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GOMIATHUS PRINCEPS, Hope.

THE

Punted by the author

COLEOPTERIST'S MANUAL,

CONTAINING THE

LAMELLICORN INSECTS

OF

LINNEUS AND FABRICIUS.

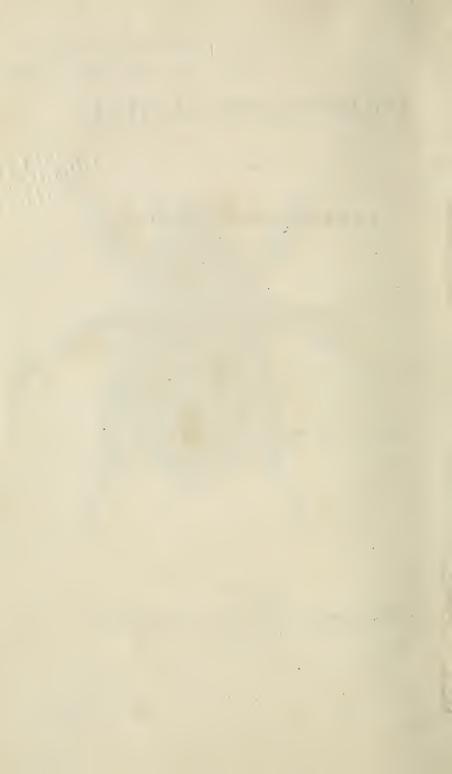
BY THE

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

LONDON:

HENRY G. BOHN, YORK STREET, COVENT GARDEN.

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TO

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,

Entomotory 23th 31 terming + 315

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. 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 $\tau \rho \nu \pi a \varphi$ 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 Sçavans 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 Leau.
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	

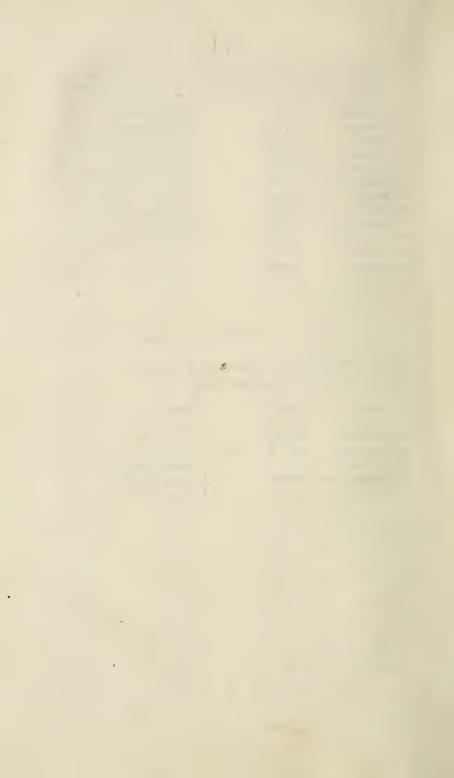
Linnean Species.	Country.	Arrangement of Authors.
3. Hæmorrhoidales	Germany	Aphodius, Fabricius.
34. Conspurcatus	France	
5. Marianus	Carolina	Dynastes Q, Mac Leay.
6. Gigas	Egypt	Heliocopris, Hope.
37. Scaber	N. America	Dynastes, Mac Leay.
8. Laticollis	S. Europe	Scarabæus, Mac Leay.
9. Longimanus	Asia	Eucheirus, Kirby.
0. Pilularius	Europe	Gymnopleurus, Illiger.
1. Schæfferi	Germany	Sisyphus, Latreille.
2. Stercorarius	England	Geotrupes, Latreille,
3. Vernalis	Austria	
4. Calcaratus	Egypt	Dichelus? Serville.
5. Schreberi	Germany	Onthophagus, Latreille.
6. Ovatus	England	
7. Amazonus	Surinam	Cyclocephala, Latreille.
8. Sabulosus	Europe	Trox, Fabricius.
9. Chrysis	S. America	Macraspis, Mac Leay.
60. Surinamus	Surinam	Rutela, Latreille.
1. Nitidus	Carolina	Gymnetis, Mac Leay.
2. Festivus	N. America	Phanæus, Mac Leay.
3. Lineola	S. America	Rutela, Latreille.
64. Sticticus	Barbary	Cetonia, Fabricius.
55. Sepicola	E. Indies?	Anisoplia ?
66. Syriacus	E. Indies	Anisoplia ?
7. Fullo	England	Melolontha, Fabricius.
58. Agricola	France	Anisoplia, Megerle.
59. Horticola	England	
30. Melolontha	France	Melolontha, F. sp. vulgaris.
31. Solstitialis	England	Zantheumia, Leach.
32. Occidentalis	Carolina	Rhisotrogus, Latreille.
33. Hemipterus	France	Valgus Scriba.
34. Farinosus	Europe	Hoplia, Illiger.
55. Aulicus	Africa	Hoplia?
66. Longipes	P. B. S.	Monochelus? Illiger.
37. Lanigerus	N. America	Areoda, Leach.
38. Squalidus		Cetonia, Fabricius.
39. Hirtellus	Germany France	Coonia, Patricia.
70. Fasciatus	England	Trichius, Fabricius.
71. Indus		Cetonia, Fabricius.
71. Inaus 72. Brunnus	N. America	
	Europe	Serica, MacLeay, sp. brunne
73. Capensis	P. B. S.	Cetonia, Fabricius.

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	Uuknown	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. Actæon.—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, καθαρσιος, "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. 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. 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. In 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.
l. 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.
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	
ı	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.
	74. Morator	E. Indies	Syrichtus, Kirby.
	75. Arator	P. B. S.	Hybosorus, MacLeay.
	76. Globator	P. B. S.	Melolontha, Fabricius.

Fabrician	Fabrician	The Countries they inhabit.	Modern Arrangement of Authors.
Genera.	Species.	they innabit.	Authors.
3. SCARABÆUS	1. Dispar	Russia	Typhæus, Leach.
	2. Coryphæus	P. B. S.	Bolboceras, Kirby.
	3. Typhæus	Europe	Typhæus, Leach.
	4. Momus	Sicily	Typhœus, 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.
4. 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 ·	
5. 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	Bengal	Onthophagus, Latreille.
	13. Aurata	Guinea	
	14. Pithecius	Asia and Africa	Copris, Fabricius.
	15. Seniculus	Madras	Onthophagus, Latreille.
	16. Javana	Java	Onthophagus, Latreille.
	17. Metallica	E. Indies	
	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	oopris, ratification.
	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:

Fabrician	Fabrician	The Countries	Modern Arrangement of
Genera.	Species.	they inhabit.	Authors.
. Copris.	54. Bucephalus	China	Heliocopris, Hope.
	55. Gigas	Africa	Heliocopris, Hope.
	56. Molossus	China	Copris, Fabricius.
	57. Ursus	Bengal	
	58. Lancifer	S. America	Phanœus, 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	
	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	Phanœus, MacLeay.
	85. Tridens	Africa?	Phanæus, MacLeay.
	86. Hispanus	Spain	Copris, Fabricius.
	87. Mopsus	E. Indies	Onthophagus, Latreille,
	88. Spinifex	Coromandel	
	89. Cœnobita	Europe	
	90. Nuchicornis	England	
	91. Fracticornis	Germany	
	92. Xiphias	England	
	93. Nutans	England	
	94. Ciconia	Guinea	Onthophagus !
	95. Ænea	Tranquebar	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.
3. 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.
			opiobias, Duor conce

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. Cinctus	China	
	42. 3-angularis	Surinam	Coprobius, Lat.
	43. Affinis	S. America	Coprobas, Eat.
	44. Melanocephalus	American Isles	Chæridium, Serville.
	45. Maculatus	Guinea	Gymnopleurus.
	46. Politus	Tranquebar	Onthophagus?
	47. 6-punctatus	Cayenne	Coprobius, Lat.
	48. Violaceus	St. Domingo	Coprobius, Zat.
	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	Onthophagus.
	56. Parvulus	E. Indies	
	57. Fuscopunctatus	E. Indies	
	58. Femoratus	S. America	
. *APHODIUS.	48. Marginellus	Coromandel	Oxyomus, Eschscholtz.
	56. Sabuleti	Switzerland	Oxyomus, Eschscholtz. Psammodius, Gyllenhal.
	57. Porcatus	Saxony	Psammodius, Gyllenhall.
	58. Stercorator	S. America	Oxyomus, Eschscholtz.
	61. Asper	Paris	Psammodius, Gyllenhall.
	65. Cæsus	Germany	3.57.77.7

^{*} 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	
	14. Delta	N. America	
	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?
IO. 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	
	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, Fao.
	1.00	S. Leone	
	79. Gagates	S. America	Diplognatha, Gory.
	80. Tetradactyla		Macraspis, MacLeay.
	81. Clavata	S. America	
	82. Fucata	S. America	0 . 77.7
	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	
	103. Albopunctata	E. Indies	

Fabrician	Fabrician	The Countries	Modern Arrangement of
Genera.	Species.	they inhabit.	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	Senegal	
	116. Discoidea	Caffraria	
	117. Lugubris	P. B. S.	
	118. Histrio	Egypt	
	119. Modesta	Tranquebar	
	120. Gloriosa	St. Domingo	Rutela, Latreille.
	121. Maura	Guinea	Cremastocheilus, Gory.
	122. Hottentottus	P. B. S.	Genuchus, MacLeay.
	123. Regia	Sumatra	Macronata, Hoffmansegg.
	124. Cruenta	P. B. S.	Genuchus, MacLeay.
MELOLONTHA.	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	The Countries they inhabit.	Modern Arrangement of
	Species.	they thintoit.	Authors.
1. 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.
	28. Punctata	N. America	Pelidnota, MacLeay.
	29. Viridis	China	Euchlora, MacLeay.
	30. Ænea	N. Holland	Repsimus, Leach.
	31. Suturalis	N. Zealand	Stethaspis, Hope.
	32. Bicolor	Madras	Euchlora, MacLeay.
	33. Geminata	S. America	Chalepus, MacLeay.
	34. Barbata	W. Indies	Onarcpas, macheny.
	35. Morio	E. Indies	Chalepus?
		S. America	Cyclocephala, Lat.
	36. Castanea	S. America	, ,
	37. Rufipennis	Tranquebar	Cyclocephala?
	38. Elata	^	Anomala, Megerle.
	39. Dorsalis	Tranquebar	77
	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.
1. 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	
	100. Squamosa 101. Bilineata	Tangiers	Hoplia, Illiger.
	101. Billieata	Algiers	
	103. Glabrata	S. America	Hoplia?
	104. Ridens	N. America?	Hoplia?
	107. Indens	11. Intelled:	Tropia .

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. Cincta	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.	
	117. Crassipes	P. B. S.	Monochelus, Illiger. Dichelus?
	119. Cancroides	P. B. S.	
	120. Marginella	P. B. S.	Pachycnema, Serville.
	121. Pulverulenta	Germany	Pachycnema?
	121. Fulverulenta 122. Morio		Hoplia, Illiger.
		Barbary	Anisoplia?
	123. Sylvicola	N. Holland W. Indian Isles	Liparetra, Kirby.
	124. Subspinosa	P. B. S.	Macrodactylus, Latreille.
	125. Longipes	P. B. S.	Dichelus, Serville.
	126. Abbreviata 127. Minuta	P. B. S.	Lepitrix, Serville.
			Dichelus, Serville.
	128. Mutabilis	Tranquebar	Serica, MacLeay.
	129. Variabilis	Germany Sierra Leone	
	130. Versicolor		
	131. Splendidula	Sumatra	a
	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	Control of the State of the Sta

Fabrician Genera.	Fabrician Species.	The Countries they inhabit.	Modern Arrangement of Authors.
1. MELOLONTHA.	148. Bombylius	Africa	Amphicoma, Latreille.
	149. Vittata	Persia	Glaphyrus, Latreille.
12. Lucanus.	1. Alces	East Indics	Lucanus, Linnè.
	2. Giraffa	East Indies	
	3. Cervus	England	
	4. Elaphus	Virginia	
	5. Capreolus	Germany	
	6. Dama	Virginia	
	7. Femoratus	Сауеппе	
	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.
3. ÆSALUS.	1. Scarabæoides	Austria	Æsalus, Fab.
4. 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. Actæon.—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 valde 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. Ædipus & 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. Cælata.—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 Sehestedt; 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 have 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 Entomologist. 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 μηκυνω and ριν, from the clypeus being prolonged into a horn. The following characters will designate the type of form. norhina 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." To 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 Hoffmansegg. 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. 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. Piccus.—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.

Caput triangulare clypeo antice truncato reflexo.

Mandibulæ robustæ antice conicæ, hirsutæ.

Maxillæ 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^{do} 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, \mathcal{Q}^{do} fere triplo longiori, \mathcal{J}^{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.

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, \mathcal{Q}^{do} crassiori suboblongo, \mathcal{S}^{tio} obconico, ultimo elongato truncato.

Mentum subtrigonum basi angustiori lateribus rotundatis, apice truncatum.

 ${\it Palpi\,labiales}$ 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. 2^{do} et 4^{to} longitudine fere æqualibus.

Mentum suboblongum lateribus convexis apice valde emarginato.

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

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.

Unquiculi 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^{to} 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 Ungues 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.

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 Mellæta, 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.

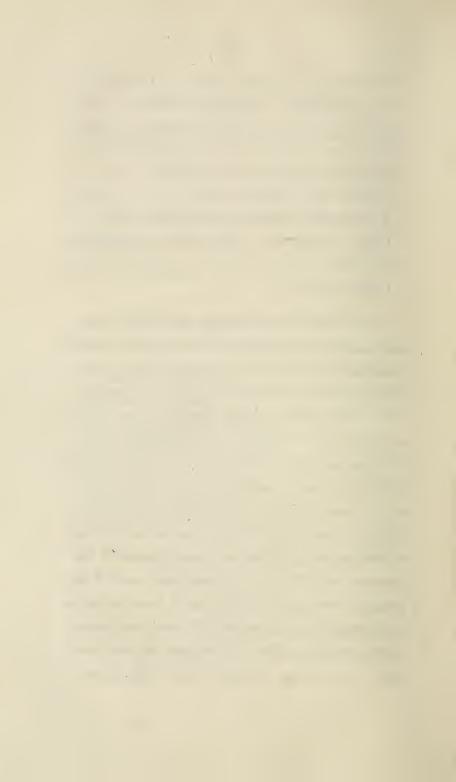
Antennæ clavâ elongato-ovata.

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.

Thorace rotundato.	Country.	Thorace trapezoidali.
Goliathus	Africa	Mecynorhina. Dicronorhina
?	Asia	Rhomborhina.
Dicronocephalus	East India	Jumnos
Incas	Brazil	N. G. (Hæfneri Dej

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

Genus. Goliathus.—Tibiæ anticæ & inermes, q extus tridentatæ, 4-posticæ & inermes, q 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.

- ₹ 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 sublente 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.



DESCRIPTION OF THE PLATES.

FRONTISPIECE.—Goliathus Princeps, Hope. P.

In the other Plates the same letters indicate the same organs throughout.

Md. Mandible; mx. Maxilla; m. p. Maxillary palpus; mn. Mentum;
l. p. Labial palpi.

PLATE I.

			PLAIL I.
Fig.	1.—Details	of the genus	Megaceras, Kirby, (M. Chorinæus)
	2.	,,	Euema, Kirby, (E. infundibulum)
	3.	,,	Cheiroplatys, Kirby, (Ch. Juvencus)
	4.	,,	Chalcosoma, Hope. (C. Atlas) H. under
			side of the head. b, brush of clypeus.
	5.	12	Strategus, Kirby, (Str. Alœus &)
			PLATE II.
Fre	6 - Dotails	of the genus	Coolosis Kirhu (C. Sylvanus)

Fig	6.—Details	of the	genus	Cœlosis, Kirby, (C. Sylvanus)
	7.	,,		Xyloryctes, Hope, (X. Satyrus 3)
	8.	,,		Syrichtus, Kirby, (S. capensis)
	9.	,,		Pentodon, Kirby, (P. punctatus)
	10.	"		Temnorhynchus, Hope, (T. retusus) P. hind leg.
	11.	,,		Bothynus, Kirby, (B. cuniculus.)

PLATE III.

Fig. 12.—Details	of the	genus	Isodon, Hope, (I. Australasiæ)
13.	,,		Goliathus Cacicus & (H. under side of the
			head— a , maxillary brush; b , terminal
			part of the mentum; c, labial palpi;
			d, maxillary palpi; e, basal portion of
			the mentum; f, base of the maxilla;
			g, side view of the extremity of the
			mentum, shewing the deep groove in
			which the palpi are lodged.)
14.	,,		Goliathus princeps Q, Hope.
15.	••		Tesserodon Novæ Hollandiæ, Fab.

FOR THE PERSONS

and the State of the same

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 discoide.

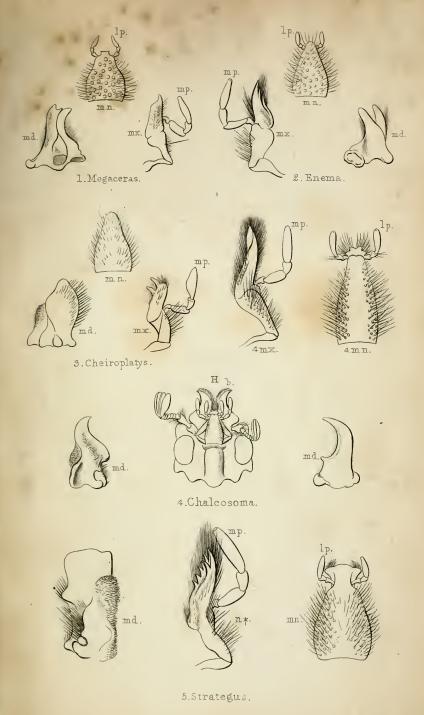
,, 74. Within, read with in.

,, 74. Hydrobiiform, read Hydrobiform.

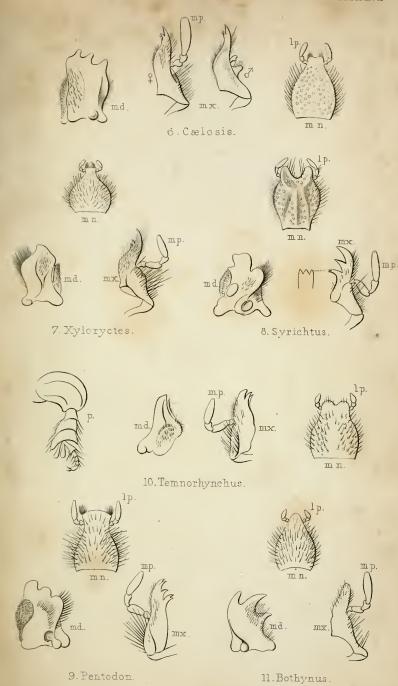
,, 106. Rhombonyx, read Euchlora.

,, 121. (line 1) Mem. Blumei, read Mim. Blumei.

Plate 3. Tesserodon, read Tessarodon.



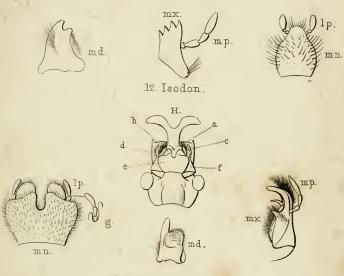
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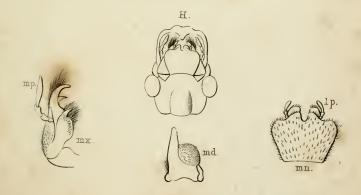




15. Tefserodon Novæ Hollandiæ.



13. Goliathus Cacicus o.



14. Goliathus Princeps &.

Undrekzila de Utimbas de jet les ficskal











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