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# Cruculatrosen. <br> THE <br> Mon...e... li than tr. <br> <br> COLEOPTERIST'S MANUAL, 

 <br> <br> 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.
ETC. ETC.

LONDON :
henry g. born, york street, Covert garden.
MDCCCXXXVII.

# THE REV. WILLIAM KIRBY, M.A. 

## 

of the

> E NTOMOLOGICAL SOCIETY, F.R.S. F.L.S. F.G.S. ETC.

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

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

> Believe me to be,
> Your's, very sincerely,
> F. W. Hope.

## Shortly will be published,

THE
FIRST FASCICULUS OF THE COLEOPTEROUS FAUNA OF NEW HOLLAND.

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

## PREFACE.

The origin of this attempt at a Classification of the Lamellicorns, may probably be traced to my interleaved copies of the Systema Naturæ of Linneus, and the Systema Eleutheratorum of Fabricius, in which for some years past I have been in the habit of noting down any remarks which occurred to me, while grouping and arranging my collection. The suggestion of a friend, accompanied by a letter urging the request, induces me to give to the Public the results of these observations, and I trust that, however imperfect or even faulty this Manual may appear, it yet may be the means of enabling the Student to name the Linnean and Fabrician species of his collection with more facility and accuracy than can be derived from any Entomological work hitherto published. Entomology in Europe at the present day is making rapid progress, and it must be a source of regret to the real lover of science,
that few of the Elementary books already published are sufficiently simple and satisfactory; perhaps the best that has appeared is the Entomologia Edinensis, published by that elegant writer, James Wilson, of Edinburgh ; throughout the work pedantry is avoided, while orismology is attended to, and what is of more consequence, the philosophy of science is steadily kept in view. It is, however, but a local Fauna, and therefore cannot be of general utility. The glowing pages of a Kirby and a Spence have no doubt induced many individuals to prosecute with ardour the study of Insects.-Alas! like the grammar of a language, the elements of science (particularly that of Entomology) have presented at the outset not only a stumbling block, but a very formidable barrier, nearly insuperable to human assiduity. To clear away these impediments, to render the tyro's first attempts at systematic Entomology more engaging than at present, is one object of the present Manual; a second is, that the writings of Linneus and Fabricius may no longer be as a sealed book or dead letter; a third is, to exhibit the state of Entomological science at the present day, and thereby enable others to direct attention to those points which have been most neglected. Let us enquire how it happens that the writings of the
above authors are nearly useless to the tyro in Entomology. The student having lately acquired the rudiments of science, naturally applies to the Systema Naturæ of Linneus for further information. He is surprised at the extreme brevity of the generic characters, and can depend little on the sections or sub-divisions of the genera described generally in a few words. He next has recourse to the Entomologica Systematica of Fabricius, where he is at once overwhelmed by the barbarous terms of the latter writer, and sighs for the classic elegance of the former. After much study and loss of time both are abandoned in despair, and if he still continues a desire to prosecute the study of Insects, he is compelled to seek information in the more voluminous writers of Sweden, Germany, and France. Should the student be a Linguist all is well; if not, further pursuit is altogether hopeless; consequently, the study of some of the most beautiful and varied forms of the Creation becomes abandoned, and the science of Entomology is deprived of the assistance of many who might have contributed to its renown. With the scientific the united works of Linneus and Fabricius must ever be considered as essential to the study of Entomology, and I know of no better means of rendering their labours acceptable to the young
beginner than by examining in detail the various Orders, Families, Genera and Species into which different authors have sub-divided the class Insecta. I commence this Manual with the Order of the Coleoptera, placing in a tabular arrangement the Lamellicorns described by Linneus. The first column will give the Linnean species-the second the country they inhabit, which in the Systema Naturæ is exceedingly faulty, as the Geographical distribution of Insects in those days was little attended to--the third column will contain an arrangement of the species under the several genera which modern Entomologists have adopted. Next to the Linnean Lamellicorns, will appear a tabular arrangement of those of Fabricius, divided into four columns. The first containing his genera, the second his recorded species, the third the countries they inhabit (often as faulty as the former), and the last will present a generic arrangement of authors similar to the preceding, and exhibiting as far as possible the state of modern science. It may be necessary here to give my reasons why I have in several cases changed the generic names, such as are in common use on the Continent. My friend, Mr. William Sharpe MacLeay, has very properly restricted the name Scarabæus to the genus of Beetles denomi-
nated 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 $\Xi u \lambda o \nu$ lignum, and $\tau \rho v \pi \alpha \omega$ 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 havoc they occasion in reducing to mere powder the mightiest monarchs of the forest, as well as in checking the over luxuriance of tropical regetation, 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. SCARAB辰US of Linneus. <br> Petalocera of MacLeay. <br> Lamellicorns of Latreille.

| Linnean Species. | Country. | Arrangement of Authors. |
| :---: | :---: | :---: |
| 1. Hercules | S. America | Dynastes, Mac Leay. |
| 2. Gideon | E. Indies | Xylotrupes, Hope. |
| 3. Actron | S. America | Megasoma, Kirby. |
| 4. Simson | S. America | Megasoma, Kirby. |
| 5. Tityus | N. America | Dynastes, Mac Leay. |
| 6. Atlas | E. Indies | Chalcosoma, Hope. |
| 7. Alæus | N. and S. America | Strategus, Kirby. |
| 8. Molossus | China | Catharsius, Hope. |
| 9. Typhøus | Europe | Typhœus, Leach. |
| 10. Lunaris | England | Copris, Fabricius. |
| 11. Cylindricus | England | Sinodendron, Fabricius. |
| 12. Bilobus | S. America | X ylotrupes, Hope? |
| 13. Lancifer | S. America | Phanæus, Mac Leay. |
| 14. Rhinoceros | Asia | Oryctes, Illiger. |
| 15. Nasicornis | Europe | Oryctes, Illiger. |
| 76. Carolinus | N. America | Copris, Fabricius. |
| 17. Mimas | S. America | Phanæus, Mac Leay. |
| 18. Sacer | Europe and Africa | Scarabæus, Mac Leay. |
| 19. Didymus | S. America | Phileurus, Latreille. |
| 20. Valgus | N. America | Phileurus, Latreille. |
| 21. Hispanus | Spain | Copris, Fabricius. |
| 22. Carnifex | N. America | Phanæus, Mac Leay. |
| 23. Granarius | Europe | Aphodius, Fabricius. |
| 24. Nuchicornis | England | Onthophagus, Latreille. |
| 25. Vacca | England | Onthophagus, Latreille. |
| 26. Taurus | Europe | Onthophagus, Latreille. |
| 27. Bison | Italy | Bubas, Megerle. |
| 28. Subterraneus | England | Aphodius, Fabricius. |
| 29. Erraticus | Europe |  |
| 30. Maurus | Mauritania | Glaphyrus, Latreille. |
| 31. Fossor | England | Aphodius, Fabricius. |
| 32. Fimetarius | Scotland | - |


| Linnean Species. | Country. | Arrangement of Authors. |
| :---: | :---: | :---: |
| 33. Hæmorrhoidales | Germany | Aphodius, Fabricius. |
| 34. Conspurcatus | France |  |
| 35. Marianus | Carolina | Dynastes ¢ $¢$, Mac Leay. |
| 36. Gigas | Egypt | Heliocopris, Hope. |
| 37. Scaber | N. America | Dynastes, Mac Leay. |
| 38. Laticollis | S. Europe | Scarabæus, Mac Leay. |
| 39. Longimanus | Asia | Eucheirus, Kirby. |
| 40. Pilularius | Europe | Gymnopleurus, Illiger. |
| 41. Schæfferi | Germany | Sisyphus, Latreille. |
| 42. Stercorarius | England | Geotrupes, Latreille, |
| 43. Vernalis | Austria | - |
| 44. Calcaratus | Egypt | Dichelus? Serville. |
| 45. Schreberi | Germany | Onthophagus, Latreille. |
| 46. Ovatus | England |  |
| 47. Amazonus | Surinam | Cyclocephala, Latreille. |
| 48. Sabulosus | Europe | Trox, Fabricius. |
| 49. Chrysis | S. America | Macraspis, Mac Leay. |
| 50. Surinamus | Surinam | Rutela, Latreille. |
| 51. Nitidus | Carolina | Gymnetis, Mac Leay. |
| 52. Festivus | N. America | Phanæus, Mac Leay. |
| 53. Lineola | S. America | Rutela, Latreille. |
| 54. Sticticus | Barbary | Cetonia, Fabricius. |
| 55. Sepicola | E. Indies? | Anisoplia? |
| 56. Syriacus | E. Indies | Anisoplia ? |
| 57. Fullo | England | Melolontha, Fabricius. |
| 58. Agricola | France | Anisoplia, Megerle. |
| 59. Horticola | England |  |
| 60. Melolontha | France | Melolontha, $F$. sp. vulgaris. |
| 61. Solstitialis | England | Zantheumia, Leach. |
| 62. Occidentalis | Carolina | Rhisotrogus, Latreille. |
| 63. Hemipterus | France | Valgus Scriba. |
| 64. Farinosus | Europe | Hoplia, Illiger. |
| 65. Aulicus | Africa | Hoplia? |
| 66. Longipes | P. B. S. | Monochelus? Illiger. |
| 67. Lanigerus | N. America | Areoda, Leach. |
| 68. Squalidus | Germany | Cetonia, Fabricius. |
| 69. Hirtellus | France |  |
| 70. Fasciatus | Eugland | Trichius, Fabricius. |
| 71. Indus | N. America | Cetonia, Fabricius. |
| 72. Brumus | Europe | Serica, Mac Leay, sp. brunnea |
| 73. Capensis | P. B. S. | Cetonia, Fabricius. |
| 74. Eremita | Europe | Osmoderma, Encyclopedie. |


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

## Genus. LUCANUS of Linneus.

## Thalerophagous Rectocera of Mac Leay.

Lamellicorns of Latreille.

1. Cervus
2. Capreolus
3. Tridentatus
4. Interruptus
5. Carinatus
6. Parallelipipedus
7. Caraboides

Europe
N. America

OElandia
N. \& S. America

Indies
England
Europe

Lucanus, Linneus.

Passalus, Fabricius.
Lucanus, Linneus.
Dorcus, Megerle.
Platycerus, Latreille.

## REMARKS AND ANNOTATIONS

ON THE

## LINNEANLAMELLICORNS.

Species 1. Scarabaus 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.
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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. Actroon.-To the genus Megasoma K. also belong G. Simson, Elephas, Typhon of Fabricius, and also Scarabæus Hector of Gory, lately published in the Annals of the Entomological Society of France. The details of the genus Megasoma Kirby, will be found in the 14th volume of the Linnean Transactions, part 3, p. 566.

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

Sp. 8. Molossus.-I am here inclined to form a new genus, comprehending those Copridæ which are
allied to Copris Molossus, Fab. The following short characters may probably be deemed sufficient, as the type is well known. "Clypeus integer, seu subemarginatus, cornutus, thorace retuso dentato punctatissimo, fovea laterali magna lævi nec punctata, elytrisque minutissime rugulosis." I suggest the adoption of the term Catharsius, $\kappa \alpha \theta \alpha \rho \sigma \iota o s$, "purgandi vim habens," or purifier, for this subgenus, which well expresses the benefit derived from these scavengers of warm and tropical regions. To it belong Copris Ursus of Fabricius, Achates of Olivier, Sagax of Schönherr and Cop. Olivieri, and Asrael of Kirby.

Sp. 9. Typheus.-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.

Sr. 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. MacLeày's names are attached.

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

Sp. 24. Nuchicornis.-Now of the genus Onthophagus, which requires however to be divided into several subgenera. I am acquainted with more than three hundred species, the major part of
which are in my possession. The species received from New Holland appear to differ from any of those which inhabit the New or Old World. The reason I do not here attempt a new arrangement is, that the forms are varied, and require a very careful and minute investigation.

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

Sp. 36. Gigas.-Now an Heliocopris. This gigantic insect is closely allied to Copris Isidis of Savigny, and may justly be ranked among those beetles which antiquity esteemed as sacred. It frequently occurs engraved on the obelisks of Egypt, and on the tombs of the kings, and is met with in collections sculptured of various sizes. As it very commonly occurs engraved at the temples of Osiris or the Sun, I suggest the adoption of the term Heliocopris to include all those species of Copris allied to C. Gigas, Linn. The following insects range with it: viz. C. Midas, Bucephalus, Antenor, Isidis; and to these may be added from my own collection those which are mentioned in Mr. Pettigrew's work on Egyptian Antiquities, namely, C. Osiris, Apis, Memnon, Sesostris, Mœris,
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 varriety of Cyclocephala signata, Fab. vid. Schon. Syn. Insect, p. 1. page 188, $122^{\text {a }}$.

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. Lonyipes.-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. 79. 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. Eneus.-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. Ceratonic.-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. $1 \frac{1}{2}$. 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 Limean 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 Lin. nean Society's collection the $\dagger \mathrm{I}$ now state that it will, in all probability, receive considerable additions
by the liberality of its members, if its arrangement be undertaken, being aware of several persons who are willing to contribute to it, and most gladly would I give a quantity of duplicates, should increased attention be bestowed on the Entomological department of that Society.

## THE LAMELLICORN BEETLES,

## DESCRIBED BY FABRICIUS.

| Fabrician Genera. | Fabrician Species. | The Countries they inhabit. | Modern Arrangement of Authors. |
| :---: | :---: | :---: | :---: |
| 1. Lethrus. | 1. Cephalotes | S. Europe | Lethrus, Fabricius. |
|  | 2. Æneus | N. Holland | Lamprima, Latreille. |
| 2. Geotrupes. | 1. Hercules | S. America | Dynastes, MacLeay. |
|  | 2. Alcides | S. America | Dynastes, MacLeay. |
|  | 3. Gideon | E. Indies | X ylotrupes, Hope. |
|  | 4. Oromedon | E. Indies | Xylotrupes, Hope. |
|  | 5. Centaurus | Africa | Xylotrupes, Hope. |
|  | 6. Ganymedes | Guinea | Xylotrupes, Hope. |
|  | 7. Jephtha | Guinea | X ylotrupes, Hope. |
|  | 8. Fgeon | 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 | X $\mathrm{ylotrupes}, \mathrm{Hope}$. |
|  | 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 | X ylotrupes, 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 | X ylotrupes, Hope. |
|  | 32. Alæus | Cayenne | Strategus, Kirby. |
|  | 33. Typhon | Bahia | Megasoma, Kirby. |
|  | 34. Vulcanus | Guadaloupe | Xylotrupes, Hope? |


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


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


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


| Fabrician Genera. | Fabrician Species. | The Countries they inhalit. | Modern Arrangement of Authors. |
| :---: | :---: | :---: | :---: |
| 5. Copris. | 54. Bucephalus | China | Heliocopris, Hope. |
|  | 55. Gigas | Africa | Helincopris, Hope. |
|  | 56. Molossus | China | Copris, Fabricius. |
|  | 57. Ursus | Bengal | --- |
|  | 58. Lancifer | S. America | Planæus, MacLeay. |
|  | 59. Paniscus | Barbary | Copris, Fabricius. |
|  | 60. Carolina | N. America | ---m |
|  | 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, Fubricius. |
|  | 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 | - m- |
|  | 83. Vitulus | E. Indies | -- |
|  | 84. Carnifex | N. America | Phanæus, MacLeay. |
|  | 85. Tridens | Africa? | Phanæus, MacLeuy. |
|  | 86. Hispanus | Spain | Copris, Fabricius. |
|  | 87. Mupsus | 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. |
| :---: | :---: | :---: | :---: |
| 5. Copris. | 96. Hyæna <br> 97. Thoracicus <br> 98. Centricornis <br> 99. Unicornis <br> 100. Scabrosa <br> 101. Furcula <br> 102. Furcatus <br> 103. Verticicornis <br> 104. Sulcator <br> 105. 4-pustulatus <br> 106. Reflexus <br> 107. Hybneri <br> 108. Quadricornis <br> 109. 4-dentatus <br> 110. Cristatus | P. B. S. <br> Senegal <br> E. Indies <br> E. Indies <br> Surinam <br> E. Indies <br> France <br> England <br> Cayenne <br> N. Holland <br> China <br> Germany <br> Tranquebar <br> E. Indies <br> Egypt | Onthophagus, Latreille. $\qquad$ $\qquad$ $\qquad$ <br> Onitis, Fabricius. <br> Onthophagus? <br> Onthophagus, Latreille. <br> Onticellus, Ziegler. <br> Copris, Fabricius. <br> Ontlophagus, Latreille. <br> Copris, Fabricius. <br> Onthophagus, Latreille. <br> Onthophagus? <br> Bolboceras, Kirby. <br> Scarabæus, MacLeay. |
| 6. Ateuchus. | 1. Sacer <br> 2. Laticollis <br> 3. Semipunctatus <br> 4. Variolosus <br> 5. Miliaris <br> 6. Sanctus <br> 7. Morbillosus <br> 8. Intricatus <br> 9. Profanus <br> 10. Cyaneus <br> 11. Minutus <br> 12. Bacchus <br> 13. Gibbosus <br> 14. Azureus <br> 15. Hollandiæ <br> 16. Leei <br> 17. Smaragdulus <br> 18. Muricatus <br> 19. Kœnigii <br> 20. Granulatus <br> 21. Cupreus <br> 22. Flagellatus <br> 23. Scabratus <br> 24. Schæfferi <br> 25. Helwigii <br> 26. Volvens <br> 27. Pillularius | Europe <br> Gallia <br> Barbary <br> S. Europe <br> E. Indies <br> Bengal <br> Guinea <br> P. B. S. <br> Guinea <br> Bombay <br> E. Indies <br> P. B. S. <br> N. America <br> Guinea <br> N. Holland <br> E. Indies <br> S. America <br> Africa? <br> Madras <br> Tranquebar <br> Africa <br> Barbary <br> P. B. S. <br> Germany <br> Tranquebar <br> N. America <br> S. Europe | Scarabæus, MacLeay. $\qquad$ $\qquad$ $\qquad$ <br> Gymnopleurus, Illiger. Scarabæus, MacLeay. $\qquad$ $\qquad$ <br> Gymnopleurus, Illiger. $\qquad$ <br> Sisyphus, Latreille. Cercellium, Latreille. Hyboma, Serville. Gymnopleurus, Illiger. Anisodon, Hope. Gymnopleurus, Illiger. Coprobius, Latreille. Sisyphus, Latreille. Gymnopleurus, Illiger. $\qquad$ <br> Anachalcos, Hope. <br> Gymnopleurus, Illiger. <br> Epirinus, D.J. <br> Sisyphus, Latreille. <br> Gymnopleurus? <br> Coprobius, Latreille. <br> Gymnoplcurus, Illiger. |


| Fabrician Genera. | Fabrician Spccies. | The Countries they inhabit. | Modern Arrangement of Authors. |
| :---: | :---: | :---: | :---: |
| 6. Ateuchus. | 28. Sinuatus <br> 29. Obliquus <br> 30. Squalidus <br> 31. Planus <br> 32. Sclireberi <br> 33. Bidens <br> 34. Glabratus <br> 35. Lævigatus <br> 36. Capistratus <br> 37. 2-pustulatus <br> 38. Pallipes <br> 39. Flavipes <br> 40. Pallens <br> 41. Cinctus <br> 42. 3 -angularis <br> 43. Affinis <br> 44. Melanocephalus <br> 45. Maculatus <br> 46. Politus <br> 47. G-punctatus <br> 48. Violaceus <br> 49. 2-tuberculatus <br> 50. Discoideus <br> 51. Aterrimus <br> 52. Ovatus <br> 53. Chrysis <br> 54. Pusillus <br> 55. Variegatus <br> 56. Parvulus <br> 57. Fuscopunctatus <br> 58. Femoratus | China <br> Scnegal <br> Brazils <br> Java <br> Germany <br> S. America <br> Barbary <br> E. Indies <br> Carolina <br> N. Holland <br> Coromandel <br> Germany <br> Morocco <br> China <br> Surinam <br> S. America <br> American Isles <br> Guinea <br> Tranquebar <br> Cayenne <br> St. Domingo <br> S. Anerica <br> Africa <br> E. Indies <br> Europe <br> S. America <br> E. Indies <br> E. Indies <br> E. Indies <br> E. Indies <br> S. America | Gymnopleurus, Illiger. <br> Onthophagus, Lat. <br> Coprobius, Hope ? <br> Onthophagus? <br> Onthophagus, Lat. <br> Coprobius? <br> Scarabæus, MacLeay. <br> Onthophagus, Lat. <br> Chæridium, Serville. <br> Onthophagus, Hope? <br> Oniticellus, Ziegler. $\qquad$ $\qquad$ $\qquad$ <br> Coprobius, Lat. $\qquad$ <br> Chæridium, Serville. <br> Gymnopleurus. <br> Onthophagus? <br> Coprobius, Lat. <br> Onthophagus, Lat. <br> Onthophagus. <br> Onthophagus. <br> Onthophagus, Lat. <br> Onthophagus? <br> Onthophagus. $\qquad$ $\qquad$ $\qquad$ |
| 7. *Aphodius. | 48. Marginellus <br> 56. Sabuleti <br> 57. Porcatus <br> 58. Stercorator <br> 61. Asper <br> 65. Cæsus | Coromandel <br> Switzerland <br> Saxony <br> S. America <br> Paris <br> Germany | Oxyomus, Eschscholtz. <br> र Oxyomus, Eschscholtz. <br> Q Psammodius, Gyllenhall. <br> Psammodius, Gyllenhall. <br> Oxyomus, Eschscholtz. <br> Psammodius, Gyllenhall. |

[^0]| Fabrician Genera. | Fabrician <br> Species. | The Countries they inhabit. | Modern Arrangement of Authors. |
| :---: | :---: | :---: | :---: |
| 8. Hexodon. | 1. Reticulatum <br> 2. Unicolor | Madagascar <br> Madagascar | Hexodon, Fab. |
| 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 | $\underline{\square}$ |
|  | 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, Illiyer. |
|  | 19. Hirtus | P. B. S. | Trichius? |
|  | 20. Pilosus | P. B. S. | Monochelus? |
|  | 21. Minutus | S. America | Trichius? |
| 10. Cetonia. | 1. Goliata | Africa | Goliathus, Lamarck. |
|  | 2. Cacicus | Guinea | Goliathus, Lamarck. |
|  | 3. Bifrons | S. America | Ynca, Serville. |
|  | 4. Polyphemus | Africa | Mecynorhina, Hope. |
|  | 5. Ynca | Peru | Ynca, Serville, Type. |
|  | 6. Micans | Africa | Mecynorhina, Hope. |
|  | 7. Chinensis | China | Agestrata, Eschscholtz. |
|  | 8. Nigrita | Ceylon | Agestrata, Eschscholtz. |
|  | 9. Aurata | England | Cetonia, Fab. |
|  | 10. Fastuosa | Austria |  |
|  | 11. Marmorata <br> 12. Viridis | Europe <br> 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 21. Rufipes 22. Holosericea 23. Strigosa 24. Nitida 25. Lobata 26. Carmelita 27. Sulcata 28. Chrysis 29. Virens 30. Splendida 31. Lucida 32. Francisca 33. Capucina 34. Lanius 35. Bajula 36. Flaveola 37. Graculus 38. Liturata 39. Carnifex 40. Glabrata 41. Rauca 42. Cornuta 43. Tristis 44. Smaragdula 45. Fascicularis 46. Aulica 47. Purpurascens 48. Capensis 49. Signata 50. Marginata 51. Ornata 52. Marginella 53. Lineola 54. Scutellata 55. Striata 56. Flavomaculata 57. Sinuata 58. Fasciata 59. Olivacea 60. Interrupta 61. Picta 3. | Italy <br> E. Indies <br> Surinam <br> S. America <br> N. America <br> S. America <br> Africa <br> Madagascar <br> S. America <br> S. America <br> S. America <br> Guadaloupe <br> E. Indies ? <br> E. Indies? <br> S. America <br> S. America <br> S. America <br> America <br> S. America <br> S. America <br> E. Indies? <br> P. B. S. <br> P. B. S. <br> S. America <br> America <br> Africa <br> P. B. S. <br> Senegal <br> P. B. S. <br> P. B. S. <br> Guinea <br> Guinea <br> S. Leone <br> S. America <br> Guinea <br> Guadaloupe <br> P.B. S. <br> P. B. S. <br> Alexandria <br> S. Leone <br> Senegal <br> E. Indies | Cetonia, Fabricius. <br> Popillia, Leach. <br> Gymnetis, MacLeay. $\qquad$ $\qquad$ $\qquad$ <br> Cetonia, Fab. <br> Macraspis, MacLeay. <br> Macraspis, MacLeay. $\qquad$ <br> Rutela? <br> Macraspis ? <br> Gymnetis, MacLeay. $\qquad$ $\qquad$ $\qquad$ <br> Diplognatha, Gory. <br> Rutela, Hope? <br> Cetonia? <br> Novum Genus. <br> Gymnetis, MLacLeay. <br> Macraspis, MacLeay. <br> Cetonia, Fab. $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ <br> Rutela, Latreille. <br> Macroma, Gory. <br> Rutela? <br> Gnathocera, Kirby. <br> Cetonia, Fab. <br> Cetonia? <br> Cetonia, Fab. <br> Macronata? Hoffmansegg. |


| Fabrician Genera. | Fabrician Specics. | The Countries they inhabit. | Modern Arrangement of Authors. |
| :---: | :---: | :---: | :---: |
| 10. Cetonia. | 62. 3-lineata <br> 63. Elata <br> 64. Semipunctata <br> 65. 5-lineata <br> 66. Atromaculata <br> 67. Limbata <br> 68. Trigona <br> 69. Elegans <br> 70. 4-maculata <br> 71. 6-maculata <br> 72. Cuprea <br> 73. Africana <br> 74. Læta <br> 75. Suturalis <br> 76. Vittata <br> 77. Fulgida <br> 78. Iris <br> 79. Gagates <br> 80. Tetradactyla <br> 81. Clavata <br> 82. Fucata <br> 83. Lurida <br> 84. Mixta <br> 85. Lunulata <br> 86. Aurichalcea <br> 87. Nitidula <br> 88. Philippensis <br> 89. Stolata <br> 90. Atomaria <br> 91. Festiva <br> 92. Abbreviata <br> 93. Maculata <br> 94. Difformis <br> 95. Acuminata <br> 96. Marmorata <br> 97. Hæmorrhoidalis <br> 98. Adspersa <br> 99. Areata <br> 100. Hirta <br> 101. Funesta <br> 102. Stictica <br> 103. Albopunctata | P. B. S. <br> Guinea <br> P. B. S. <br> E. Indies <br> Poona <br> Egypt <br> S. America <br> Madras <br> Africa <br> Sumatra <br> Surinam <br> S. Leone <br> E. Indies <br> SenegaI <br> Africa <br> Pennsylvania <br> Surinam <br> S. Leone <br> S. America <br> S. America <br> S. America <br> Brazils <br> Sumatra <br> S. America? <br> Surat <br> Africa <br> China <br> Senegal <br> China <br> Tranquebar <br> Senegal <br> Coromandel <br> Madras <br> P. B. S. <br> Sumatra <br> P.B.S. <br> P. B. S. <br> Virginia <br> Spain <br> Italy <br> France <br> E. Indies | Macronata? Hoffmansegg. Amphistoros, Gory. <br> Cetonia, Fab. <br> Macronata, Hoffmansegg. <br> Cetonia, Fab. <br> Agenius, Serville. <br> Chasmodia, MacLeay. <br> Gnathocera, Kirby. <br> Mecynorhina, Hope? <br> Gnathocera, Kirby. <br> Cetonia, Fab.? <br> Gnathocera, Kirby. <br> - - - $\qquad$ <br> Trichius, Fab. <br> Cetonia, Fab. <br> Cetonia? <br> Diplognatha, Gory. <br> Macraspis, MacLeay. $\qquad$ $\qquad$ <br> Cetonia, Fab. <br> Rutela? Hope? <br> Cetonia, Fab. $\qquad$ <br> - $\qquad$ $\qquad$ <br> Cetonia ? <br> Cetonia, Fab. $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ |



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


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


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


| Fabrician Genera. | Fabrician Species. | The Countries they inhabit. | Modern Arrangement of Authors. |
| :---: | :---: | :---: | :---: |
| 11. Melolontha. | 148. Bombylius 149. Vittata | Africa Persia | Amphicoma, Latreille. 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 | Cayenne | - |
|  | 8. Bison | S. America | - |
|  | 9. Gazella | Siam | - |
|  | 10. Lama | East Indies | -- |
|  | 11. Suturalis | Japan? | - |
|  | 12. Saiga | S. America | - |
|  | 13. Taurus | Sumatra | - |
|  | 14. Acuminatus | Java | Egus, MacLeay. |
|  | 15. Barbarossa | Tangiers | Dorcus, MacLeay? |
|  | 16. Parallelipipedus | England | Dorcus, MacLeay. |
|  | 17. Inermis | Sumatra | Egus, MacLeay. |
|  | 18. Cancroides | N. Holland | - |
|  | 19. Lunatus | Sumatra |  |
|  | 20. Piceus | America | Ceruchus, Mac Leay. |
|  | 21. Tenebrioides | N. Europe | Ceruchus, (Type.) |
|  | 22. Striatus | E. Indies | Figulus, Mac Leay. |
|  | 23. Caraboides | England | Platycerus, Lat. |
|  | 24. Rufipes | Switzerlaud |  |
|  | 25. Punctatus | Sumatra | Figulus, MacLeay. |
| 13. Esalus. | 1. Scarabæoides | Austria | Esalus, Fab. |
| 14. Passalus.* | 1. Interruptus | S. America | Passalus, Fabricius. |

[^1]
# REMARKS AND OBSERVATIONS 

## on THE

## LAMELLICORNS OF FABRICIUS.

## 1. Lethrus.

Species 2. Aneus, 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. AEgeon.-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. Dadalus.-It has been asserted that the female of Dædalus is the Melolontha diadema Olivier. I confess I can scarcely believe it. There seems a doubt respecting the country where it was taken, according to Sehestedt it is from the East Indies, and in various collections of the Continent it is labelled from South America; probably two distinct species are included under the above name.

Sp. 20. Actaon.-The characters of the Genus Megasoma, Kirby, are amply detailed in the fourteenth 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 Entomologica ; 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. Scarabeus.

Sp. 2. Corypheus.-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 $\alpha \nu \omega, \alpha \nu \alpha$ supra, and $\chi \alpha \lambda \kappa o s$ 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. Fabricius 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. $1 \& 4$. FEdipus \& 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. Celata.-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. Meliteus.-Mentioned as in the collections of D. Schousboe and Sehestedt. I cannot give any information respecting this species.

Sp. 47. EEson.-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 strix 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. Hollandice.-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. Schoefferi.-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. 3\%. 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.

Sr. 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. Iregret 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 $\mu \eta \kappa v \nu \omega$ and $\rho \iota \nu$, from the clypeus being prolonged into a horn. The following characters will designate the type of form. Mecynorhina 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 Hœpfneri 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 Golia-
thus Hœpfneri, 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 tibir 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 undéscribed 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. 79. Cuprea.-No mention is made of this species, and indeed, I may add, of several other Fabrician insects in the Monograph of Cetoniadæ
by Messicurs 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 12 th 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. Lumulata.-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 bluc, 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 14 th 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 $o \pi \lambda o s$ and $\pi o u s$; 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. 2\%. 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. Aneus.-'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.

Sr. 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 Newcástle 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 it 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 gencra.

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

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

Sp. 71. Cardui.-Now of the genus Glaphyrus Lat. which has very properly been formed into a
family by Mr. MacLeay: the genera composing it require a thorough investigation.

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

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

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

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

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

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

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

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

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

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

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

## 12. Lucanus.

Sp. 7. Femoratus.-Several species allied to Lucanus femoratus from South America are remarkable for their form, the head being large and nearly square, with the sides straight. The body is much depressed, having the base of the elytra considerably wider than at the apex. This form
appears to be peculiar to the New World. The clava of the antennæ has only three lamellæ.

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

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

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

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

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

Sp. 23. Caraboides.-The type of the genus Platycerus of Latreille, Lucanus rufipes Fab. is perhaps only a variety of Pl. caraboides. I possess a second species from North America, which belongs
to the same genus, and appears to agree with the description of Lucanus virescens Fab., a species omitted in the later works of Fabricius, being first described in the Appendix to the Systema Entomologicæ, p. 81\%. 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. Punctatu.-_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 Chorineus, Fab.

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

Mandibulce validæ apice bilobæ, basi dilatatæ intus subciliatæ.

Maxilla ungulatæ, interne inermes.
Palpi maxillares 4 -articulati articulo $1^{\mathrm{mo}}$ brevi, $2^{\text {do }}$ longiori suboblongo, $3^{\text {tio }}$ obconico, extimo elon-gato-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.

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

Corpus oblongum.
Thorax postice abdominis latitudine, e basi antice

[^2]valde elevatus, apice late emarginato, seu in cornua bina porrecta producto. Fœmina adluc 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.

Mandibulce bilobæ basi dilatatæ, apice fortiter bifido.

Maxilla apice 3-unguiculatæ dente extimo longiori.

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

Mentum subtrigonum vel conicum apice simplici.
Palpi labiales 3-articulati articulis duobus primis obconicis, tertio longiori ovato.

Antennce fere ut in Megacerate, Kirby.
Thorax in utroque scxu unicornis, aut bifidus, G 2
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.
Mandibulee robustæ antice conicæ, hirsutæ.
Maxille apice 3-dentatæ, dente extimo truncato. $\dagger$

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

* From $\chi^{\varepsilon \iota \rho, ~ m a n u s, ~ a n d ~} \pi \lambda a \tau v \varsigma$, latus.
+ In some specimens dissected the external tooth was as large as the two others, and of similar form.
minuto, $\mathfrak{2}^{\text {do }}$ suboblongo, $3^{\text {tio }}$ obconico, ultimo scalpiformi.

Mentum elongato-conicum apice rotundatum.
Palpi labiales articulo ultimo majori scalpiformi.
Corpus fere oblongum elytris thorace parum latioribus.

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

Pedes breves validissimi, tibiis anticis of 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 refexo postice dentato clypeo bifido.

Mendibule basi dilatatæ apice falcatæ acutæ.
Maxillce elongatæ lobo tenui subacuto, valde hirsutæ.

Palpi maxillares 4-articulati, $1^{\text {mo }}$ brevi minimo, $2^{\text {to }}$ crassiori oblongo $3^{\text {tio }}$ obconico ultimo ovato producto, duobus precedentibus 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 Aleeus, Fab.
Caput fere trigonum apice truncatum vix emarginatum fronte antice tuberculis seu dentibus armato.

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

Maxille \& apice 8 -spinosæ et ${ }^{\text {t }} 5$-spinosæ subtus hirsutæ.

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

Mentum subtrigonum antice dilatatum apice rotundatum.

Palpi labiales 3-articulati, articulo $1^{\text {mo }}$ sequenti longiore, $2^{\text {io }}$ 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. Celosis, Kirby.

Type of the Genus. Geotrupes Sylvanus, Fab.
Caput triangulare, cornu recurvo clypeo emarginato.

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

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

Palpi maxillares 4-articulati, articulo $1^{\text {mo }}$ 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. of
Caput unicorne, cornu simplici recurvo, clypeo dentibus acutis armato.

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

Maxilla 3-unguiculatæ dentibus internis minoribus, apicali acuto.

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

Mentum subtrigonum basi angustiori lateribus rotundatis, apice truncatum.

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

Corpus oblongum crassum.
Thorax inermis trunctatus et declivis.
Femina thorace antice convexo, capite postice corniculo armato.

This genus is closely allied to Oryctes of Illiger. An insect sent to me from the United States, by Monsieur Leconte, under the name of Satyrus, differs from the species in the Fabrician Cabinet. I propose, therefore, to give to this second species the
name of that indefatigable and zealous entomologist. Geot. Jamaciensis Fab. belongs to the same genus, and there are several others from South America and the West India Isles, which might be added, the greater part of which are undescribed. Mr. Kirby in his manuscripts proposed the name of Orycter to include the above species, but as the name is very similar to that of Oryctes, I have substituted that of Xyloryctes, from $\Xi v \lambda o \nu$ lignum et $o \rho v \sigma \sigma \omega$ 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.

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

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

Palpi maxillares elongati articulo basali minimo, tertio obconico. $2^{\text {do }}$ et $4^{\text {to }}$ longitudine fere æqualibus.

Mentum suboblongum lateribus convexis apice valde emarginato.

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

Corpus oblongum subtus pilosissimum.
Thorax fere semicircularis, inermis.
Tibia quatuor posticæ pectinatæ.
Tarsi quatuor postici haud articulo $1^{\mathrm{mog}}$ 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.
Mandibulce validæ 3-lobatæ, lobis latis obtusorotundatis, externc hirsutæ, interne lanuginosæ.

Maxillce apice quinque-dentatæ, dente medio minori.

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

Palpi maxillares 4-articulati, articulo $1^{\mathrm{mo}}$ brevi, $2^{\text {th }}$ fere oblongo, $3^{\text {tio }}$ 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.

Mandibule subtrigonæ apice conicæ edentatæ.

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

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

Mentum suboblongum antice paullo angustius emarginatum.

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

Corpus crassum.
Tharax muticus antice parum retusus.
Femora bina antica complanata, posteriora quatuor multo incrassata inflata.

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

Tarsi breves hirsuti, $1^{\text {mo. }}$ 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 typeone, 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.

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

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

Mentum subtrigono-conicum basi angustius.
Palpi labiales brevissimi 3-articulati articulis duobus basalibus obconicis, $3^{\text {tio }}$ 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, tibice antice 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. Australasie, Kirby.
Corpus ovatum convexum elytris presertim pone medium thorace latioribus.

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

Mandibulce triquetro-trigonæ incurvæ intus dente parvo obtuso armatæ.

Maxille 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. Tibica antica tridentatæ dente extimo longiori.

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

## Family. MELOLONTHIDA, MacLeay.

Genus. Lepidiota, Kirby.
Type of the Genus. Melolontha Stigma, Fab.
Caput cum oculis transversum, clypeo rotundato subemarginato reflexo.

Antenne 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 tibix, 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 Gemus. Melolontha serrata, Fab.
Caput transverso-oblongum, postice prominens, clypeo apice elevato emarginato.

Antennce 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.

Type of the Genus. Melolontha Fervida, Fab.
Caput antice rotundatum clypeo emarginato reflexo.

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

Labrum transversum carinatum, carina arcuata.
Mandibule 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 theGemus. Melolontha transversa, Fub.
Corpus cylindricum.
Clypeus supra reflexus subemarginatus.
Labrum 2-lobum vel medio excavatum.
Antennce 10-articulatæ, $7^{\mathrm{mos}}$ 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.
Unguiculi dentati.

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

Genus. Macrophylla, Hope.
Type of the Genus. Melolontha longicornis, Hope.

Caput rotundatum clypeo refleso haud emarginato. Antennce 10-articulate caule 5 -articulato, articulo $5^{\text {to }}$ 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.
Antenne 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.

Antennce 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 ${ }_{4}$ 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.
Antenne 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 clevated lines. This form seems peculiar to Siberia, Japan, and China.

## Family. SERICIDA, Hope. <br> Genus. Calonota, Hope.

Type of the Genus. Melolontha Festiva, Fab.
Corpus hydrobiiforme.
Clypeus rotundatus subemarginatus parum reflexus.

Antennce clava trilamellata.
Cubitus 3-dentatus dente interno fere obsoleto.
Palpi maxillares ultimo articulo ovato-conico.
Mesosternum inter pedes anticos porrectum subcornutum. Quatuor pedes antici æquales femoribus compressis, postici femoribus incrassatis.

I am unable at present to give the full details of this genus, as the single specimen of the type in my possession (originally in Mr. Lee's cabinet) is in too mutilated a state to describe. It, however, affords ample characters for generic distinction. I am inclined to think that the antennæ of the sexes differ, and that the club in one sex has five lamellæ, while in the other only three. To this genus belong Mel. læta, Fab., and other species all from New Holland. The name Calonota is derived from $\kappa \alpha \lambda о s$, pulcher, and votos, 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.
Antenna 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.
Antennee 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.

## A P P E N DIX.

## 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. AEneus.-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, howerer, 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 obseryations 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.

> GOLIATHIDE.

| Thorace rotundato. | Country. | Thorace trapezoidali. <br> Goliathus <br> Africa |
| :--- | :--- | :--- |
| Dicronocephalus <br> Incas | Mecynorhina. <br> Dicronorhina |  |
| East India | Bhomborhina. |  |
| Brazil | Jumnos |  |
| N. G. (Hæfneri Dej.) |  |  |

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

Genus. Goliathus.-Tibiæ anticæ of inermes, \& extus tridentatæ, 4-posticæ ot inermes, 우 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 Princers, Hope.

Long. Unc. 3. Lat. elytr. Unc. 1. lin. 7.
Nigro-piceus capite 2-maculato, thorace vittato, scutello lateribus subalbidis, elytris late nigropiceis 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.

Antennce nigræ articulo basali rufo-hirto.
Mandibulce subquadratæ angulo antico externo in dentem parvum planum producto, lobo interno hirsuto.

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

Palpi maxillares breves articulis 2 et 3 æqualibus $4^{\text {to }}$ 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.
Tibia 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 byProfessor 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.

Sест. 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.

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

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

Mimela Xanthorhina, Hope
(Vide page 76.)
M. viridis, nitida capite antice, thoracis elytrorumque lateribus luteo-tinctis, corpore subtus cum pedibus fusco-testaceis.

Long. Corp. lin. 7.
Habitat in montibus Indiæ Neilgherry dictis. Madras. In mus. nostr.

Species parva, magnitudine Mem. Blumei æqualis. Supra viridis nitida, capite thoraceque sub lente punctatissimis, elytris punctis majoribus irregulariter dispositis, et in singulo elytro lineas 9 punctorum longitudinales, per paria digestas ( $1^{\mathrm{mo}}$ 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.


# DESCRIPTION OF THE PLATES. 

Frontrispiece.-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; 1. p. Labial palpi.

## plate I.

Fig. 1.-Details of the genus Megaceras, Kirby, (M. Chorinæus)

| $\dot{z}$. | " | 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. | Strategus, Kirby, (Str. Alœus đ) |  |

## plate II.

Fig 6.-Details of the genus Cœelosis, Kirby, (C. Sylvanus)

| 7. | $"$ | Xyloryctes, Hope, (X. Satyrus 8) |
| :---: | :---: | :---: |
| 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. |

Frg. 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 ㅇ, Hope. |
| 15. |  | Tesserodon Novæ Hollandiæ, Fab. |

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## 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 discöide.
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.
ancos
1


6





## 3. Cheiroplatys.


4.Chalcosoma.

5.Strategus.

SLats OE 2 .




10. Temnorhynchus


7. Xyloryctes.



15. Tefserodon Novæ Hollandiæ.

14. Goliathus Princeps $x^{\circ}$.

TE!nay!




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[^0]:    * 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.

[^1]:    * 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.

[^2]:    * Labium, Kirby, in Linnean Transactions.

