Prionocera, Perty.	Senegal	P. Cæruleipennis, Perty.
9. Idgia, Laporte.	Senegal	I. Terminata, Laporte.
10. Tylocerus, Dalmann.	Antilles	T. Crassicornis, Dalmann.
11. Anisotelus, Hope.	Nepal	An. Lividus, Hope.
12. Cantharodema, Gory.	N. America	C. Marginipennis, Gory.
13. $\begin{cases} \text{Calochromus, Guerin.} \\ \text{Calochrosis, Hope.} \end{cases}$	New Guinea	C. Glaucoptera, Guerin.
14. Silis, Latreille.	Dalmatia	S. Rubricollis, Charpentier.
15. Malthinus, Latreille.	Paris	M. Flavus, Latreille.

Other genera will be found inserted in various catalogues; as however I have reason to think their anatomical characters remain unpublished, I have not inserted them. The genus thirteen, named Calochromus by Guerin, is too closely allied to Callichroma, one of the Longicornes; I suggest therefore the adoption of the name of Calochrosis.

REMARKS ON THE FOREGOING SPECIES.

- Sp. 6. Viridescens. This species appears to be the same as species 15. The locality of the Cape of Good Hope is correct, although Olivier states that it occurs in the Brazils.
- Sp. 15. Smaragdula. Vid, Species 6. Change the country of Brazils to that of the Cape of Good Hope.
- Sp. 22. *Diadema*.—A Podabrus of Dr. Fischer. I consider this insect as an Ischnomerus of Stephens. If Dr. Fischer published before Mr. Stephens, his name should be adopted.
- Sp. 32. *Dimidiata*.—According to the Baron De Jean the locality of this Telephorus is the Cape of Good Hope, and not Ceylon.
- Sp. 37. Abbreviata.—I regard this species as a Malthinus, and probably Species 39 belongs to the same genus.
- Sp. 45. Vittata.—Probably a Necydalis.—Vid. Illiger's Mag. page 380-43, note.
- Sp. 51. Minima.—I have in the tables recorded this species as a Malthinus of Latreille. It may probably be a Malachius.

Malachius, Fabricius.

Some Entomologists consider Malachius as entitled to rank as a family, the genera composing it being Malachius of Fabricius, and Laius of Guerin. I consider these genera merely as Melyridæ, and

connect them with that family; and as there are no observations to make on the species, I proceed onwards to Melyris.

MELYRIDÆ, Kirby. MELYRIS, Fabricius.

Genera.	Country.	Typical Species.
1. Malachius, Fabricius.	Guinea	Mal. Pulcher, Fabricius.
2. Laius, Guerin.	New Holland	Mal. Heterocerus, Boisduval.
3. { Aplocnemus, Stephens. Elicopis, Besser.	England	Aploc. Impressus, Marsham.
4. Enicopus, Stephens.	England	Dasy. Ater, Fabricius.
5. Dasytes, Fabricius.	England	Dasy. Niger, Linneus.
6. Dolichosoma, Stephens.	England	Dasy. Linearis, Eschcholtz.
7. Melyris, Fabricius.	P. B. S.	Mel. Viridis, Fabricius.
8. Zygia, Latreille.	S. France	Z. Oblonga, Fabricius.
9. Polycaon, Gory.	Chili	P. Chilensis, Gory.
10. Pelecophorus, De Jean.	Mauritius	Pel. Illiger, Schonherr.
11. Chauliognathus, De Geer.	N. America	Ch. Pensylvanicus, De Geer.

As there are no observations worth recording relating to the Fabrician species, I proceed to the next genus Dermestes.

Dermestes, Linneus. Dermestidæ, Leach.

Genera.	Country.	Typical Species.
1. Dermestes, Fabricius.	England	D. Lardarius, Linneus.
2. Tiresias, Stephens.	England	D. Serra, Fabricius.
3. Attagenus, Latreille.	England	D. Pellio, Linneus.
4. Megatoma, Herbst.	England	D. Undatus, Linneus.
5. Trogoderma, Latreille.	Germany	A. Elongatulus, Fabricius.
6. Pristoderus, Hope.	New Holland	D. Scaber, Fabricius.
7. {Globicornis, Latreille. Sphæroceras, Hope.	France	D. Rufitarsis, Panzer.
	1	

The above genera belong to the Dermestidæ, a family closely allied to the Byrrhidæ. Arranged under that term will be found various other genera, which are noted in the tables. Dermestes, like Helops of the same author, appears to have been a Magazine genus for any remarkable variation of form; in proof of which I mention that the genera Cryptophagus, Byturus, and Engis, belong to Engidæ, Corticaria and Sylvanus to the Silvanidæ; Biphyllus is allied to Mycetophagus, Crypta to Anthicus, Cis to the Bostrichidæ, Catheretes to Nitidula; and as to Throscus, an insect which has much perplexed Entomologists, I locate it with the Elateridæ, others place it with the Byrrhidæ, and some like Fabricius along with Dermestes: as to its power of leaping there cannot exist a doubt; the meaning of Throscus implies it; and if other testimony besides that of Gyllenhal is required, I may state that I have frequently seen them jump; they do not however spring repeatedly like the Elateridæ: in habits they are certainly more sluggish than the Skipper Beetles, and frequently will not move when touched.

FABRICIAN SPECIES OF DERMESTES.

Sp. 3. Cadaverinus.—The locality mentioned by Fabricius is St. Helena. I have received it from the Cape of Good Hope and from St. Domingo, and there can be little doubt that it will occur in various other countries, as it is carried in shipping to various parts of the Old as well as the New World.

- Sp. 12. Vulpinus.—Originally perhaps peculiar to Europe. It appears at present in North and South America, and is not unfrequent at Singapore, Bombay, Calcutta, and the Cape; its range is nearly universal.
- Sp. 17. Lycoperdi,—Now a Cryptophagus. For an account of the Bavarian species of this genus the reader is referred to Gistl's Faunus, Erster Band, page 112. Mr. Kirby, in his Fauna Boreali Americana, elevates Cryptophagus to the rank of a family.
- Sp. 19. 2-punctatus.—This is now a Crypta of Kirby, one of the genera belonging to the Anthicidæ; it is also called Psammæchus by Boudier. This insect has been supposed to be only a variety of Byturus tomentosus of Latreille; the variety is evidently distinct, and is probably the type of Mr. Kirby's genus Mycetæa, one of the Engidæ.
- Sp. 23. Fuscus.—Although I agree with other writers in considering this insect as a Throscus, I note that Westermann believes it to be a Cis, and no other species than Cis Boleti, according to his expression.
- Sp. 32. Scaber.—I make this the type of a new genus, which I denominate Pristoderus, from $\pi\rho\iota sos$ serra sectus et $\delta\epsilon\rho\eta$ collum.

PRISTODERUS, Hope.

Totum corpus supra scabritie tectum. Caput antice rotundatum, antennis perfoliatis. Thorax fere semicircularis dilatatus, angulis anticis porrectis et acutis, posticis rotundatis et serratis. Scutellum

rotundatum. Elytra thorace, duplo longiora, scabra, pedibus modicis. The type is the only insect of the genus that is known; it is from New Holland, and for the present is ranged with the Dermestidæ.

Sp. 33. Chinensis.—This insect is about the size of Colobicus marginatus, and appears to be allied to the genus Coxelus of Ziegler. It is in too bad a state to describe.

Sp. 34. Subterraneus.—Fabricius says respecting this species "affinis certe D. Chinensi, at testaceus, et elytra minus striata;" but Schonherr regards it as a Cryptophagus.

Sp. 36. Limbatus.—This insect evidently belongs to an unknown genus, and is allied to Latridius. There is a figure of it in Olivier. The specimen in the Banksian collection is too imperfect to dissect and describe.

Sp. 45. Brachypterus.—Erichson is inclined to consider this species a Proteinus, one of Staphilinidæ I regard it as a Cateretes, one of the Nitidulidæ.

Anobium, Fabricius.

Anobium is a genus belonging at present to the Ptinidæ. Some species of Cis Latreille, have been confounded with Anobium; they are however essentially distinct. As there are no observations on the species worth recording, I pass on to Ptinus of Fabricius.

Ptinus, Fabricius.
Ptinidæ, Leach.

Genera.	Country.	Typical Species.
1. Xyletinus, Latreille.	Germany	Xyl. Pectinatus, Fabricius.
2. Ptilinus, Fabricius.	England	Ptil. Pectinicornis, Fab.
3. Ptinus, Linneus.	England	Ptin. Imperialis, Linneus.
4. Mezium, Leach	England	Mez. Sulcatum, Fabricius.
5. Gibbium, Kugellan.	England	Gib. Scotias, Fabricius.
6. Lasioderma, Stephens,	London	Las. Testaceum, Stephens.
7. Dorcatoma, Herbst.	Saxony	Dor. Dresdense, Fabricius.
8. Anobium, Fabricius.	England	Anob. Tessellatum, Fab.
9. Ochina, Ziegler.	England	Och. Ptinoides, Marsham.
10. Hedobia, Ziegler.	Austria	Hed. Pubescens, Fabricius
11. Dryophilus, Westwood.	England	Dry. Anobioides, Chevrolat.

The above genera belong to the Ptinidæ, and on examining the tables of the species we have to notice two genera which appear quite out of place; the first is Luperus of Geoffroy, allied to Galleruca, and the second Mastigus, which is a genus mediate between the Pelaphidæ and Scydmænidæ. As most of the Ptinidæ are well known, allusion is made to a few mentioned species. Mezium sulcatum of Leach is probably an imported insect. Gibbium Scotias is found in various parts of Europe. At Vienna I took some hundreds of them at the London Hotel in that city; they were feeding on the size, or glutinous substance, which had fastened the paper to the walls. My friend Sir Gardner Wilkinson, the celebrated Egyptian traveller, sent me many specimens found in one of the pyramids of Egypt: amongst the dust sent with them, there

were relics of some thousand specimens. The species appears to differ from those we find in England. I have received others, which are undescribed, from the Island of St. Vincent, and also from Singapore and Assam. Anobium Capense of Fabricius, is probably only a variety of Anob. Panicum.

SARROTRUM, Fabricius.

There is only one species belonging to this genus, and great difference of opinion exists amongst Entomologists as to its true locality. Mr. Stephens, in his catalogue, places it at the head of the Heteromera, in the family of the Tenebrionidæ. The Baron De Jean places it between Hypophlæus and Corticus, genera of the Taxicornes; with the latter arrangement there appears to me very little affinity.

PTILINUS, Fabricius.

Ptilinus of Fabricius includes under that head four genera; two of them, namely, Ptilinus and Xyletinus belong to the Ptinidæ, Rhipicera to a family named Rhipiceridæ by Laporte de Castelneau, and Drilus, which we have already classed amongst the Telephoridæ. For observations on the Rhipiceridæ consult the Histoire Naturelle des Animaux Articules, par Laporte, Vid. vol. 1, p. 255. The only remark to be made on any of the species mentioned by Fabricius is that of Flavescens, which is parasitic on snails in its larval state, by Mielzinsky, it is denominated Cochleoctonus. The name of Drilus ought to be adopted. The next genus to

Ptilinus, is Dorcatoma of Fabricius, which is included in the family of Ptinidæ; then follows Melasis of the Eucnemidæ. Only two species are recorded, one of them being the type of the genus, while the other evidently belongs to the genus Rhipicera, previously mentioned. The locality of the Cape of Good Hope is erroneous, as Rhipicera Mystacina only inhabits New Holland. As Parnus is already treated of, we pass on to

NECROPHORUS, Fabricius. NECROPHORIDÆ, Kirby. Entaphia, Kirby.

Genera.	Country.	Typical Species.
 Necrophorus, Fabricius. Hypocephalus, Desmarest. Cyrtoscelis, Hope. Diamesus, Hope. 	England Brazil England Madras.	Nec. Germanicus, Fab. Hyp. Armatus, Desmar. N. Vespillo, Fabricius. Nec. Osculans, Vigors.

There is reason to think that other genera from Asia, belonging to this family, will shortly be added. The prejudice of caste not allowing the Indians to touch a carcass, is partly the cause of their not being collected, united also with a natural antipathy to insects of such disgusting habits. However much they may be disliked, the functions they perform are very important; for what the vulture leaves when glutted to satiety, these sexton beetles bury in the earth, having previously deposited their ova in the rapidly decaying carcass. Have we here no

cause then to admire the preventive wisdom of the Creator in endowing insects with such peculiar instincts in the propagation of their species—instincts which, however disregarded by the generality of mankind, can only lead, when properly viewed by individuals, to the adoration of the all-wise and beneficent Governor of the Universe. Instead of commenting on the Fabrician species, I have only one remark to make, and that is, that all the Necrophori may be divided into two sections, those with straight and those with curved tibiæ; if this difference is allowed, I suggest the adoption of the term Cyrtoscelis to include those species with bent tibiæ, the type of which I consider Necrophorus Vespillo.

SILPHA, Fabricius.
SILPHIDÆ, Leach.
SILPHOIDEA, Hope.

	Genera.	Country.	Typical Species.
1.	Necrodes, Wilkin.	England	S. Littoralis, Linneus.
2.	Ptomaphila, Hope.	New Holland	Pto. Lachrymosa, Schreibers
3.	Oiceoptoma, Leach.	England	Oic. Thoracica, Fabricius.
4.	Necrobora, Hope.	Pensylvania	S. Americana, Fabricius.
5,	Thanatophilus, Leach.	England	S. Sinuata, Fabricius.
6.	Phosphuga, Leach.	England	S. Atrata, Fabricius.
7.	Necrophila, Latreille.	Syria	S. Subterranea, Illiger.
8.	Peltis, Fabricius.	Sweden	P. Grossa, Fabricius.
9.	Sphærites, Duffschmidt.	England	S. Glabratus, Fabricius.
10.	Agyrtes, Frolich.	England	Myc. Castaneus, Fabricius.

The genera of Silphidæ will no doubt eventually be considerably increased. In looking to the chief

catalogues yet published, the Entomologist is struck with the paucity of species, which are described as extra European, that others exist cannot be doubted, and that they will not be found wanting in Africa or Asia I may confidently state from the examination of various continental collections, as well as from numerous undescribed species in my own Museum.

FABRICIAN SPECIES OF SILPHA.

- Sp. 1. Surinamensis.—Now a Necrodes. Nine species have fallen under my notice, some of them occurring in North as well as South America.
- Sp 5. Indica.—This insect appears to be the Ips grandis of Schonherr; I obtained it at Lee's sale, and therefore cannot doubt of the species.
- Sp. 6. Americana.—The name of Necrophilus is used by Latreille for a genus belonging to this family, the type of which is S. Subterranea of Illiger; I have been compelled therefore to change Mr. Kirby's name to Necrobora, derived from νεκροβορος mortuos devorans, i. e. νεκρος et βορα.
- Sp. 8. Lævicollis.—This insect is Heteromerous, and is the type of a genus allied to Asida.
- Sp. 22. Dentata.—Possessing this insect, I have no hesitation in saying that it is a true Peltis.
- Sp. 23. Limbata.—From examining this species in the Banksian collection at the Linnean Society, I gave it as a Nitidula.
- Sp. 25. Minuta. I regard this insect as an Anthobium; Fabricius adds at the end of his description, "De Synonymis valde dubito."

Peltis, Fabricius.

This genus I have included along with the Silphidæ, although Mr. Kirby considers it as a distinct family. Of four species described by Fabricius three belong to the genus at present; the fourth is a Thymalus.

IMATIDIUM, Fabricius. IMATIDIIDE, Hope.

Genera.	Country.	Typical Species.
1. Imatidium, Fabricius.	S. America	Im 3-maculatum, Fab.
2. Calopepla, Hope.	East Indies	C. Leyana, Latreille,
3. Prioptera, Hope.	China	C. 8-punctata, Fabricius.
4. Hoplionota, Hope.	Java	C. Echinata, Fabricius.
5. Porphyraspis, Hope.	N. America	C. Erythrocera, Germar.

The above genera, according to my views, belong to the family Imatidiidæ, and others might undoubtedly be added. It seems remarkable that Fabricius should have located Imatidium between Silpha and Nitidula; as however it is difficult to account for his arrangement in the present instance, I proceed to characterise the genera belonging to the above family.

CALOPEPLA, Hope.

Typus C. Leyana, Olivier. Caput subrotundatum vertice compresso. Antennæ conspicuæ Thorace duplo longiores articulis compressis, ultimis externe crassioribus et inter oculos insertis. Thorax brevis

antice valde marginatus, dorso canaliculato. Elytra dilatata, abdomine latiora rugosa, striatopunctata, lineisq. elevatis confusis. In reliquis Calopeplon Imatidio convenit. Habitat in India Orientali.

PRIOPTERA, Hope.

A new genus allied to Imatidium; the name is derived from πριω and πτερον, which are singularly serrated at the base of the wings. Type Cassida 8-punctata of Fabricius. Caput parvum postice rotundatum antice fovea fortiter impressa. Antennæ Thorace longiores articulis vix conspicius. Thorax brevis transversus, convexus et antice valde emarginatus, postice, margine sinuato. Elytra thorace latiora, ad apicem increscentia, alæ ad humeros sinuatæ et serratæ, et ad sinus thoracis conformatæ. Corpus infra parvum sub-depressum elytris abdomine multo latioribus. Pedes breves, femoribus parum incrassatis. Habitat in India Orientali.

HOPLIONATA, Hope.

Type Cassida Echinata of Fabricius. Caput parvum clypeo emarginato, lateribus parum dilatatis et serratis. Antennæ clava elongata, quinque articulata, articulis ultimis crassioribus. Thorax transversus, antice valde emarginatus, lateribus rotundatis, scabris. Elytra margine dilatato, in medio emarginata, serrata, spinaq. erecta valida armata, postice carinata. Margo sinuatus et serratus. Habitat in Australasia.

Porphyraspis, Hope.

Coccinelliformis et hemeisphærica. Caput prominulum canaliculatum. Antennæ moniliformes ultimis articulis sensim crassioribus. Thorax valde emarginatus, supra scutellum productus, truncatus. Elytra gibba, basi profunde emarginata, angulis anticis porrectis, thoracisque latera cingentibus, fortiter punctata seu insculpta. Corpus infra depressum, elytris abdomine multo latioribus. Femora parum incrassata tarsis valde dilatatis. Habitat in America Septentrionali. In selecting the above genera I have chiefly directed my attention to country, as it is remarkable that all the species of Imatidium described by Fabricius were from South America. The last which I have characterized is from North America; the rest are from the East Indies, and to them several others will eventually be added.

NITIDULA, Fabricins. NITIDULIDE, MacLeay.

Genera.	Country.	Typical Species.
1. Thymalus, Latreille.	England	T. Limbatus, Fabricius.
2. Nitidula, Fabricius.	Carolina	N. Grossa, Fabricius.
3. Colobicus, Latreille.	Paris	C. Marginatus, Latreille.
4. Strongylus, Herbst.	England	St. Ferrugineus, Fabricius.
5. Cryptarcha, Shuckhard.	England	N. Strigata, Fabricius.
6. Psilotus, Fischer.	Cayenne	Ps. Cornutus, Fischer.
7. Meligethes, Kirby.	England	N. Rufipes, Fabricius.
8. Campta, Kirby.	England	N. Lutea, Herbst.
9. Pria, Kirby.	England	N. Truncatella, Marsham.
10. Carpophilus, Leach.	England	N. Flexuosus, Fabricius.

NITIDULA-	(continued.)
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Country.	Typical Species.
England	S. Pedicularia, Linneus.
England	An. Spirææ, Howit.
France	Cor. Mandibularis, Laporte.
England	Tri. Atomaria, De Geer.
England	Sta. Porcatus, Paykull.
Brazil	C. Maxillaris, Laporte.
	England England France England England

The above sixteen genera apparently belong to the Nitidulidæ, without we separate those named by Laporte, Cormyphora and Cerophorus. The name of Anisocera Howitt, must be changed, as it is previously used by Mr. Westwood.

SPECIES OF FABRICIAN NITIDULE.

- Sp. 5. Abbreviata.—It is likely that this insect belongs to a new genus. I leave it as a Nitidula for the present, the Banksian specimen being too imperfect to describe. Olivier's figure does not well represent the original insect.
 - Sp. 23. Discoides-Read Discoidea.
- Sp. 25. 6-pustulata.—According to Illiger this is Lyctus abbreviatus of Panzer. By the Baron De Jean it is considered as an Ips. Vid. Laporte, p. 11, vol. 2.
- Sp. 27. Litura.—According to Illiger this was a Coccinella; it is at present arranged by Mr. Stephens under his genus Rhyzobius.
 - Sp. 33. Quadrata.—Schonherr refers this species

to his section, B, elytris, dimidiatis, et quadratis; therefore if the reference to Dermestes Hemipterus is correct, it evidently belongs to the genus Carpophilus of Leach.

Sp. 35. Macroptera. — Illiger thinks that Macroptera is a typographical error, and changes the term to Microptera. This insect is compared with Nit. Rupta, "Statura Nit. Ruptæ at paullo minor;" and most likely therefore it is an Ips of the present day.

Sp. 37. Truncata.—Now a Cateretes of Herbst, and is only a synonym of Cercus Pedicularius, of Fabricius.

Coccinella, Linneus.

The next genus to Nitidula is Heterocerus which has already been treated of; I proceed therefore to Coccinella, which follows it.

COCCINELLIDÆ, Leach.
COCCINELLIDÆ, Hope.

The remaining families likely to fall under our consideration in this fasciculus have been scarcely attended to. The Coccinellidæ have been apparantly carelessly subdivided, and various names are attached to particular genera; ten of them however will stand. As the differences appear in many instances to be of little value, and as the generic characters are not detailed, I cannot adopt names.

I shall mention in the following tables types of two or three which merit attention, and must leave others to investigate them more accurately. The following families, according to my views, belong to the Coccinelloidea, viz. the Coccinellidæ, Scymnidæ, and Endomychidæ, and to them some writers probably would add the Erotylidæ; with that opinion I cannot agree: having bred the larvæ of Endomychus, I regard it in habits as a Coccinella, and from my personal observations retain it in this family. The following genera pertain to it, although several others might be added.

Coccinellide, Leach

Genera.	Country.	Typical Species.
1. Coccinella, Linneus.	Brazil	C. Marginata, Linneus.
2. Selenites, Hope.	P. B. S.	C. Lunata, Fabricius.
3. Micraspis, Chevrolat.	Senegal	C. Striata, Fabricius.
4. Chilochorus, Leach.	Brazil	C. Cacti, Fabricius.
5. Epilachna, Chevrolat.	N. America	C. Borealis, Fabricius.
6. Lasia, Hope.	Paris	C. Globosa, Illiger.
7. Hemisphærica, Hope.	N. America	C. 5-signata, Kirby.
8. {Leptia, Kirby. Sphærosoma, Kirby.	England	Sp. Quercus, Leach.

To the above genera undoubtedly several others might be added; out of the above eight only four are properly characterized; the rest are added provisionally, and of course the individual is entitled to name them who accurately details them. The Hemisphærica of Kirby appears to form a natural genus. I do not attempt to add general observations of the species, which would lead me

into a discussion on species and varieties, and shall merely allude therefore to any remarks relating to a difference of locality, &c.

- Sp. 4. *Diaphana*.—The locality given by Fabricius is Denmark; Illiger regards it as coming from Tranquebar.
- Sp. 11. Cincta.—The number of Species 11 is twice repeated, and Species 13 is omitted; it is easy therefore to rectify the error of the press.
- Sp. 14, *Impunctata*.—This insect I give as the type of the genus Lasia Mihi, better known under the name of Coc. Globosa of Illiger.
- Sp. 32. Rivularis.—Probably from the Cape of Good Hope, and not from Sweden.

CASSIDOIDEA, Hope.

This important group contains three families; the Imatidiidæ, the Mesomphalidæ, and Cassidæ; and as the genera of the first family have been given in a former page, it only remains to add the two following.

CASSIDÆ, Leach.

Genera.	Country.	Typical Species.
1. Omoplata, Hope.	Brazil	C. Marginata, Linneus.
2. Omaspides, Chevrolat.	Cayenne	C. Transversa, Fabricius.
3. Aspidimorpha, Hope.	East Indies	C. Miliaris, Fabricius.
4. Asteriza, Chevrolat.	St. Domingo	C. Flavicornis, Olivier.
5. Thyreaspis, Hope.	Cayenne	C. 11-punctata, Fabricius.
6. Cassida, Linneus.	England	C. Viridis, Fabricius.

The above 6 genera belong to the Cassidæ; and the genera 3, 5, and 6, require still further subdivision I am not certain that the genera named Asteriza and Omaspides are published; they appear to afford ample characters for sub-division; and for the present, I merely adopt them provisionally.

OMOPLATA, Hope.

Type of the genus Cassida Marginata of Linneus. Mandibulæ, maxillæ et palpi, fere ut in Cassida perforata. Antennæ parum compressæ, pubescentes, articulo 1mo. crasso, 2do. minimo, 3tio. paullo longiori, reliquis longitudine fere æqualibus, at extrorsum crassioribus. Thorax antice rotundatus, semicircularis, reversus, postice sinuatus, ad suturam conformatus. Elytra semicircularia in medio disci elevata, convexa, humeri valde porrecti, lati, haud in spinam producti, apex elytrorum rotundatus. The above name is derived from ωμος humerus, and πλατυς latus.

The characters of Oxynodera and Calaspis will be found at the end of this Fasciculus along with other new genera and species. Omaspidis and Asteriza of Chevrolat, differ in form from Omoplata. Aspidimorpha and Thyreaspis are represented by the Fabrician species C. Miliaris, and 11-punctata. The details of the last will be found in Olivier's work, at Plate 4, Fig. 67, b, Cassida.

PÆCILASPIS, Hope.

The major part of the species are variegated with red and yellow.

MESOMPHALIDÆ, Hope.

Genera.	Country.	Typical Species.
1. Tauroma, Hope.	Cuba	C. Taurus, Fabricius.
2. Desmonota, Hope.	Brazil	C. Platynota, Germar.
3. Mesomphalia, Hope.	Brazil	C. Gibbosa, Fabricius.
4. Oxynodera, Hope.	Brazil	C. Variegata, Fabricius.
5. Dolichotoma, Hope.	Isle St. Vincent	C. Chloris, Hope.
6. Calaspis, Hope.	Cayenne	C. Grossa, Fabricius.
7. Selenis, Hope.	Cayenne	C. Perforata, Fabricius.
8. Batonota, Hope.	Brazil	C. Bidens, Fabricius.
9. Cyphoptera, Hope.	St. Domingo	C. Ampulla, Olivier.
10. Pæcilaspis, Hope.	Cayenne	C. 16-pustulata Fabricius.
11. Cyphomorpha, Hope.	Brazil	C. Gibba, Fabricius.

The above genera belong to the Mesomphalidæ. With regard to Mesomphalidæ, it might still further be sub-divided into three, if not four sub-genera, a task I willingly leave to others. The next genus I describe and name, is Pæcilaspis, from ποικιλος and ασπισ scutum, as the major part of the species are variegated with red and orange spots. The following characters sufficiently separate it from its allied genera. "Antennæ submoniliformes, compressæ. Thorax semicircularis lateribus utrinque rotundatis, elytris haud æqualibus postice sinuatis. Elytra convexa, thorace latiora, humeris prominentibus et tuberculatis; apex elytrorum rotundatus. Prosternum in medio fortiter impressum.*

^{*} For an account of Cassida generally, and for the details of six new genera, the reader is referred to the Annals of Natural History, No. 15, published in 1839.

ADORIUM, Fabricius.

This genus seems to connect the Cassidæ and Gallerucidæ, and appears rightly located by Fabricius. The major part of the species belong to the East Indies; some few of them inhabit Africa and New Guinea. Two are recorded also, as occurring in Australia. As any remarks on the species are scarcely worthy of notice, I pass on to the genus Colaspis.

Colaspis, Fabricius.

Monsieur Laporte de Castelneau, in the Revue Entomologique de Mon. Silbermann, has divided this family into seven genera, most of them made up of the term Colaspis and other compounds; some of them are too similar in their appearance, and one of them named Brevicolaspis, ought to be changed. I am, however, disposed to retain the names, as the characters are published; they certainly appear preserable to those adopted by De Jean, a specimen of which I add. scarcely be believed, that the following ridiculous generic names occur in one page, namely,-Thisbe, Amasia, Acis, Bathseba, Charitonia, and Eva: certainly the changes of Colaspis are greatly to be preferred, I repeat therefore, that I retain Laporte's names, as it would establish a bad precedent, and lead us to abandon, not only Linnean, but Fabrician terms, a practice sadly too rife amongst the French Entomologists. For the types of the above genera, I refer the reader to the above quoted work.

Eumolpidæ, *Fabricius*. Eumolpidæ, *Hope*.

Genera.	Country.	Typical Species.
1. Eumolpus, Fabricius.	Cayenne	E. Ignitus, Fabricius.
2. Corynodes, Hope.	East Indies	E. Cyaneus, Fabricius.
3. Adoxus, Kirby.	New York	E. Vitis, Fabricius.
4. Euryope, Dalmann.	Senegal	E. 4-maculatus, Olivier.
5. Lamprosoma, Kirby.	Brazil	L. Bicolor, Kirby.

Various types of form occur among the Eumolpidæ, which have hitherto not been characterized. No group has probably been more neglected than the Chrysomeloidea; the genera are numerous, and the families composing it are so intimately connected that it is almost impossible to say to what genus an insect belongs, so imperfect is our acquaintance with these richly metallic and magnificent insects. In the Fauna Boreali Americana, at page 209, will be found the characters of Adoxus of Kirby. The present short description of Corynodes, is sufficient to mark generically, an insect universally known and different in various minor points from the type of true Eumolpus.

Corynodes, Hope.

From κορυνωδμε clavæ formam habens. Habitat in India Orientali. Species typicalis. Eumolpus cyaneus of Fabricius. "Antennæ compressæ, articulo 1mo. crasso, robusto, 2do. minimo, ternis proximis fere æqualibus, reliquis externe gradatim crassioribus et compressis. Caput rotundatum, punctatum. Thorax convexus, marginatus, antice contractus,

postice latior. Elytra, Gibba, convexa, antice humeris tuberculatis, postice dilatata. Pedes robusti, tibiis canaliculatis tarsisque spongiosis, latis."

It will be seen from the above tables, that the Colaspidæ have been confounded with the Eumolpidæ: they are certainly intimately connected, and yet it does not require any great discrimination to arrange them more satisfactorily than has hitherto been attempted. As I have no observations to add on the Fabrician species, I proceed to the next genus.

CHRYSOMELIDÆ, Leach.
CHRYSOMELOIDEA, Hope.

Genera.	Country.	Typical Species.
1. Doryphora, Illiger.	Brazil	C. Punctatissima, Fabricius,
2. Timarcha, Megerle.	Spain	T. Rugosa, Linneus.
3. {Paropsis, Olivier. Notoclea, Marsham.	New Holland	N. Atomaria, Marsham.
4. Chrysomela, Linneus.	England	Ch. Goettingensis, Fab.
5. Polysticta, Hope.	P. B. S.	C. Guttata, Fabricius.
6. Spartophila, Chevrolat.	Spain	C. Spartii, Olivier.
7. Gastroeidea, Hope.	England	Ch. Polygoni, Fabricius.
8. Phædon, Megerle.	England	C. Armoraciæ, Linneus.
9. Podontia, Dalmann.	East Indies	C. 14-punctata, Fabricius.
10. Melasoma, Dilwynn.	England	C. Populi, Fabricius.
11. Chrysochloa, Hope.	France	C. Tristis, Fabricius.
12. Polyspila, Hope.	N. America	C. Philadelphica, Fabricius.
13. Phyllocharis, Dalmann.	New Holland	C. Cyanipes, Fabricius.
14. Phytodecta, Kirby.	England	C. Rufipes, Degeer.
15. Helodes, Fabricius.	England	C. Phellandrii, Fabricius.
16. Trochalonata, Westwood.	Brazil	C. Badia, Germar.
17. Calomela, Hope.	New Holland	Chry. Curtisii, Kirby.
18. Argopus, Fischer.	Europe	Ch. Testaceus, Fabricius.

The above 18 genera appear to afford the most prominent forms for sub-division, and very many

others might be added. Monsieur Chevrolat, in the Baron De Jean's Catalogue, has published the names of at least 20 others, but as their characters are not given, I cannot adopt them. The following concise descriptions of some of the sub-genera which appear in the tables, will separate a few from the mass of nondescripts, in a family, which is remarkable not only for its great variety of form, but also for the abundance of species belonging to it.

POLYSTICTA, Hope.

Type of the genus Chrysomela guttata, Fabricius. Genus Africanum, statura coccinelliformis, ovata, valde gibbosa. Antennæ breves. Thorax lævis, haud marginatus, scutellum postice subrotundatum. Elytra abdomine latiora, valde convexa, punctata. Corpus infra contractum. Pedibus robustis. The majority of the species are remarkable for the number of guttæ or spots with which they are ardorned; and hence I have applied the name of Polysticta.

GASTROEIDEA, Hope.

From γαsροείδηs ventrosus. Type of the genus Chry. Polygoni, Linneus. Statura ovato hemisphærica, oblonga. Caput rotundatum, antennis thorace fere duplo longioribus. Thorax transversus latior quam longior, lateribus haud incrassatis. Elytra thorace triplo longiora Ovis gravida, ultra coleoptera ventricosa evadit. From this peculiarity, I have given the above name of Gastroeidea.

CHRYSOCHLOA, Hope.

From $\chi\rho\nu\sigma\sigma\sigma$ and $\chi\lambda\sigma\eta$ gold and green being the predominant characteristics of the species belonging to this sub-genus. Type of the genus C. Tristis of Fabricius. Corpus oblongum lateribus thoracis incrassatis. Antennæ thorace multo longiores. Elytra oblonga, thorace triplo longiora, modice convexa et vage punctata, alis inferioribus sanguineis. The insects belonging to this genus chiefly frequent alpine vegetation, and are found on the mountains at a considerable altitude; the major part of them are rich in gold, green, and blue colors. The genus Melasoma of Dilwynn, I consider altogether as distinct; the latter answers to Lina of Megerle de Muhlfield.

POLYSPILA, Hope.

Type of the genus Chrysomela Philadelphica of Fabricius. The name is derived from πολυς and σπιλος macula, signifying much spotted. There are several species in North and South America agreeing with this form. Statura fere Chry. Populi, at convexior, oblonga ovata. Thorax immarginatus. Elytra convexa, reticulato-strigosa, striato-punctata, maculis numerosis notata. To this genus belong Ch. Exclamationis of Fabricius; Chry. Polyspila, and Punctipennis of Germar; as well as Hieroglyphica and Pantherina of Klug, all of them inhabiting the New World,

CALOMELA, Hope.

From $\kappa a \lambda o s$ and $\mu \eta \lambda o \nu$ signifying a beautiful apple. Type of the genus Chrysomela Curtisii of Kirby.

Corpus oblongum, antennæ compressæ articulis extrorsum crassioribus. Thorax transversus immarginatus. Elytra elongata, thorace triplo longiora, ad basim subdepressa, ad apicem modice convexa, pedes robusti. This genus, allied to Chrysomela, seems to be peculiar to New Holland. They are amongst the most beautiful insects of this family; about fifteen species have fallen under my notice, all of them inhabiting Australia.

FABRICIAN SPECIES OF CHRYSOMELA.

- Sp. 5. Morio.—From examining the Banksian Cabinet, I report this species to be Paropsis.
- Sp. 7. Surinamensis Now an Eumolpus, and apparently only a variety of Eum, Ignitus Fabricius.
- Sp. 11. 8-maculata.—This insect is a Doryphora of Illiger.
- Sp. 13. Conjugata.—I consider this species as a Doryphora; if it should turn out to be allied to Ch. Pulchra of Fabricius, it will, along with other species, afford characters for a sub-genus.
- Sp. 23. Australasiæ.—Now a Paropsis of Olivier. The species of this genus are very numerous, and require sub-division.
- Sp. 24. Globus.—Now a Lamprosoma of Kirby-For an account of the characters of this genus, refer to the 12th volume of the Linnean Transactions, page 445. Mr. Kirby thinks that there is an affinity

to Clythra. I regard it as belonging to the Eumolpidæ, and range it consequently with that family.

Sp. 25, 6, 7, 8, and 9.—From the descriptions of the species, I am inclined to consider all the above insects as belonging to the genus Lamprosoma.

Sp. 31. Centaurii.—Read Centauriæ.

Sp. 41. Rufipes.—This insect is certainly a species of Paropsis.

Sp. 83. Viminalis.—Now a Phytodecta of Kirby. In the Fauna Boreali Americana, will be found the characters of this genus; the type is Chrys, Rufipes of Degeer.

Sp. 124. Arcuta.—Evidently an error of the press. Read Areata.

CRIOCERIS, Fabricius.

There appears to be great confusion respecting Crioceris. The type of the genus is closely allied to Galleruca, and I therefore, retain the generic name of Crioceris, but sink that of the family, including it merely as a genus of the Gallerucidæ. The cause of the confusion, is confounding Lema with it, which is certainly quite a distinct form, and may be considered as belonging to a separate family, which may be named Lemidæ. Under the term Crioceris, we find various genera thrown together by Fabricius, which have little connection with it. The major part of the species evidently belong to the Gallerucidæ; others, to Haltica and Chrysomela. A single inspection of the tables tells me, that of

all the genera formed by Fabricius, few were more carelessly constituted than those of the Chrysomelidæ. As I have no remarks to make on the species, I pass on to Helodes.

Helodes, Fabricius.

Helodes is one of genera of Chrysomelidæ; and under the above name, we find five species alluded to, but two of them only really belong to it, namely, Hel. Phellandrii and Violacea; the third of them is a Lema of Fabricius; and the two remaining, pertain to a genus which appears not to be characterized.

Lema, Fabricius.

In a former page, I have stated the reasons for adopting the family name of Lemadæ instead of Crioceridæ. Lema of Fabricius, is very rich in species, and eventually, will be sub-divided into several genera; at present I only mention two others belonging to it, namely, Megascelis and Petauristes, both of them created by Latreille. It seems not improbable that the insect named L. Nigricornis may be a Megalopus.

Galleruca, Fabricius. Gallerucidæ, Leach.

Genera.	Country.	Typical Species.
1. Galleruca, Fabricius.	England	G. Tanaceti, Fabricius.
2. Adorium, Fabricius.	East Indies	A. 2-punctatum, Fabricius.
3. Adimonia, Laicharting.	England	A. Alni, Fabricius.
4. Auchenia, Marsham.	Denmark	A. 4-maculata, Fabricius.
5. Malacoptera, Hope.	Portugal	C. Lusitanica, Fabricius.

GALLERUCA—(continued.)

Genera.	Country.	Typical Species.
6. Cladocera, Hope.	Senegal	Cl. Pectinicornis, Olivier.
7. Luperus, Geoffroy.	England	L. Rufipes, Fabricius.
8. Calomicrus, Dilwynn.	England	C. Circumfusus, Marsham.
9. Octogonotes, Drapiez.	Cayenne	Oc. Banonii, Drapiez.
10. Crioceris, Fabricius.	Africa	C. 2-tuberculata, Fabricius.
11. Agetocera, Hope.	Nepal.	Aget. Mirabilis, Hope.
12. Phyllotrupes, Hope.	Brazil	C. Cyanipennis, Fabricius.

The above genera are not near the number which naturally belong to this family. The Gallerucidæ, in our London Collections are very numerous, and are well worthy of the attention of a Monographer. It will require, however, the patience of a Gravenhorst, and the assiduity of a Schonherr combined, to accomplish such an undertaking. The genus Thaumacera of Thunberg, and also another mentioned in Silberman's Rev. Ent. by the name of Cherodia, belong to this family. As I am not acquainted with the types, I have omitted them in the tables.

CLADOCERA, Hope.

From Κλαδος a branch and Κερας. Type of the genus Cly. pecticornis of Olivier. Corpus galleruciforme, antennis valde pectinatis, seu ramosis, articulo 1mo, crasso, duobus sequentibus minoribus et æquabus, reliquis valde pectinatis. Thorax transversus, marginatus, lateribus postice rotundatis. Elytra convexa, abdomine longiora. Pedes modici, femoribus posticis incrassatis, reliquis minoribus.

AGETOCERA, Hope.

From ayyros mirandus, and kepas. This remarkable insect I have separated from Galleruca, on account of the difference of the antennæ of the different sexes. Olivier in his work, figures in the second plate of Gallerucidæ, at number 25ab another extraordinary species, belonging probably to a new and distinct genus. "Corpus galleruciforme Antennæ 12 articulatæ, articulus primus, duobus sequentibus æqualis, secundus brevissimus, quartus elongatus et dilatatus; articuli 4, 5, 6, 7, fere æquales, octonus elongatus et inflatus, nonus difformis, duobus proximis longitudine æqualis, ultimoque breviori. Habitat in Agro Nepalensi." In Gray's Miscellany this insect was misprinted Agelocerus; how to account for a double blunder in one word I know not: there are several other errors in that brochure which have never been corrected. I have not detailed the characters of the sub-genus named by me Phyllotrupes. I consider the typical species C. cyanipennis of Fabricius, and if I am not mistaken, this genus answers to that which Monsieur Chevrolat has named Diabrotica. He appears however to have thrown together several species, which cannot well be arranged under one head; instead therefore of attempting to publish the characters of a single genus, where twenty others at least might be added, it is better to leave the task for a future Entomologist, who is bold enough to attempt a new

arrangement of the Chrysomeloidea, namely, the Gallerucidæ, Halticidæ, Chrysomelidæ, Lemidæ, Colaspidæ, Eumolpidæ, Clythridæ, and Chlamydæ; and to these Mr. Kirby adds the Cryptocephalidæ.

FABRICIAN SPECIES OF GALLERUCA.

- Sp. 26. Abdominalis.—In the Banksian cabinet there are two distinct insects labelled Abdominalis; the first is a true Lema, and the second is an elongated species of Galleruca.
- Sp. 28. Compressicornis.—This insect is the type of a new genus. The Fabrician description of this species, with some additions, would afford ample generic characters.
- Sp. 46. Capreæ.—In the Systema Naturæ this insect is named Cupræa, evidently an error of the press.
- Sp. 50. Lactucæ.—Fabricius says of this insect, "Species obscura, haud mihi rite nota." I suspect it to be a Diaperis.
- Sp. 85. Collaris.—Now an Orchestris of Kirby. The characters of the genus are detailed in the Fauna Boreali Americana.

CYPHON, Fabricius.

The genus Cyphon is by many Entomologists classed with the Malacodermata, and so is Scirtes; and although the latter has saltatorial legs, it has been removed from the Halticidæ: in habits it certainly approaches the latter family.

Endomychus, Fabricius.

The genus Endomychus I am inclined to arrange next to the Coccinellidæ; its larvæ greatly resembling them, little is known of their habits, excepting that they are found under the bark of decayed trees. It is a matter of doubt in my mind if Lycoperdina is at all related to Endomychus, although they agree in form, and have been associated in the same family. In concluding the first volume of the Systema Eleutheratorum, I have only to add that the next Fasciculus will terminate the Manual, when I shall enter more fully into the merits and demerits of Fabricius as a Systematist and an Entomologist.

DESCRIPTIONS

OF THE

NEW GENERA AND SPECIES.

CALODEMA KIRBII, Hope.

Long, lin. 19. lat. lin. $7\frac{1}{2}$.

Flava, thorace viridi, maculis duabus ovalibus puniceis, fossulisque binis in medio disci positis, elytris flavis, marginibus internis viridibus; corpore infra viridi, splendido annulis abdominis utrinque flavomaculatis.

Habitat in Australia. In Mus. Dom. Hope.

This magnificent insect, one of the most beautiful of all the Buprestidæ, I named in honour of the Rev. William Kirby, in a Prodromus which I published some few years back. Monsieur Gory rejects the generic name of Stigmodera, and substitutes in its place Calodema, to include various species allied to the above insect; but on what authority he also changes the specific name of Kirbii to Regalis I know not, without it is from a love of notoriety. The generic details of the genus Calodema will be found in the Iconographie des Insectes Coleopteres, par Le Comte de Castelneau et H. Gory.

Vid. page 60. I am acquainted with another species closely allied to the above, and as it is undescribed I suggest the adoption of the specific name of Spencii. It is from the same locality as Calodema Kirbii.

I may here add that I have lately received several new and very interesting species of Buprestidæ from New Holland, some of them evidently belonging to Calodema; and when Monsieur Gory has finished his Monograph, it is my intention to publish an account of them, and hope to be able to add some remarks on the larvæ and habits of the above beautiful group, our present information on those points being very scanty and unsatisfactory.

HISPIDÆ, Leach.

ESTIGMENA,* Hope. Novum Genus.

Type of the Genus HISPA CHINENSIS Mihi.

Antennæ filiformes ante oculos insertæ, basi approximatæ.

Mandibulæ trigonæ corneæ, externe ad basin tuberculo transverso.

Labrum transversum subemarginatum setosum.

Maxillæ parvæ bilobæ lobo externo parvo piloso.

Palpi maxillares articulo 1mo. brevi, 2do. obconico, 3tio. obtrigono, extimo elongato ovato, apice truncato.

^{*} From the Greek word esigneros notis compunctus.

Mentum subhexagonum corneum.

Labium porrectum integrum membranaceum.

Palpi labiales breves, apice crassiores, 3 articulati, articulo 1mo. brevi, 2do. longiori, ultimo apice obovato.

Elytra elongata, postice paullo latiora.

Thorax lateribus inæqualibus, angulis lateralibus antice et postice obliquis.

Pedes robusti, femoribus incrassatis, tarsis latis, infra luteo spongiosis, articulo penultimo valde bifido.

Habitat in China, in Mus. Dom. Hope.

Estigmena Chinensis. Long. lin. $5\frac{1}{2}$, lat. lin. 2. Nigra, antennis atro-corallinis, thorace, corpore pedibusq. concoloribus.

Caput atrum, antennis 6 articulis primis glabris et atrorufis, reliquis nigricantibus. Thorax rufus dorso sparsim eroso. Elytra nigra, striatopunctata punctis fortiter insculptis. Corpus infra rubrum, acuta spina inter pedes anteriores protensa.

Pectus depressum, annulis abdominis crebrissime punctulatis. Pedes robusti, rubri, femoribus incrassatis, plantis aurato-spongiosis.

To the above genus belong the following undescribed species, namely, Rufocastanea, Rubra, Miniata, Cyanura and Cantori, all of them inhabiting the East Indies.

IMATIDIIDÆ, Hope.

PRIOPTERA.* Novum Genus.

Type of the Genus Cassida, 8-punctata Fab.

Antennæ 11 articulatæ, rectæ, articulo 1mo. crasso, 2do. et 3tio. minutis et æqualibus, septem sequentibus gradatim longitudine increscentibus, extimo subcultriformi.

Labrum breve, margine antico ad latera declivi, medio subemarginato.

Mandibulæ cochleariformes, margine externo versum apicem obtuse 4-dentato.

Maxillæ breves, bilobæ, lobo externo curvato, setoso.

Palpi Maxillares articulo 1mo. brevi, 2do. et tertio trigonis, æqualibus, extimo ovato conico.

Mentum parvum transversum.

Labium magnum subquadratum membranaceum.

Palpi labiales articulo 1mo. brevi, 2do. trigono, ultimo ovato apice truncato.

Elytra magna, postice latissima, rotundata, basi crenata, ad humeros subsinuata et serrata.

Thorax antice emarginatus, lateralibus angulis anticis rotundatis, posticis subsinuatis.

Prosternum in medio angulariter productum et in impressione mesosterni receptum.

Pedes breves.

To this genus belong Cassida sinuata of Olivier,

^{*} Prioptera is derived from $\pi\rho\iota\omega$ and $\pi\epsilon\tau\rho\sigma\nu$, the wings being serrated.

C. 6-punctata, and Javana of Hope, all of them inhabiting the East Indies.

CHRYSOMELIDÆ, Leach.

AGASTA, Hope. Novum Genus.

Type of the Genus Chrysomela Formosa Mihi.

Caput parvum articulo basali crasso, 2do. minimo, 3tio. elongato, octo sequentibus gradatim externe crassioribus, extimo ovato apice subacuto.

Mandibulæ parvæ apice fissæ, subtrigonæ.

Labrum breve, in medio valde emarginatum.

Maxillæ breves bilobæ, ciliatæ, lobo externo subarticulato.

Palpi maxillares breves, articulo 1mo. minimo, 2do. multo crassiori, 3tio. et 4to. rhombiformibus.

Mentum transversum, antice angustius.

Labrum breve, integrum.

Palpi labiales articulo 1mo. minuto, 2do. ovali et duplo longiori, extimo minori, ovato truncato.

Elytra elongato-quadrata, valde convexa, angulis antice et postice rotundatis.

Thorax transversus, antice subemarginatus, angulis omnibus subrotundatis.

Pedes simplices tarsis infra spongiosis, articulo 1mo. lato, obcordato, 2do. trigono, minuto, 3tio. bilobo, extimo longiori.

Agasta formosa Mihi. Long. lin. 5. lat. lin. 3. Flava, antennis pedibusque concoloribus, thorace quadrinotato, elytrisque cyaneo-maculatis.

Caput parvum-flavum oculis nigris. Thorax

transversus, quadrinotatus, puncto laterali nigro utrinque posito, binisque maculis lunulatis fere mediis. *Elytra* thorace multo latiora, convexa, flava, purpureis maculis notata, sex in singulo dispersa septimo fere apicali, transversa et communi. Corpus infra testaceum pedibus concoloribus.

This remarkably beautiful insect I received from Singapore; it is probable also that it occurs in Java and other parts of the Indian continent. I have named the genus Agasta, from the Greek word ayasos, signifying admirable.

CLYTHRIDÆ, Leach.

Pæcilomorpha, Hope. Novum Genus. Type P. Passerinii, Hope.

Caput magnum oculis prominentibus.

Antennæ breves apice crassiores, articulo 2do. et 4to. minutis, 7 ultimis serratis.

Labrum magnum subquadratum, antice angustius, setosum.

Mandibulæ elongato trigonæ, externe rotundatæ, apicibus acutis integris.

Maxillæ lobis duobus elongatis, externo gracili, apice setis longis instructo, interno subensiformi, setoso.

Palpi maxillares articulo basali minuto 2do. elongato obconico, 3tio. brevi, subtrigono, ultimo longovato, apice acuto.

Mentum transversum, margine antico recto, an-

gulis anticis productis. Labium 4-dratum antice vix emarginatum setosum.

Palpi labiales articulo basali minuto 2do. oblongo obconico subcurvato, ultimo ovato acuto.

Thorax capite vix latior, lateribus postice rotundatis.

Elytra oblongo quadrata postice rotundata.

Pedes longitudine mediocres, setosi femoribus gracilibus.

Pæcilomorpha Passerinii, Hope. Long. lin. $3\frac{1}{2}$. lat. lin. $1\frac{1}{2}$. Cyanea, thorace flavo, in medio nigromaculata, elytris cyaneis punctatis, corpore infra testaceo.

Antennæ fuscopiceæ. Caput nigro-violaceum oculis prominentibus atris, thorax flavus, macula media longitudinali notatus. Elytra cyanea, punctatissima. Corpus infra testaceum femoribus concoloribus, posticis crassioribus. Tibiis fuscis et curvatis.

Habitat in Sierra Leona. In Mus. Dom. Hope.

This elegantly formed insect is named in honour of Professor Passerini of Florence, well known as a celebrated Entomologist.

SAGRIDÆ, Leach.
AMETALLA,* Hope. Novum Genus.

Type of the genus Donacia Spinolæ Hope.

Forma donaciformis.

Antennæ setaceæ ante oculos insertæ, articulo

^{*} From the Greek a non, and $\mu\epsilon\tau a\lambda\lambda o\nu$, as contrasted with true Sagræ, which are richly metallic.

basali crasso, 2do. subgloboso, reliquis magnitudine æqualibus, apicali autem acuto.

Mandibulæ falciformes apicibus acutis ante apicem interne bifidæ.

Labrum transversum tomentosum, angulis anticis rotundatis.

Maxillæ minutæ, basi corneæ bilobæ, lobis ciliatis.

Palpi maxillares articulo 1mo. brevi 2do. elongato obconico, 3tio. trigono, extino ovato, apice subtruncato.

Mentum transversum, margine antico recto, angulis anticis rotundato productis.

Labium magnum subquadratum, antice setosum.

Palpi labiales maxillaribus fere longitudine æquales, articulo basali minimo, 2do. obconico, ultimo ovato.

Elytra ad basin lata, ad apicem gradatim attenuata.

Thorax antice latior quam ad basin, angulis anterioribus rotundatis, supra depressus.

Pedes quatuor anteriores simplices, femoribus posticis incrassatis et interne unidentatis, tibiisq. incurvis. Habitat in Nova Hollandia.

AMETALLA * Spinolæ. Long. lin. $4\frac{1}{2}$. lat. lin. $1\frac{1}{2}$. Flava, thorace rubro, maculato, elytris ochraceis nigrolineatis. Caput fusco cinereum, antennis pedibusq. concoloribus. *Thorax* ruber, maculis ternis posticis notatus. Elytra flavo ochracea, lineis nigris

^{*} From the Greek a non, and μετσλλον, as contrasted.

variegata. Corpus infra fusco-cinereum, pedibus concoloribus, femoribus posticis incrassatis et unidentatis. Habitat in Nova Hollandia.

This singular form uniting in itself the genera Donacia and Sagra, I have named in honour of the Marquis Maximilian Spinola, author of various publications on the Entomology of Europe.

SAGRIDÆ, Leach. MECYNODERA, Hope. Novum Genus.

Type of the Genus SAGRA PICTA Hope's MSS.

Corpus sagriforme.

Antennæ ante oculos insertæ, setaceæ, articulo 1mo. crassiori, 2do. brevi, reliquis magnitudine æqualibus apicali autem acuto.

Labrum transverso-quadratum, tomentosum angulis anticis rotundatis.

Mandibulæ falciformes, apice acuto integro, margine interno ciliato.

Maxillæ basi corneæ, apice bilobæ, lobis ciliatis, rotundatis.

Palpi maxillares articulo 1mo. minimo vix conspicuo, 2do. longo, obconico, 3tio. crassiori obtrigono, extimo ovato subtruncato.

Mentum breve, margine antico recto, angulis anticis rotundato-productis.

Palpi labiales articulo 1mo. brevi, 2do. elongato, obconico, tertio ovato.

Elytra thorace duplo latiora, antice truncata,

angulis anticis subrotundatis, posticis valde rotundatis.

Thorax oblongus, antice paullo angustior, capite vix latior, angulis anticis rotundatis, posticis rectis.

Mesosternum valde declive, intra pedes medios productum,

Pedes quatuor anteriores simplices femoribus posticis valde incrassatis, spinaque valida armatis.

Tibiæ curvatæ, articulis tarsorum bilobatis, plantis infra tomentosis.

Mecynodera picta. Long. lin. $6\frac{1}{2}$. lat. lin. $2\frac{1}{2}$. Nigra, antennis, corpore, pedibusq. infra cinereotomentosis, fuscis, thorace bilineato, elytrisque flavopictis.

Caput antice margine aurantio, postice nigrocinereum, antennis concoloribus. Thorax in medio niger, lateribus aurantio colore lineatis. Elytra atra flavopicta, maculis variis inquinata, sagitta flava in singulo delineata. Corpus infra cinereo-tomentosum, mesosterno dente brevi rubro armato, pedibus posticis incrassatis, spinaq. acuta armatis.

Habitat in Nova Hollandia. In Mus. Dom. Hope.

The above genus appears to be a form uniting Donacia and Sagra, but it is evidently most allied to the latter. Mr. George Gray has mistaken this insect for the Megamerus of Mr. MacLeay, with which it differs in many points; I propose therefore to give it the name of Mecynodera (derived from $\mu\eta\kappa\nu\nu\omega$ and $\delta\epsilon\rho\eta$) to include the species belonging to this form. It certainly appears to be a link uniting the above-mentioned genera.

Mesomphalidæ. Calaspidea,* Hope.

Type of the Genus Cassida Grossa of Fabricius.

Forma fere arbicularis.

Antennæ 11 articulatæ, articulo 1mo. crassiori, 2do. brevi, 3tio. triplo longiori, reliquis fere æqualibus ultimo apice subconico.

Labrum breve, margine antico acute inciso.

Mandibulæ cochleariformes, apicibus subrotundatis, obtuse denticulatis.

Maxillæ breves, lobo externo apice dilatato, apice setoso.

Palpi maxillares crassi, articulo 1mo. brevi, 2do. duplo longiori, 3tio. fere trigono, ultimo suborbiculari ovato.

Mentum parvum, antice subconicum.

Labium membranaceum subovatum.

Palpi labiales cornei, articulo 1mo. brevi, 2do. longiori extimo trigono, oblique exciso.

Elytra orbicularia, convexa, apicibus subacuminatis.

Thorax rotundatus emarginatus.

Prosternum sub ore protensum, inter pedes anticos productum, contractum, seu carinatum, antice et postice dilatatum.

To this genus belong Cassida grandis of De Jean, Erythrodera and Rubripennis of Hope, and several

^{*} From καλος pulcher, αοπις and ιδεα.

other nondescripts, to which manuscript names have been given, the latter are consequently not adopted.

Habitat in America Meridionali.

MESOMPHALIDÆ, Hope. OXYNODERA, Mihi.

Type of the Genus Cassida Variegata Fab.

Forma fere orbicularis.

Antennæ 11 articulatæ, cylindricæ, articulo Imo. crassiori, sequentibus quinque proximis minutis et æqualibus, reliquis magnitudine duplo longioribus, extimo apice ovato conico.

Labium breve, margine antico declivi, setoso, subrecto.

Mandibulæ cochleariformes apicibus subacutis et 4-denticulatis.

Maxillæ breves, bilobæ, lobo externo apice setoso, interno simplici.

Palpi maxillares articulo 1mo. brevi, 2do. et tertio fere trigonis, et æqualibus, ultimo longiori, apice oblongo ovato conico.

Mentum parvum transversum.

Labium membranaceum, integrum setosum.

Palpi labiales cornei, articulo 1mo. trigono, 2do. longiori, ultimo elongato apice conice.

Elytra fere orbicularia, antice paullo latiora et emarginata, ante medium umbone armata.

Thorax antice rotundatus, postice subsinuatus, lateribus utrinque in dentem acutum productis.

Prosternum inter pedes anticos protensum, depressum, postice dilatatum, subrugosum. **Mesosternum** antice bifurcatum.

Habitat in America Meridionali.

To this genus belong Cassida palliata of Fabricius. C. Strigata of Hoffmansegg, and Biplagiata Mihi. The last insect I have lately received from Colombia, and to the above various other species might be added, most of them being as yet undescribed. Cassida carbonaria of Klug will probably at some future time be regarded as the type of a sub-genus allied to Oxynodera.

CHIROSCELIDÆ, Gory.
CHIROSCELIS, Lamarck.

Type of the Genus TENEBRIO DIGITATUS Fab.

A description and figure of this insect will be found in Erman's Reise um die Erde, Vid. Table 15, fig. 11; as the specimen there delineated appears to have been dwarfish, scarcely exceeding 14 lines in length, I have some doubts if it is really the insect alluded to by Fabricius. Dr. Leach, in the article Entomology, of the Edinburgh Encyclopædia, at page 100, describes Chiroscelis as having its anterior tibiæ palmated or dentated externally; he intended to say internally. The locality given is New Holland, which also appears to be erroneous, as Fabricius is right when he states it to be from Sierra Leone. It seems that the Bifenestra of Lamarck and Digitatus of Fabricius are only sexes of one species; the anatomical details of both are

given at plate 3^{ak} fig. 3. To the family Chiroscelidæ I am enabled to add an undescribed genus, lately received from Sierra Leone, besides the genus Prioscelis, which has already been described. I propose the name of Pachylocerus from its remarkably robust antennæ. The following characters detach it from Prioscelis.

PACHYLOCERUS, Hope.

Caput magnum, clypeo transverso truncato, antennæ robustæ articulo 1mo. crasso, 2do. brevi 3tio. duplo longiori, quinque sequentibus moniliformibus longitudine æqualibus, nono et decimo cyathiformibus, extimo ovato. Thorax valde convexus, antice angustior, postice latior, lateribus curvatis. Elytra sulcata, striatopunctata, metallica. Corpus infra nigroæneum, nitidum, pedibus concoloribus. Femora antica subdentata, sinuata et sulcata, tibiis in sulcis receptis, postica quatuor subrugosa. Tibiæ curvatæ, anteriores fortiter unidentatæ, mediæ subdentatæ, ultimis fere rectis subscabris.

Habitat in Sierra Leona,

Pachylocerus, Westermanni Hope.

Long. lin. 13. lat. lin. 4½. Nigroæneus, thorace glabro, elytrisq. striato-punctatis. Totum corpus supra metallicum, antennis nigro violaceis, ultimo articulo rufescenti, infra nigro æneum, nitidum. Pedes quatuor anteriore tibiis armatis, tarsis infra piceis, rufescentibus, capillisque obsitis.

This magnificent insect I have named in honour

of Professor Westermann of Copenhagen, the possessor of a very rich collection of exotic entomology. The above species is subject to vary in its colours; some specimens have the wings golden green, others brown, which are immature; in its mature state the colour is black, with a strong metallic lustre; it appears to approach the genera Iphicerus and Odontopus.

ENGIDE, MacLeay. HELOTA, MacLeay.

Type of the Genus Helota Vigorsii of MacLeay.

Helota Servillei, Hope. N.S.

Long. lin. 8, lat. lin. $2\frac{1}{2}$. Corpus supra roseocupreum, punctatum, thorace eminentiis lævissimis, elytris geminatim striatis et flavo bimaculatis.

Caput aurato cupreum punctatissimum oculis fuscis collo subtus rubro, antennis piceis. Thorax cupreus lateribus subserratis, disco punctulis eroso, lineis duabus antice elevatis, et glabris, ternisque aliis postice eminentibus. Scutellum nigrum. Elytra acuminata, roseo-cuprea, striis punctorum geminatis, marginibusque externis elevatis in singulo maculæ binæ magnæ, succineo colore inquinatæ. Corpus totum infra rubrum et nitidum. Pedes rubro corallini, geniculis chelisq. nigris.

Habitat in India Orientali, circa Poonah.

Described from the collection of Colonel Withill.

This beautiful insect, the largest of the known

species of Helota, I name in honour of my valued and respected friend, Monsieur Audinet Serville of Paris, whose numerous publications have greatly contributed to the advance of Entomological science.

Hеlota, Guerinii.

Long. lin. 4 lat. lin. 1½. Nigroænea, thorace aurato viridi, elytris flavo bimaculatis corporeq. infra testaceo, nitido.

Caput viridi æneum punctulatum, oculis nigricantibus, collo subtus testaceo, antennis flavis. Thorax viridiæneus, punctatus, lateralibus anticis angulis flavis, marginibus antice et postice auratis. Elytra nigroænea striatopunctata, maculis duabus convexis, glabris flavis, seu succineo colore inquinatis, apicibus rotundatis. Corpus infra testaceum nitidum. Pedes femoribus incrassatis, flavis, tibiis auratoviridibus tarsis chelisq. piceis.

Habitat in India Orientali circa Travancore. In Mus. Dom. Withill.

This nondescript species of Helota I have much pleasure in dedicating in honour of Monsieur Guerin, the author of the Magazin d'Entomologie, one of the most useful books of the present day.

Adeliadæ, Kirby.

THORACOPHORUS. Hope.

Type of the Genus Adelium Walckenærii Hope.

Forma carabiformis.

Antennæ thorace longiores 11 articulatæ, articulo

1mo. ovato. 2do. brevi, reliquis æqualibus extimo autem apice conico.

Thorax semicircularis, depressus, emarginatus, margo anterior latior quam posterior, postice transversus, angulis lateralibus fortiter elevatis et recurvis.

Elytra valde depressa, porcata. Pedes sicut in Adelio Kirby.

THORACOPHORUS WALKENÆRII, Hope.

Long. lin. 8. lat. lin, $2\frac{1}{3}$. Nigroæneus, nitidus, thorace postice utrinque angulato, elytris porcatis. Totum corpus supra et infra depressum, glabrum, nitidum, et nigroæneum. Caput subtrigonum, punctis duobis in medio disci notatum. Thorax linea longitudinali media impressa, foveolis ad latera posticeque insculptis. Elytra elongata-ovata, fortissime sulcata. Pedes sicut in Adelio Kirby.

Habitat in Nova Hollandia.

This new form of Adelium I have a satisfaction in naming as the type of a new genus, giving it the specific name of Walckenærii, in honour of Baron Walckenær, the celebrated Apterologist. To the same genus belong the following species, viz. Thoracophorus Audouini, Depressus, Æneipennis, and Walkerii, all of them inhabiting New Holland, and in my possession.

Languiridæ, Leach. Macromelea,* Hope.

Antennæ fere corporis longitudine, 11 articulatæ, articulo 1mo. crasso, 2do. brevi, 3tio. quadruplo longiori, apice dilatato, quatuor proximis gradatim longitudine decrescentibus, octonono cylindrico, tribus ultimis subtrigonis æqualibus.

Labrum breve transversum antice setosum.

Mandibulæ elongato-trigonæ, apice acuto-bifidæ.

Maxillæ elongatæ, lobo externo crasso, setoso, interno gracili apice bifido.

Palpi maxillares maxillis vix longiores, articulo 1mo. minimo, 2do. trigono et crasso, 3tio. cyathiformi, ultimo elongato conico, apice acuto.

Mentum corneum medio latius, antice angustius, angulis anticis acute productis.

Labium cordato-truncatum.

Palpi labiales articulo basali parvo, 2do. duplo longiori, obconico, ultimo fere magnitudine præcedenti æquali apice truncato.

Elytra elongata apicibus gradatim attenuatis et rotundatis.

Thorax elongatus, antice angustior.

Pedes anteriores longissimi, tibiis elongatis et curvatis, 4 posticis minoribus. Tarsi articulis duobus primis trigonis, 3tio. bilobo 4to. cylindrico.

Habitat in India Orientali.

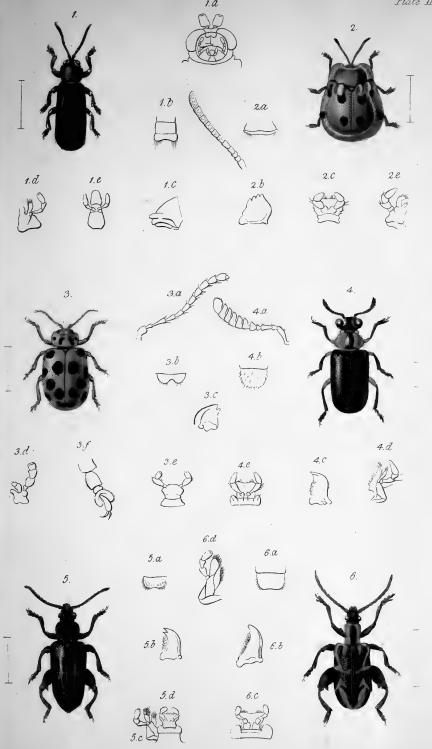
^{*} From the Greek $\mu a \kappa \rho o s$ long, and $\mu \epsilon \lambda \epsilon a$ limbs, long-limbed Languiria.

MACROMELEA WIEDEMANNI Hope.

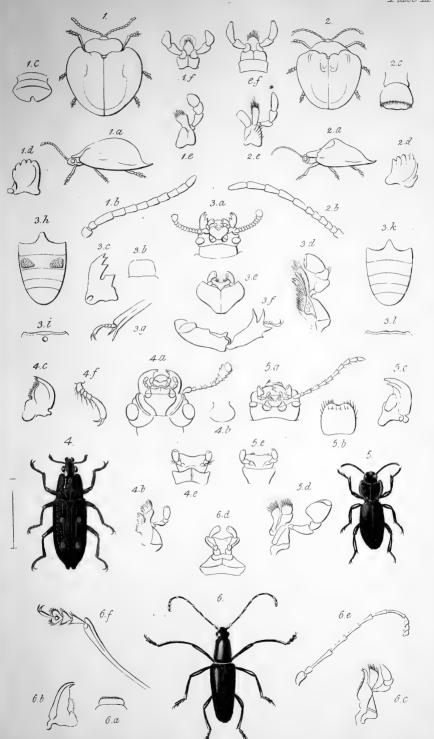
Long. lin. 11. lat. lin. 3. Cyanea, antennis elongatis, capite thoraceq. badiis, hoc antice angusto, elytris chalybeo-violascentibus, pedibusque nigris, Tranquebar.

The above description I have copied from Wiedemann's Zoologisches Magazin, Band. 2, page 48, Species 69; and as I have applied a generic name from its peculiar long limbs, I change the name of Longicornis to Wiedemanni, who first described the above species. To the same genus belongs Languiria Nigripennis of Wiedemann.



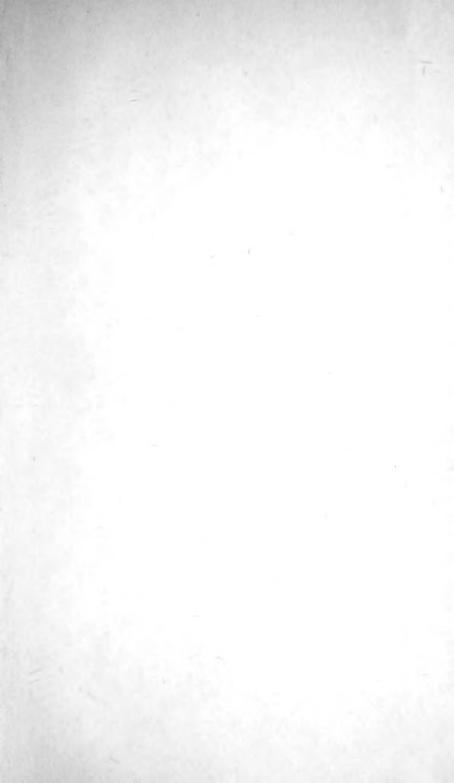


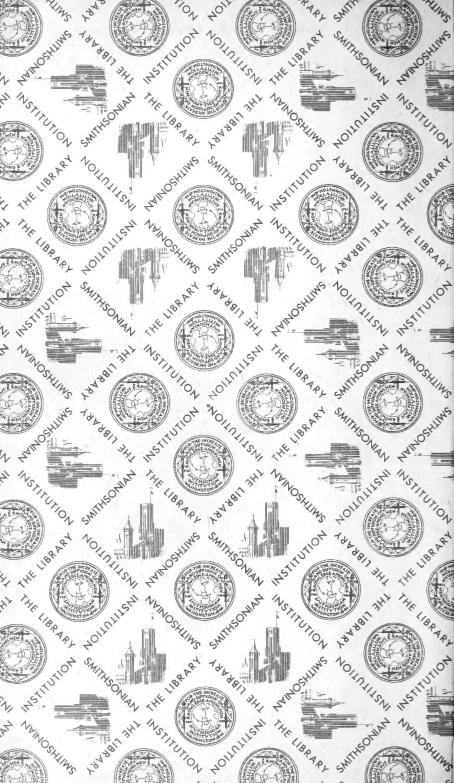


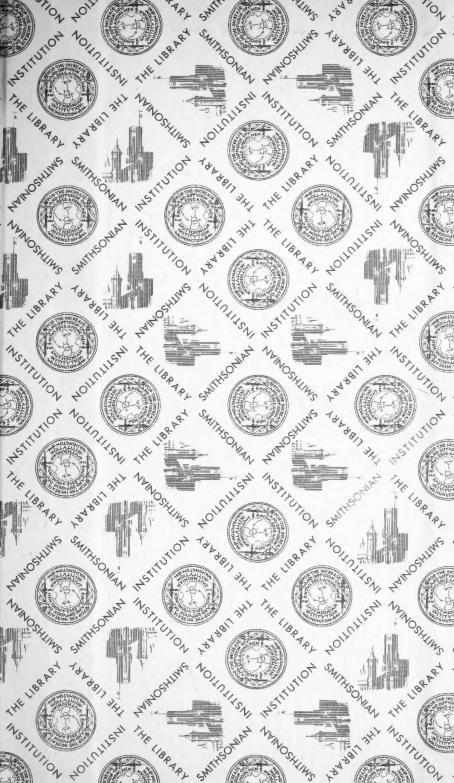












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