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CATALOGUE OF THE SPECIMENS

ILLUSTRATING THE

OSTEOLOGY AND DENTITION

OF

VERTEBRATED ANIMALS,

RECENT AND EXTINCT,

CONTAINED IN

THE MUSEUM

OF

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

PART II.

Class MAMMALIA, other than MAN.

 $\mathbf{B}\mathbf{Y}$

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ASSISTED BY

JOHN GEORGE GARSON, M.D.,

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PREFACE.

The first printed list of the Osteological Specimens contained in the Museum was published in 1831. It soon, however, became evident that a more complete catalogue was required; and at a meeting of the Museum Committee, held on the 6th of January, 1842, Professor Owen, then Conservator of the Museum, presented a report "On the advantages of combining the Fossil and Recent Osteological Specimens in one Catalogue and system of arrangement"; and at a meeting on the 8th of February of the same year it was resolved, "that, in pursuance of the authority given to the Committee by the Council, the fossil and recent osteology be incorporated in one series, and that, in accordance with this view, the Catalogue of the same be prepared by Mr. Owen."

For some motive not explained upon the Minutes, the method of arrangement approved by the Committee and Council, and which had been recommended with much urgency and excellent reasoning by the Conservator, was not carried out. The specimens continued to be divided primarily, not according to their zoological or anatomical relations, but by a most incon-

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venient and artificial system, according as the animals from which they were derived lived before or after a particular period of the world's history. Hence each series was incomplete, and required reference to the other for its perfect illustration and comprehension.

The 'Catalogue of Fossil Remains of Mammalia and Aves' appeared in 1845; the 'Catalogue of the Osteological Series' (comprising only the specimens of existing species) in 1853; and the 'Catalogue of Fossil Remains of Reptilia and Pisces' in 1854.

These very valuable and detailed Catalogues, for which the Museum was indebted to the assiduous labours of Professor Owen, are, owing to the numerous additions made to the collection, as well as to the advances in zoological classification since their publication, gradually ceasing to fulfil the present requirements of the Museum; and the necessity for new ones is becoming obvious to every one engaged in studying the collection. The desirability of returning to the resolution of the Committee of 1842 is also continually becoming more evident.

It is always difficult, in the case of a growing collection, to fix the best time to print a Catalogue, as it is necessary to choose between the danger, on the one hand, of incurring much labour and expense in the production of a publication which may before long require to be superseded, and, on the other, of allowing the interests of the collection and of the workers in it to suffer by the condition of confusion into which it necessarily falls when a vast quantity of new material has

been incorporated into a framework not sufficiently comprehensive or elastic to adapt itself to its reception.

Under the circumstances, the best principle appeared to be not to attempt, with the present greatly enlarged collection, to give a minute description of every individual specimen, as had previously been done, but rather to aim at making a complete list of the contents of this department of the Museum, arranged upon a system which should combine modern scientific views of classification with convenience of reference and capability of extension, and to pay great attention to accuracy of nomenclature, and especially to the preservation of every record relating to the history and authenticity of each specimen, laying stress on all particulars which are not to be seen in the specimen itself, rather than on those which can at any time readily be found there. To do this a very great amount of time has been consumed in searching through old documents, letters, and publications, though often with little visible result; and, notwithstanding all the pains taken, some specimens will be found in the Catalogue, received into the collection in former times, the history of which is doubtful or unknown.

That the value of the former full descriptions may be retained, references will be given in the new Catalogue to its predecessors in all instances of specimens mentioned in them.

As the additions to the collection have been especially numerous among the specimens illustrating the anatomy of Man and the higher forms of Vertebrates, it has been considered advisable to reverse the order of the last Catalogue,

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and to commence at the higher instead of the lower end of the series. The first portion will relate to the section of the collection devoted to Human Osteology, including the series of skeletons and crania of the various races of Man; and, for the convenience of those who make this branch of the subject a speciality, it will be issued separately.

Royal College of Surgeons, September 12, 1879.

INTRODUCTION TO PART II.

THE part of the Catalogue containing the specimens illustrating Human Ostcology having been issued separately with a special Introduction, the present volume is devoted to the remainder of the Class Mammalia.

As there is no matter of such great importance in a Catalogue as the correct naming of the objects described in it, this part of the subject has engaged a very large share of attention in preparing the work. I am not sanguine enough to suppose that the names I have adopted, always after careful research and consideration, will in every case be deemed satisfactory by other zoologists, yet I hope that some advance will have been made towards that most desirable end, a fixed and generally recognized nomenclature of all the best-known species of mammals. selected the generic and specific name which I considered most appropriate, I have given the place and date of their first occurrence, but have only admitted such synonyms as have found their way into standard works, judging it better that the remainder should be buried in oblivion, or at all events only retained in professedly bibliographical treatises. In selecting the name chosen I have been mainly guided by the views which have been gradually gaining general currency among conscientious naturalists of all nations, and which were formulated in what is

commonly called the "Stricklandian Code," adopted by a Committee of the British Association for the Advancement of Science in 1842, and revised and reprinted by the Association in 1865 and again in 1878. These are nearly the same in principle as those concisely and clearly laid down by Isidore Geoffroy Saint-Hilaire in the introduction to his unfinished Catalogue of the Mammalia of the "Muséum d'Histoire Naturelle de Paris" (1851), and those so copiously elaborated in Mr. Dall's Report of the Committee on Zoological Nomenclature to the American Association for the Advancement of Science at the Nashville meeting in 1877. The regulations laid down in these codes for the formation of new names are unimpeachable; and although some of the rules for the selection of names already in existence have given rise to criticism, and are occasionally difficult of practical application when an endeavour is made to enforce them rigidly, they do in the main, when interpreted with discretion and common sense, lead to satisfactory results. As what we are aiming at is simply convenience and general accord, and not abstract justice or truth, there are cases in which the rigid law of priority, even if it can be ascertained, requires qualification, as it is certainly not advisable to revive an obsolete or almost unknown name at the expense of one which, if not strictly legitimate, has been universally accepted and become thoroughly incorporated in zoological and anatomical literature; and it is often better to put up with a small error or inconvenience in an existing name than to incur the much larger confusion caused by the introduction of a new one.

Of all the various groups into which animals are conventionally divided by zoologists, such as classes, orders, families, genera, species, &c., the last two are of greater importance than any of the others, as upon the limits assigned to them the name of the animal depends. It matters comparatively little how we arrange and rearrange orders and suborders, families and subfamilies in our endeavours to express our views of the affinities

of their members to each other; but directly we apply the same process to genera and species we begin to introduce that greatest cause of troublo and perplexity to students, and most fertile source of impediment to the progress of zoological knowledge, the multiplication of names of the same object. All zoologists seem to be agreed as to the value of the system introduced by Linnæus, by which the name of the animal is determined by the genus and species under which it is placed, and all attempts to improve and modify this method of nomenclature have ended in failure. It might have been supposed that this general agreement would have preserved these groups, especially the former, from the inconsiderate, hasty, and useless alterations to which they have been incessantly subjected by zoologists who have often contributed nothing else to the development of their science. I do not mean that with the advancement of knowledge improvements cannot be continually made in the current arrangement of genera. The older groups become so unwieldy by the discovery of new species belonging to them that they must be broken up, if only for the sake of convenience; newly discovered forms which cannot be placed in any of the established genera must have new genera constituted for them, and fuller knowledge of the structure of an animal may necessitate its removal from one genus into another: all these are incidents in the legitimate progress of science. Such alterations, however, should never be made lightly and without a full sense of responsibility for the difficulties which may be occasioned by them, and which often can never be removed. Complete agreement upon this subject can never be expected, as the idea of a genus, of an assemblage of animals to which a common generic name may be attached, cannot be defined in words, and only exists in the imagination of the different persons making use of the expression; but there might be no difficulty in coming to some general agreement, if individual zoologists would look at the idea as held by the majority, and would not give way to the impulso to bestow a name wherever there is the slightest opening for doing so. In the following

Catalogue not a single new division has been proposed, or a new name introduced; but, on the contrary, very many of the generic divisions of modern zoological writers, founded upon most trifling characters, often artificial or even erroneous, have been ignored, as it is thought that the sooner such names are disearded the better. Others have certainly been admitted which, according to my judgment, it would have been better never to have invented; but as they exist and are generally recognized, less confusion and alteration of existing nomenclature is caused by retaining than by abolishing them.

Subgenera with names attached to them have always been avoided, as they eause confusion of nomenclature, and nearly always end sooner or later in being promoted to the rank of true genera. It seems preferable in the ease of large genera, showing much diversity of characters among their members, to group together those which resemble each other most into sections, but avoiding the use of any distinctive name that would clash with the binomial principle. In the case of both generic and specific names, I have always endeavoured to give the original authority and date, which have in almost every ease received careful verification in the last proof, although some few of the works cited eould not be found even in the scientific libraries of this metropolis. Judging from what I have observed in works of this kind by others, even those from whom a high standard of accuracy might have been expected, I cannot help fearing that many errors may have erept into these references, although the pains taken both by Dr. Garson and myself to avoid them have been considerable.

In citing the authorities for the generic names, the first (Linnean or post-Linnean) date of the occurrence of the word as indicating a distinct group of species is always quoted. Many of the older genera have been gradually restricted; but in such eases it has not been thought necessary to mention, even if it could be ascertained, by whom they were first used exactly in the sense

adopted in this Catalogue. Many of the terms originally proposed only in a subgeneric sense have been gradually elevated into generic rank. Thus in each successive revision of any group by Dr. Gray the subgenera of one memoir became the genera of the next, and so on. In such cases the first use of the name, whether as a subgenus or genus, is quoted.

In order to make the work of greater utility than a mere list would be, the modifications of the dentition, so characteristic of the different groups of the Mammalia, are given so far as they can be represented by the usual formulæ. To avoid repetition, when all the members of a family agree in this respect, the formula is given under the heading of the family. When differences occur in genera included under the same family, these are indicated under the generic heading. In all complete skeletons, the numbers of the vertebræ of the different regions is also added; but in this case, as individual variations are not infrequent, this is given under the heading of the particular specimen referred to.

The principles adopted in the arrangement and description of the specimens have been as follows:—

The scientific name of the genus and of the species, and the authority for these, and the most important synonyms having been determined, the best-known English name, when any exists, and the general habitat (without entering into details of geographical distribution) are given. In the case of extinct species, the names are printed in Old English characters, and the geological horizon in which their remains are found is added. Each number usually represents the whole, or such parts as the Museum contains, of a single individual animal. The complete skeletons are placed first, afterwards the skulls or crania (the latter term meaning a skull without a lower jaw), and then detached bones of the skeleton.

The specimen may be presumed to belong to an adult animal,

unless otherwise stated. In the case of young animals, the condition of the dentition is almost always described, both as affording an approximate indication of the age, and for the guidance of those who are engaged in studying this important part of the animal economy.

In giving the numbers of the vertebræ, the specimen is always presumed to be in a perfect condition, unless otherwise stated. Certain of the terminal caudal vertebræ are unfortunately very often lost in preparing skeletons; when this appears to have been the case the word "incomplete" is added.

The cervical vertebræ are those in front of the first which bears a rib directly articulating with the sternum. The dorsal or thoracic vertebræ are those which bear movably articulated ribs. The lumbar vertebræ are those that intervene between the dorsal and sacral regions. The distinction between the sacral and caudal vertebræ is more difficult. The artificial and conventional definition of the former as those that are ankylosed together in an adult state to form a single bone has been generally adopted in this catalogue in default of a more scientific one of universal application. In the Cctacca, the first caudal is that which bears upon its hinder edge the first pair of chevron bones. It must never be forgotten that although the division of the vertebral columns into distinct regions is convenient for descriptive purposes, at the contiguous extremities of the regions the characters of the vertebræ of onc region are apt to blend into those of the next, either normally or as peculiarities of individual skeletons.

When the sex of the animal from which the skeleton was prepared is known from certain evidence, it is stated in full, "male" or "female"; if only inferred from the character of the specimen, it is indicated by the signs 3 or 2. When no such sign is appended, the characters are not sufficiently distinctive to attribute it to either sex.

The name of the donor, the date at which the specimen was acquired, and the locality whence it was obtained are recorded in every case in which they could be ascertained. details are often of importance in tracing the history or establishing the authenticity of specimens which might, perhaps, otherwise be subjects of doubt, and they form a material element in tracing the growth and progress of the Muscum. With the specimens added since the commencement of the year 1862, this has been almost invariably carried out; but with the earlier ones, owing to the imperfect state of the Museum register, it has often been impossible to do so, and of the numerous specimens which had accumulated in the stores, now for the first time entered in the Catalogue, the origin had to be left blank, or in the latter part of the volume given, for greater precision, as having been "in the Museum before 1862." References are always given to any published descriptions or figures of the specimens; and the number in the former Catalogues, O. C.* or O. C. F., is given in the case of all the specimens mentioned in them, that the more detailed descriptions in those works may be referred to, for which purpose copies will be retained in the Museum.

A few words respecting the various public or private collections from which specimens have passed into this department of the College Museum may be interesting, and will be preceded in each case by the designations by which they are indicated in this Catalogue:—

Hunterian.—The private collection formed by John Hunter (who died in 1793), purchased from his executors by the British Government in 1799, and held in trust for the nation by the Council of the Royal College of Surgeons. The increase of the collection since it has been under the care of the College is shown by the fact that, out of the 3972 specimens

^{*} Descriptive Catalogue of the Osteological Series contained in the Museum of the Royal College of Surgeons of England. 2 vols. 4to. 1853.

[†] Descriptive and Illustrated Catalogue of the Fossil Organic Remains of Mammalia and Aves. 4to. 1845.

recorded in the present volume of the Catalogue, only 668 are Hunterian. In the year 1846 it was deemed advisable by the Council of the College, and sanctioned by the Trustees, to remove a number of Hunterian specimens of "external natural history" from the collection, and to offer them to the British Museum; but, in order to maintain the Hunterian Collection at its original value, a number of osteological specimens (chiefly birds) belonging to the College were transferred to the Hunterian Collection and placed under the care of its Trustees. To distinguish such specimens (a few of which are included in the present volume) the words "Hunterian Substitute, 1846" are added.

A similar transfer of anatomical preparations in spirit, in place of dried specimens which had become valueless, was made in 1877. The details of these transfers, and the negotiations which led to them and to the extension and definition of the powers of the Trustees with regard to the disposal of duplicate or useless specimens, are recorded in the Minutes of that body.

British Museum.—At a meeting of the Trustees of the British Museum, held on the 20th of April, 1809, it was determined that all osteological, anatomical, and pathological specimens, being unfit to be preserved in the Museum, should be no longer The specimens coming under these categories were purchased by the College at a valuation, and many of them are contained in the portion of the collection treated of in the present volume of the Catalogue. It was in this way that the College became possessed of some remarkable specimens (as No. 2499) which formed part of the Museum of the Royal Society at Gresham College, and arc described in Grew's Catalogue of that collection, published in the year 1681. It may be mentioned as a matter of history that the large skulls of the Greenland Whale and Sperm-Whale, still in the British Museum, were included in the purchase, but were allowed to remain at the British Museum "until the Museum of the College should be in a fit state for their reception" (as recorded in the Minutes

of the Board of Curators, 3rd July, 1809). It does not appear that they were ever reclaimed.

Brookes Collection.—The Anatomical and Zoological Museum of Mr. Joshua Brookes, F.R.S., in Blenheim Street, was, next to Hunter's, the largest private collection ever formed in this country. The greater part was sold by auction in 1828, on the 14th of July and the twenty-four following days, when the College was a purchaser to the amount of £800. A few specimens were also bought at a subsequent sale of the remaining portion of the collection in 1830.

Langstaff Collection.—A considerable part of a very large private collection, chiefly of pathological and anatomical specimens in spirit, formed by Mr. George Langstaff, was purchased by the College in 1835, and some more were added when the remainder of the collection was sold by auction in 1842. There are but few osteological specimens from this source.

South Collection.—A collection of articulated skeletons of mammals and birds, prepared by Mr. John Flint South, Surgeon to St. Thomas's Hospital, and afterwards President of the College, was privately purchased by the College in 1835.

Parker Collection.—An osteological collection, formed by Mr. William Kitchen Parker, F.R.S., afterwards Professor of Comparative Anatomy in the College, was purchased in 1858.

Yarrell Collection.—A few specimens in the present volume, and many skeletons of birds, were purchased at the sale, in 1856, of the collection of Mr. William Yarrell, author of the Histories of British Birds and of British Fishes.

Gould Collection.—The specimens under this designation, consisting of a considerable number of skeletons of mammals and birds, were all collected by Mr. John Gould, F.R.S., the distinguished ornithologist, during his tour in Australia in the years 1838 and 1839, and purchased by the College in 1840.

Du Chaillu Collection.—This consists chiefly of skeletons of the Anthropoid Apes collected in the Gaboon district of Africa by the well-known traveller M. Paul DuChaillu, purchased in 1863.

Barnard Davis Collection.—The great osteological collection of the late Dr. Barnard Davis, F.R.S., of Shelton, Staffordshire, purchased by the College in 1880, contained, besides human skeletons and skulls, those of several other mammals, which are mentioned in the present Catalogue.

By "Zoological Society," so often referred to in this volume, must be understood "The Zoological Society of London." "Geological Society" is also used for "The Geological Society of London."

I am greatly indebted to my friend Mr. J. W. Clark, M.A., Superintendent of the Museum of Zoology and Comparative Anatomy of the University of Cambridge, for his kindness in reading the whole of the proofs and in offering many valuable suggestions. I may also state, in conclusion, that the excellent 'Catalogue of the Mammalia in the Indian Museum, Calcutta,' by Dr. John Anderson, Part I., containing the Primates, Prosimiæ, Chiroptera, and Insectivora, though dated 1881, did not come into my hands until the part of the present Catalogue relating to the first two of these groups was already printed; so that I was not able to avail myself of its aid in determining certain difficulties of nomenclature.

W. H. FLOWER.

January 1st, 1884.

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[Extinct species are denoted by an asterisk.]

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OSTEOLOGICAL CATALOGUE.

PART II.

Class MAMMALIA.

Order PRIMATES.

This order, as at present constituted, contains all the PRIMATES of Linnæus, excluding the Bats. It is equivalent to the orders Bimana and Quadrumana of Cuvier's 'Règne Animal'*.

Suborder ANTHROPOIDEA.

Family HOMINIDÆ.

The specimens belonging to this family, constituted of the single species *Homo sapiens*, Linn., are contained in Part I. of the Catalogue, published in 1879.

* An excellent analysis of the synonymy of the species of Primates, as far as they were known up to the date of publication, is contained in the 'Catalogue Méthodique de la Collection des Mammifères' &c. in the Muséum d'Histoiro Naturelle of Paris, by Isidoro Geoffroy Saint-Hilairo, 1851. More recently Schlegel has published a descriptive catalogue of the specimens of the Order contained in the Muséum d'Histoire Naturelle des Pays-Bas (1876), reference to which is made in the present Catalogue in cases where a diffèrent nomenclature is adopted.

PART II.

Family SIMIIDÆ.

Anthropomorpha, Huxley.

Dental formula as in Man, viz. :—i. $\frac{2}{2}$, c. $\frac{1}{1}$, p. $\frac{2}{2}$, m. $\frac{3}{3}$, = $\frac{8}{8}$: total 32.

Genus TROGLODYTES.

Troglodytes*, E. Geoffroy St.-Hilairo, Tableau des Quadrumanes, Ann. du Muséum, tome xix. p. 87 (1812). Anthropopithecus, Blainvillo, Leçons Orales, 1839.

In this and the next genus, the carpus has the same number of bones as in Man. In all the other members of the suborder the os centrale is a distinct bone, making, with the radial sesamoid, altogether ten.

The number of presacral vertebræ taken together is the same as in Man; but thirteen bear movable ribs instead of twelve.

Troglodytes niger.

Troglodytes niger, Geoffroy, Ann. du Muséum, xix. p. 87 (1812). Simia troglodytes, Gmelin, Syst. Nat. 1788; Schlegel's Cat. Mus. des Pays-Bas, p. 8 (1876).

Anthropopithecus troglodytes (Gm.), Selater's List of Animals in the Gardens of the Zoological Society of London, p. 1 (1879).

THE CHIMPANZEE.

Hab. West and Central Æquatorial Africa.

1. Articulated skeleton of male.

The vertebral formula in this and the other specimens of this species (unless otherwise noted) is: C. 7, D. 13, L. 4, S. 5.

* As this name was previously (1806) applied to a genus of Aves, some authors have considered it inadmissible for a mammalian genus; and Mimetes, Leach, 1819 (open to the same objection, having been in 1816 applied to a genus of Lepidoptera), and Anthropopithecus, Blainville, 1839, have been proposed as substitutes (cf. Peters, Monatsbericht Ak. Berlin, 1876, p. 470). Troglodytes, however, is now so thoroughly established in zoological literature for the Chimpanzee, as well as for the Wrens, that less confusion will be entailed by retaining than by changing it.

SIMHDÆ.

The last lumbar vertebra has a tendency to become sacral in its characters, as seen better in the next, still older, specimen.

From the Gaboon.

Du Chaillu Collection. Purchased, 1863.

2. Articulated skeleton of aged female. O. C. 5082.

This specimen, when compared with the last, shows that the Chimpanzoe differs from the Gorilla in the absence of any marked disparity between the soxes, either in size or in the conformation of the skull, although the male can always be distinguished by the larger size of the canine teeth.

This and the following were sent to England in brine, having been shot "within a day's journey of the port of Jacko Jackeo, Mudwood Coast, Gulf of Guinea."

Purchased, 1840.

3. Skull and separated bones of the skeleton of male. O. C. 5086, the skull; 5088 to 5170, the bones, which are separately described and compared with the corresponding parts of the Orang.

The oil-painting by Zeitter in possession of the College was made from this specimen before it was macerated. The phalanges are wanting.

Purchased, 1840.

4. Skeleton of female.

This specimen was marked by M. Du Chaillu as bolonging to the variety ealled by him *T. calvus*. It was received with the vertebral column united by its natural ligaments, and has one dorsal vertebra and one pair of ribs less than the usual number, the formula being: C. 7, D. 12, L. 4, S. 5, C. 5.

The right femur, tibia, fibula, and patella are wanting; in all other respects it is perfect.

From the Gaboon.

Du Chaillu Collection. Purchased, 1863.

5. Skeleton, wanting the hands and feet, of female.

It has the usual thirteon dorsal vertebræ. The fourth lumbar is united with the sacrum.

From the Gaboon.

Du Chaillu Collection. Purchased, 1866.

Troglodytes niger.

6. Skeleton, not quite complete, of female.

Many of the bones are mounted in the separate series.

Purchased, 1860.

7. Skull, scapulæ, ilia, and long bones of the extremities of adolescent male. O. C. 5087.

The roots of the teeth have been exposed on the right side of both jaws. The large earlines characteristic of the sex have been fully acquired, but the left last upper molar has not come into place. The suture between the basicecipital and basisphenoid is not united.

The teeth of this specimen are minutely described in O. C.

Presented by Captain Harris, 1851.

8. Skull with the hyoid and four upper cervical vertebræ of male.

Prepared from a head sent, with some other parts of the body, in spirit from the West Coast of Africa by Captain R. Burton. Although certainly a male, the temporal ridges do not meet at the vertex.

Presented by George Busk, Esq., 1862.

9. Skull of male, wanting most of the teeth.

The temporal ridges are widely separated at the top of the skull.

From the Gold Coast.

Presented by Staff-Surgeon J. R. Thomas, 1869.

10. Skull of male.

The temporal ridges meet over the sagittal suture.

This and the three following were sent from the Gaboon to Dr. Barnard Davis by Mr. R. B. Walker.

Barnard Davis Collection. Purchased, 1880.

11. Skull of female.

Barnard Davis Collection. Purchased, 1880.

12. Cranium.

Apparently a male. The temporal ridges are widely separated at the top of the skull.

Barnard Davis Collection. Purchased, 1880.

13. Articulated skeleton of young.

The central permanent incisors and the first permanent molars are in place. Vertebræ: C. 7, D. 13, L. 4, S. & C. 8.

This specimen was named by M. Du Chaillu T. calvus.

Du Chaillu Collection. Purchased, 1863.

14. Articulated skeleton of young. O. C. 5084.

The milk-dentition is in place, and the first molars are just appearing.

South Collection. Purchased, 1835.

15. Articulated skeleton of young.

The milk-dentition is in place; but the canines are not fully exserted. There are thirteen dorsal and but three lumbar vertebre.

16. Natural skeleton of very young. O. C. 5085.

The milk-teeth are in place, except the canines and posterior upper molars. There are thirteen dorsal and four lumbar vertebræ. Though both the last lumbar and first sacral vertebræ articulate with the ilia, the distinction between them is clearly seen in the presence of a distinct pleurapophysial ossification in the transverse process of the latter.

Brookes Collection. Purchased, 1828.

17. Skull of young. O. C. 5171.

The milk-dentition is in place.

Presented by Earl Spencer.

18. Skull of young.

The milk-dentition is in place.

From the Gold Coast.

Presented by Staff-Surgeon J. R. Thomas, 1869.

19. Right manus of adult.

Genus GORILLA.

Is. St.-Hilaire, Comptes Rendus de l'Aead. des Sciences, t. xxxiv. p. 84 (1852).

Gorilla savagii.

Troglodytes gorilla, Savage, Journ. Nat. Hist. Soc. of Boston, vol. v. (1847).

Troglodytes savagei, Owen, Proc. Zool. Soc. 1848, p. 29.

Gorilla gina, Is. St.-Hilaire, Comptes Rendus, t. xxxvi. p. 933 (1853).

Gorilla savagei, Gray, Cataloguo of Monkeys &e. in Brit. Mus. p. 7 (1870).

Simia gorilla, Schlegel's Cat. Mus. des Pays-Bas, p. 8 (1876).

THE GORILLA.

Hab. West Æquatorial Africa.

20. Articulated skeleton of male. O. O. 5178.

This is the first skeleton of a Gorilla which was brought to Europo. It is described in great detail in O. C. and in Prof. Owen's memoir in the 'Transactions' of the Zoological Society, vol. v.

The animal had just attained maturity: all the permanent teeth are in place; but some of the larger epiphyses are still ununited, and the sagittal and occipital crests have not reached their full development. The greater part of the sternum, the seventh cervical vertebra, the left leg and foot, and the right manus are wanting, and have been replaced by plaster models. Vertebra: C. 7, D. 13, L. 4, S. 5, C. wanting. The right transverse process of the last lumbar vertebra is expanded and articulates with the ilium.

Presented by Captain Harris, 1851.

21. Skeleton of male.

The left radius and ulna, two vertebre, and some of the bones of the manus and pes are wanting. Traces of immaturity

SIMIIDÆ. 7

remain in the absence of union of the basal suture of the cranium and the freedom of the epiphyses of the crest of the ilium, suprascapular border, and upper end of the humerus. All the other epiphyses of the long bones are united. There are but three lumbar vertebræ; the one corresponding to the fourth in the younger specimens, and the fifth in man, is united with the sacrum.

Obtained at the Gaboon by Mr. R. B. Walker.

Barnard Davis Collection. Purchased, 1880.

22. Skull and imperfect skeleton of male.

The alveolar wall has been removed on the right side to show the roots of the teeth. Though by no means an aged individual, the supraorbital ridges and eranial crests are largely developed.

Many of the bones of this skeleton are mounted in the separate series.

Purchased, 1860.

23. Articulated skeleton of an old female.

This specimen shows well the inferiority in size and in development of the canine teeth and of the cranial crosts in the female sex of the Gorilla. Vertebræ: C. 7, D. 13, L. 4, S. 5, C. 2 (incomplete). The vertebra corresponding to the last lumbar of Man and the younger skeletons of the Gorilla has both its transverse processes expanded to articulate with the ilium, and is by its body united with the sacrum; so that functionally it is converted into a sacral vertebra, as is partially the case in the male skeleton No. 20*.

From the Gaboon.

Du Chaillu Collection. Purchased, 1863.

24. Incomplete skeleton of female.

The skull is perfect, with complete unworn dontition. Many of the bones are mounted in the separate series.

Du Chaillu Collection. Purchased, 1863.

25. Mutilated cranium of male. O. C. 5179.

Presented by Captain Harris, 1851.

* The same condition occurs on both sides in the female Bushman, No. 1301, and on the left side of the female Australian, No. 1088 (Osteological Catalogue, Part I.).

Gorilla savagii.

26. Cranium of female.

Obtained at the Gaboon by Mr. R. B. Walker.

Barnard Davis Collection. Purchased, 1880.

27. Skull of adolescent female.

The basal suture is still open. The upper posterior molars (m. 3) are not fully in place.

Obtained at the Gaboon by Mr. R. B. Walker.

Purchased, 1876.

28. Skull of young male.

The canines alone of the milk-teeth are retained. The lower third molars are in place, but not those of the upper jaw. The temporal ridges do not quite meet at the vertex; and there is consequently no sagittal crest.

From Eloby, Western Æquatorial Africa.

Purchased, 1881.

29. Articulated skeleton of young.

All the milk-teeth are in place, with the first permanent molars. Vertebræ: C. 7, D. 13, L. 4, S. 5, C. 4 (complete). The vertebra here reckoned as the first lumbar, in accordance with its characters in the other skeletons, has a pair of short movable ribs, and might therefore be considered as belonging to the dorsal region. The fourth lumbar vertebra has no union with the ilia or sacrum.

Du Chaillu Collection. Purchased, 1863.

30. Natural skeleton of very young.

The milk-dentition is complete, and the crowns of the first permanent molars are just appearing. Vertebræ: C. 7, D. 13, L. 4, S. & C. 10.

Purchased, 1879.

31. Basi-hyal of male.

Purchased, 1872.

32. Cast of cranium of male. O. C. 5180.

Though the amount of woar of the teeth indicates an animal of advanced ago, the sagittal crest is small, and divided by a longitudinal median groove.

The originals of this and the two following were obtained from the Gaboon rivor. They are in the Museum of the Philosophical Institution of Bristol.

Presented by the Bristol Philosophical Institution, 1848.

33. Cast of cranium of male. O. C. 5181.

Though the teeth indicate a younger animal than the last, the sagittal crest is more fully developed.

Presented by the Bristol Philosophical Institution, 1848.

34. Cast of cranium of female. O. C. 5182.

Presented by the Bristol Philosophical Institution, 1848.

35. Cast of cranium. O. C. 5183.

From the vicinity of the river Danger, West Coast of Africa. The points in which this specimen differs from those from the Gaboon are fully described in O. C.

Presented by the Bristol Philosophical Institution, 1848.

Genus DRYOPITHECUS.

Lartet, Comptes Rendus des Séances de l'Académie des Seiences, xliii. p. 219 (1856).

Dryopithecus fontani.

36. Cast of mandible.

The original, in the Paris Museum of Natural History, was found in a mioceno deposit at Saint Gaudons (Hauto Garonno), Franco, and is described and figured by M. Lartet as above. It is probably from a female, and of the same size as the existing Chimpanzee, though in dental characters more resembling the Gorilla.

Presented by Professor Gervais, 1869.

Genus SIMIA.

Simia*, Linnæus, Systema Naturæ, edit. xii. i. p. 34 (1766). Pithecus, Geoffroy, Ann. du Muséum, xix. p. 88 (1812).

In seven out of eight skeletons of animals of this genus in the Museum, the number of dorso-lumbar vertebræ is sixteen, viz. twelve dorsal and four lumbar. The distinction between the last lumbar and the first sacral vertebræ is clearly marked in all the young specimens by the additional pleurapophysial ossifications in the transverse processes of the latter. Thus, though Simia presents a closer resemblance to Man than does Troglodytes in the number of ribs, it differs in the more important character of that of the whole series of trunk-vertebræ. The one exception is the large articulated skeleton No. 37, which has an additional lumbar vertebra. This, having for a long time been the only one in the Museum, has often been described as typical, and has given origin to the common statement that the Orang has the same total number of vertebræ as in Man.

Simia satyrus.

Simia satyrus, Linnæus, Syst. Nat. edit. xii. i. p. 34 (1766). Pithecus satyrus, Geoffroy, Ann. du Muséum, xix. p. 88 (1812).

THE ORANG-OUTANG.

Hab. Borneo and Sumatra.

37. Articulated skeleton of male. O. C. 5050.

Vertebræ: C. 7, D, 12, L. 5, S. 5, C. 2 (incomplete). From Sumatra.

Presented by Sir T. Stamford Rayles, 1822.

38. Skeleton of a larger male.

Vertebræ: C. 7, D. 12, L. 4, S. 5, C. 3.

^{*} The Linnean genus Simia included all known Monkeys. It is now by general consent limited to the Orangs. If Pithecus were adopted for these, Simia would cease to exist as a genus.

The twelfth dorsal has no rib on the left side, and a very short one on the right.

From Borneo.

Received in exchange from the Royal Museum of Natural History, Brussels, 1871.

39. Skull, left radius and ulna, and right ulna of a still larger male. O. C. 5051, 5052, and 5053.

From Borneo.

Presented by Sir William Blizard, 1809.

40. Articulated skeleton of adolescent female.

All the permanent teeth are in place.

Vertebræ: C. 7, D. 12, L. 4, S. 5, C. 4. The last quite rudimentary.

Prepared from an animal which died in the Rotterdam Zoological Gardens.

The length and the curves of the spine are retained exactly as they were before the removal of the muscles and ligaments. The brain and most of the viscera are preserved in the physiological series. The right elaviele is with the preparation of the air-saes connected with the larynx.

Purchased, 1867.

41. Skull of male.

From the neighbourhood of Sarawak.

The position of the left upper canine is abnormal, being displaced backwards and lying to the outer side of the first premolar, which it has pushed towards the middle line.

Received in exchange, 1877.

42. Skull of male.

The facial bones are somewhat injured. Collected in Borneo by Mr. A. R. Wallace.

Barnard Davis Collection. Purchased, 1880.

43. Skull of male.

Many of the teeth are wanting. Collected by Brockmeijer.

Barnard Davis Collection. Purchased, 1880.

Simia satyrus.

44. Skull of female.

Remarkable for the completo absence of nasal bones (which are greatly reduced in some of the other specimens) and of the upper third right molar.

From near Sarawak, Borneo.

Purchased, 1876.

45. Skull of a male, of the variety called by the donor "Mias Rambi." O. C. 5054 and 5055.

From Borneo.

Presented by Sir James Brooke, Rajah of Sarawak.

46. Skull of a female of the same variety. O. C. 5056.

The roots of the teeth are exposed on the right side of both jaws, showing that the upper premolars as well as true molars are implanted by three distinct roots, two external and one internal.

Presented by Professor Owen.

47. Skull and greater part of skeleton of young female. O. C. 5060 to 5079.

The milk-teeth are being replaced by the permanent series, the eentral incisors of the upper jaw, all the lower incisors, and the first and second molars of the latter being already in place, with the milk-molars and canines.

Purchased.

48. Skeleton of young female. O. C. 5057.

The milk-dentition and first permanent molars are in place.

The animal from which this skeleton was prepared was brought to England by Dr. Abel, who accompanied Lord Amherst in the Embassy to China in the year 1817. It was a native of Borneo. It arrived in England in August 1817, and survived its transportation to this country until the 1st of April, 1819, during which period it was kept in the Menagerie at Exeter Change.

Presented by Sir Everard Home, Bart., 1819.

49. Skeleton of young. O. C. 5059.

The milk-teeth with the first permanent molars are in place.

Presented by Sir T. Stamford Raffles, 1820.

50. Skeleton of young. O. C. 5058.

The milk-teeth are in place, and the first true molars are beginning to rise from the alveolus. The vortebral formula is C. 7, D. 12, L. 4, S. 5, C. 4, the last being quite rudimentary. The state of ossification of the sacrum shows that there are three sacral vertebræ connected with the ilium by means of distinct pleurapophyses.

Brookes Collection. Purchased, 1828.

51. Skeleton of young.

The milk-dentition is complete.

Vertebral formula: C. 7, D. 12, L. 4, S. 5, C. 3.

Presented by the Managers of the Royal Institution, 1870.

- 52. Skeleton of young, with complete milk-dentition.
- 53. Skeleton of young, with milk-dentition.

The lower canines have scarcely risen above the alveolus. From an animal killed near Sarawak, in Borneo.

Purchased, 1879.

- **54.** Skeleton of young, with milk-dentition. O. C. 5080.

 Presented by Professor Owen.
- 55. Cranium of young, with milk-dentition.
- 56. Hyoid bone of adult male.

Purchased, 1873.

57. Skull of old male.

It has been the subject of extensive fractures, which have completely separated the facial portion from the brain-case, and divided the lower jaw into three pieces. New bone has been thrown up round the fractured edges, the condition of which shows that the animal must have lived some time after receiving these frightful injuries.

From Borneo.

Purchased, 1880.

Gonus HYLOBATES.

Illiger, Prodromus Systematis Mammalium et Avium, p. 67 (1811).

GIBBONS OR LONG-ARMED APES.

a. Genus Siamanga, Gray.

Hylobates syndactylus.

Simia syndactyla, Raffles, Trans. Linn. Soc. xiii. p. 241 (1822). Siamanga syndactyla (Raffles), Gray, List of Mammals Brit. Mus. p. 1 (1843).

THE SIAMANG OR UNGKA APE.

Hab. Sumatra.

58. Skeleton of male. O. C. 5032–5049.

The right manus and left pes are wanting. Vertebræ: C. 7, D. 13, L. 4, S. 5.

Prepared from an animal obtained in the Monangkabau country, in the interior of Sumatra, and which lived for some time in the possession of the donor. It is described and figured in 'Loudon's Magazine of Natural History,' vol. v. p. 131 (1832).

Presented by Dr. George Bennett, 1831.

59. Skull of male.

From Mr. A. R. Wallace's collection.

Purchased, 1872.

60. Cranium of young.

The first and second true molars and the permanent incisors have been acquired.

61. Skeleton of young. O. C. 5031.

The first permanent incisors and the first true molars are in place, with the milk lateral incisors, canines, and molars. Vertebræ: C. 7, D. 13, L. 4, S. 4, C. 4.

Prepared from an animal shot in Sumatra, and presented to Mr. Brookes by Evan Evans, Esq., Surgeon R.N.

Brookes Collection. Purchased, 1828.

SIMIIDÆ. 15

62. Cranium apparently of young Siamang, with the milk-dentition.

The ridge between the antero-internal and postero-external cusp of the second molar is very strongly marked.

Presented by Sir T. Stamford Raffles.

b. Hylobates proper.

Excluding the Siamang, the Gibbons differ but little in size and general conformation, and the colour of individuals of undoubtedly the same species is remarkably variable. Hence there is much uncertainty about the number of species, and much confusion in the nomenclature. The names given to the specimens in the Old Catalogue cannot, therefore, be altogether trusted; and, owing to the want of authenticated skeletons in any collection in the country, they cannot be rectified. Among the following, two distinct species can be recognized, characterized chiefly by the proportional length of the limbs.

63. Skeleton (wanting the skull). O. C. 5028, where it is called *II. variegatus*.

Vertebræ: C. 7, D. 13, L. 5, S. 5, C. 2.

The anterior end of the erest of the ilium is more prominent and angular than in the other skeletons. The lower limbs are proportionally longer, the femur being to the humerus as 85 to 100.

From the forests of Deval, Bengal.

Presented by Dr. B. C. Henderson, 1822.

64. Skull and bones of the extremities of a femalo*.

In the length and proportions of the extromities, this agrees with the last; but the bones are all more slonder. The mandible is remarkable for the lowness of the ascending ramus, want of development of the angle, and backward direction of the neck and coronoid process, in which respects No. 72 comes nearest to it.

Presented by Sir T. Stamford Raffles.

^{*} This and Nos. 71 and 72 were taken in 1864 from skins which had entirely lost all the hair.

Hylobates, sp.

In the remaining specimens, the angle of the lower jaw is more or less developed, though the height of the ascending ramus varies considerably. The anterior angle of the crest of the ilium is rounded off; and the length of the femur is to that of the humerus about as 74 to 100. There appears to be nothing in their osteological characters by which they can be separated specifically; and the skulls agree with authenticated specimens of *II. lar* in the British Museum; so they probably belong to that or to some closely allied species.

65. Articulated skeleton. O. C. 5026 (where it is called *II. leuciscus*).

Vertebræ: C. 7, D. 13, L. 5, S. 5, C. 2 (imperfect).

Presented by Dr. B. C. Henderson, 1822.

66. Articulated skeleton. O. C. 5027 (where it is called *H. lar*).

Vertebræ: C. 7, D. 13, L. 5, S. 5, C. 2.

Brookes Collection. Purchased, 1828.

67. Bones of the trunk and scapular arch. O. C. 5029.

The number of vertebræ is the same as in the preceding skeletons of Gibbons; but in this specimen there are 14 pairs of ribs, a short and straight pair being developed from the vertebra corresponding to the first lumbar in the others.

Hunterian.

68. Cranium of young. O. C. 5030.

The milk-canines and molars remain in place with the first permanent incisors and first true molars. An extension of the frontal bone reaches backwards in the middle line as far as the occipital, completely separating the parietals.

Hunterian.

69. Cranium of young.

The third molars are not yet in place.

70. Skull (mutilated behind) of adult.

Takon from a skin of a uniform pale yellowish-whito colour.

Presented by Sir T. Stamford Raffles.

71. Skull and bones of the extremities of young male.

Presented by Sir T. Stamford Raffles.

72. Skull and bones of the extremities of young female.

Presented by Sir T. Stamford Raffles.

Hylobates lar.

Homo lar, Linn. Mantissa Plantarum, Regni Animalis Appendix, p. 521 (1771).

THE WHITE-HANDED GIBBON.

Hab. Malay Peninsula.

73. Pelvis, sternum, right clavicle, and hyoid bone of male.

Prepared from a specimon from Mergui, which died in the Gardens of the Zoological Society in 1870.

Presented by the Zoological Society, 1870.

74. Hyoid bone.

Presented by the Zoological Society, 1869.

Hylobates hoolock.

Simia hoolock, Harlan, Trans. Amer. Philos. Soc. n. s. t. iv. p. 52 (1834).

THE HOOLOCK GIBBON.

Пав. Assam.

75. Hyoid bone of female.

From a specimen from Assam, which died in the Zoological Society's Gardens, Jan. 1, 1873, having lived there more than four years.

Presented by the Zoological Society.

Genus OREOPITHECUS.

Gervais, Comptes Rendus de l'Acad. de Paris, tome lxxiv. p. 1217 (1872).

Greopithecus bambolii.

- 76. Cast of mandible.
- 77. Cast of the same mandible after the germ of the posterior molar had been exposed.

The original from which these specimens were taken was found in the lignito beds of Monte Bamboli, Tuscany. It is described in the 'Comptes Rendus' for 1872, and also, with figure, in the 'Journal de Zoologie,' vol. i. (1872), p. 228, pl. xiv.

This animal was probably one of the Simiidæ, though differing in details of dentition from any of the existing forms, especially in the great antero-posterior length of the third molar—a character to which the Gorilla slightly approximates, but which is more fully developed in the members of the next family.

Presented by Professor Gervais, 1872.

Family CERCOPITHECIDÆ.

Cynopithecina, Is. Geoff. Archiv. du Muséum, ii. p. 495 (1841). Dental formula as in the Simiidæ.

Subfamily Colobin Æ.

The genera which constitute this group differ from all other monkeys in the singularly complex character of the stomach.

Genus COLOBUS.

Illigor, Prodromus Syst. Mam. et Avium, p. 69 (1811).

The monkeys of this genus are all natives of Africa. They are distinguished from the closely allied Asiatic forms of the family by the very rudimentary character of the pollex.

Colobus vellerosus.

Semnopithecus vellerosus, Is. Geoff. Zool. du Voyage do Bélanger, p. 37 (1834).

Colobus bicolor, Wesmael, Bull. Acad. Sc. Bruxelles, ii. p. 237 (1835).

THE WHITE-THIGHED COLOBUS.

Hab. West Africa.

78. Articulated skeleton of male.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 30.

Prepared from a specimen received in spirit from the West Coast of Africa.

Purchased, 1862.

79. Cranium of female, probably of this species.

Colobus satanas.

Waterhouse, Proc. Zool. Soc. 1838, p. 58.

THE BLACK COLOBUS.

Hab. West Africa.

80. Skull, J.

From the Gaboon.

Purchased, 1876.

81. Skull, 9.

From the Gaboon.

Purchased, 1876.

Colobus ursinus.

Ogilby, Proc. Zool. Soc. 1835, p. 98.

THE URSINE COLOBUS.

Hab. West Africa.

82. Hyoid bone of male.

From an animal which died in the Gardons of the Zoological Society.

Purchased, 1870.

Genus SEMNOPITHECUS.

Semno-pithèque, F. Cuvier, Hist. Nat. des Mammifères, 1821. Presbytis*, Eschscholtz, in Kotzebue's Entdockungsreise, iii. p. 196 (1821).

Pollex as long as the second metacarpal, with both phalanges completely developed, though small. Asiatic habitat.

Semnopithecus entellus.

Simia entellus, Dufresne, Bull. do la Soc. Philomat. 1797, p. 49.

THE ENTELLUS OF HANUMÁN MONKEY.

Hab. India.

83. Skeleton of nearly adult female.

All the permanent teeth are in place, but not worn. Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 32.

Presented by P. L. Sclater, Esq., 1870.

84. Skull, J. O. C. 5005.

Purchased.

85. Skull, J. O. C. 5006.

The calvarium has been detached to show the interior of the cranial cavity. The incisor and canine teeth are wanting.

Purchased.

86. Cranium, J.

The incisor and canine teeth are wanting.

87. The teeth separately displayed of a nearly adult male.

Prepared from an animal received from the Zoological Society's Gardens, July 26, 1862.

88. Cranium, ♀. O. C. 5007.

It shows the sexual inforiority of size of the canines. The animal had suffered from a severe fracture of the parietes of the left orbit.

Purchased.

^{*} There is some doubt as to the priority of these two names; but Semno-pithecus is that which is most commonly adopted.

- 89. Skull, longitudinally and vertically bisceted, of female.
- 90. Articulated skeleton of young. O. C. 5004.

The milk-molars and eanines are retained. Vertebræ: C. 7, D. 12, L. 7, S. 2, C. 25 (not quite complete).

South Collection. Purchased, 1835.

91. Skull of young.

The milk-molars and upper eanines are retained; but the permanent ineisors and first and second true molars are in place.

- 92. Cranium of a somewhat younger individual, apparently of the same species.
- 93. Skull of a slightly younger animal.
- 94. Skull of a still younger animal.

The lateral milk-ineisors are retained above and below, as well as the eanines and molars. The first permanent molars are in place in both jaws.

95. Skull of a younger monkey, apparently of the same species.

It retains all the milk-teeth, with the first permanent molars.

Semnopithecus schistaceus.

Hodgson, Journ. Asiat. Soc. Bengal, ix. p. 1212 (1840).

THE LANGUR MONKEY.

Hab. Northern India.

96. Bones of the trunk of adult.

Vertobræ: C. 7, D. 12, L. 7, S. 3, C. 12 (incomploto). From Nepal.

Presented by Bryan II. Hodgson, Esq.

Semnopithecus schistaceus.

97. Bones of the trunk and extremities of nearly adult.

This species is considered by some authors merely a variety of S. entellus. Schlegel (Muséum des Pays-Bas, Simiæ, 1876, p. 61) is of the contrary opinion. On comparing the present specimen (which was named and presented by the describer of the species) with the skeleton of S. entellus of corresponding size and age, though probably different sex, it will be seen that though the femur and radius are of almost identical length, the tibia is slightly shorter and the humerus longer, so that there is not so great a disproportion between the length of the anterior and posterior extremities as in S. entellus. The hands and feet are also slightly larger. Whether these differences are really specific can only be determined by the examination of a larger series of specimens.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

98. Skull of young male.

The milk-teeth and first permanent molars are in place.

This and the following specimen were obtained by the donor at Simla in 1866.

Presented by R. C. Beavan, Esq., 1867.

99. Skull of young female.

The central permanent incisors have just come into place. From Simla.

Presented by R. C. Beavan, Esq., 1867.

Semnopithecus cristatus.

Simia cristata, Raffles, Trans. Linn. Soc. xiii. p. 533 (1822). Semnopithecus pruinosus, Desmarest, Mamm. Supplément, p. 533 (1822).

Hab. Sumatra, Borneo

100. Skeleton, wanting the hands and feet, of male.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 17 (incomplete). From Sumatra.

Presented by Sir T. Stamford Raffles.

101. Skull and vertebral column of female.

From Sumatra.

Presented by Sir T. Stamford Raffles.

102. Skull of a very young Semnopithecus, probably of the same species as the above.

The milk-dentition is in place.

Presented by Sir T. Stamford Raffles.

Semnopithecus chrysomelas.

S. Mueller and Schlegel, Verhandl. over de Nat. Gesehied. der Nederlandsche overzeesche bezittingen, p. 61, plate xi. fig. 3 (skull), 1839–1844.

This species wants the fifth lobe to the posterior lower molar, found in most of the Colobinæ.

Hab. Borneo.

103. Skull of male.

From Borneo. Marked "Lutung."

Purchased, 1872.

Semnopithecus maurus.

Simia maura, Schreber, Säugthiere, i. p. 107, tab. xxii. B. (1775). 104. Hyoid bone.

Presented by the Zoological Society, 1869.

Genus NASALIS.

Geoffroy, Ann. du Muséum, xix. p. 90 (1812).

The skull can be distinguished at a glance from that of any Colobus or Semnopithecus by the lower border of the nasal bones being considerably below the lower margin of the orbits, as in the Cercopitheci and all the other genera of this family, whereas in the other Colobinæ the anterior narial aperture extends upwards between the orbits.

Nasalis larvatus.

Cercopithecus l vatus, Wurmb, Verhand. Batav. Genootseh. iii. p. 145 (1781).

Simia nasica, Daubenton, in Audebort, Hist. Nat. des Singes (1797). Simia nasalis, Shaw, Gen. Zool. i. p. 55 (1800).

Semnopithecus nasicus, Sehlegel, Cat. Mus. Pays-Bas, p. 66 (1876).

THE PROBOSCIS MONKEY.

Hab. Borneo.

105. Skeleton of male.

Prepared in 1870 from a specimen received from Borneo in spirit. The skin of the face, with the characteristic elongated nasal appendage, is preserved in the Physiological Series (Organs of Smell).

Vertebræ: C. 7, D. 12, L. 6, S. 3, C. 27 (complete). It has therefore, as an individual peculiarity, one presaeral vertebra less than all the other specimens of Colobinæ in the Museum.

Purchased, 1840.

106. Skull of male.

Purchased, 1868.

107. Skeleton of female.

It is very inferior to the male in size and in the development of the eanine teeth.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 24 (incomplete).

Presented by John Flower, Esq., 1873.

Subfamily CERCOPITHECINÆ.

Genus CERCOPITHECUS.

Erxlebon, Syst. Reg. Animal, p. 22 (1777).

All the species of this genus are of African habitat.

Species incerta.

108. Skeleton of nearly adult male. O. C. 5018.

Vertebræ: C. 7, D. 12, L. 7, S. 2, C. 22.

Propared from an animal which died in the Menagorie at Exeter Change.

Presented by William Home Clift, Esq., 1823.

Cercopithecus patas.

Simia patas, Schreber, Säugthiere, i. p. 98, tab. xvi. (1775). Cercopithecus patas, Erxleben, Syst. Reg. Animal. p. 34 (1777). Simia rubra, Gmelin, Syst. Nat. p. 34 (1788). Cercopithecus ruber, Geoff. Ann. du Mus. xix. p. 96 (1812).

THE PATAS MONKEY.

Hab. West and Central Africa.

109. Skeleton of young. O. C. 5009.

The first permanent molars and central incisors have been eut. Vertebræ: C. 7, D. 12, L. 7, S. 1, C. 28.

South Collection. Purchased, 1835.

110. Skull.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1877.

111. Hyoid bone of male.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1877.

Cercopithecus sabæus.

? Simia sabæa, Linnæus, Syst. Nat. ed. 12, i. p. 38 (1766).

Cercopithecus sabæus, Is. Geoff. Cat. Mus. Paris, p. 22 (1851), and Schlegel, Cat. Mus. Pays-Bas, p. 74 (1876).

Cercopithecus griseo-viridis, Desmarest, Sclator's List of Animals, 1879, p. 6.

THE GRIVET MONKEY.

Hab. East and Central Africa.

Cercopithecus sabæus.

112. Skeleton of young female.

The milk-teeth have all been shed; but the third true molars are still within the alveoli. Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 25. The thirteenth trunk-vertebra bears a pair of short movable ribs. The animal had lived two years in captivity; and the articular extremities of many of the long bones are deformed. The right manus and pes are mounted in the Physiological Series (Organs of Locomotion).

Brought by way of the Nile from the Soudan.

Presented by C. E. Flower, Esq.

Cercopithecus lalandii.

Cercopithecus lalandii, Is. Geoff. Archiv. du Muséum, ii. p. 561 (1841).

? Simia pygerythra, F. Cuvier, Hist. Nat. des Mammifères, 1821.

THE VERVET MONKEY.

Hab. South Africa.

113. Skull of male.

As an individual peculiarity, the inferior canines are recurved and pass behind the upper ones.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1871.

114. Skull of nearly adult female.

From an animal which died in the Zoological Society's Gardens, 1861.

Presented by Professor Flower, 1881.

115. Skull of female.

Taken from a skin in the stores, 1876.

Cercopithecus callitrichus.

Cercopithecus callitrichus, Is. Gooff. Cat. Mus. Paris, 1851, p. 23. Cercopithecus sabæus auct. recentiorum.

THE GREEN MONKEY.

Hab. West Africa.

116. Skull of nearly adult male, probably of this species. O. C. 5016.

Hunterian.

117. Skull of young.

The posterior milk-molars remain, with the first and second permanent molars.

From an animal which died in the Gardens of the Zoological Society.

Purchased, 1881.

Cercopithecus albigularis.

Semnopithecus? albogularis, Sykes, Proc. Zool. Soc. 1831, p. 105. Cercopithecus albogularis, Sykes, Proc. Zool. Soc. 1832, p. 18.

SYKES'S MONKEY.

Hab. East Africa.

118. Bones of the trunk.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. wanting.

From an animal which died in the Gardens of the Zoological Society.

Presented by the Zoological Society, 1867.

Cercopithecus campbelli.

Waterhouse, Proc. Zool. Soc. 1838, p. 61.

CAMPBELL'S MONKEY.

IIab. West Africa.

119. Skull.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1881.

Cercopithecus mona.

Simia mona, Schrebor, Säugthiere, i. p. 97, tab. xv. (1775).

THE MONA MONKEY.

Hab. West Africa.

Cercopithecus mona.

120. Skull of young female.

The milk-dentition and first lower true molars are in place. From the West Coast of Africa. Prepared from a specimen in the spirit stores.

Cercopithecus diana.

Simia diana, Linnæus, Syst. Nat. ed. 12, i. p. 38 (1766).

THE DIANA MONKEY.

Hab. West Africa.

121. Skull.

West Coast of Africa.

Purchased, 1881.

122. Hyoid bone.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1870.

Cercopithecus cephus.

Simia cephus, Linnæus, Syst. Nat. ed. 12, i. p. 39 (1766).

THE MOUSTACHE MONKEY.

Hab. West Africa.

123. Skull of young female.

All the milk-teeth have been shed; but the permanent teeth are not fully in place, and the crowns of the third molars are still within the alveoli.

From the Gaboon.

Purchased, 1876.

Cercopithecus petaurista.

Simia petaurista, Sehreber, Säugthiere, i. tab. xix. B (1775).

THE LESSER WHITE-NOSED MONKEY.

Hab. West Africa.

124. Skeleton of young female.

The milk-caninos and molars and the permanent incisors and first and second molars are in place. Vertebræ: C. 7, D. 12, L. 7, S. 2, C. 19 (imperfect).

Prepared from an animal which diod in the Gardens of the Zoological Society.

Purchased, 1862.

The specific determinations assigned to the following crania of young individuals of the genus *Cercopithecus* cannot be depended upon.

125. Cranium of young, with milk-dentition. O. C. 5011 (where it is called *C. albogularis*).

Hunterian.

126. Cranium of young, with the milk-teeth and first permanent molars. O. C. 5012 (where it is called *C. albogularis*).

British Museum.

127. Cranium of young, with the milk-dentition. O. C. 5022 (where it is called *C. albogularis*).

Hunterian.

128. Skull, longitudinally and vertically bisected, of a species of Cercopithecus. O. C. 5019 (where it is called C. cephalopterus).

Hunterian.

Genus CERCOCEBUS.

Geoffroy, Ann. du Muséum, xix. p. 97 (1812).

This genus differs from *Cercopithecus*, and resembles *Macacus* in the presence of a fifth tuberele to the posterior lower molar. All the species are of African habitat.

Cercocebus collaris.

Gray, List of Mamm. Brit. Mus. p. 7 (1843).

THE WHITE-COLLARED MANGABEY.

Hab. West Africa.

129. Skull, J.

From the Gaboon.

Purchased, 1876.

130. Skull, ♀.

From the Gaboon.

Purchased, 1876.

Cercocebus fuliginosus.

Geoffroy, Ann. du Muséum, xix. p. 97 (1812).

THE SOOTY MANGABEY.

Hab. West Africa.

131. Hyoid bone.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1870.

Cercocebus æthiops.

Simia æthiops, Linnæus, Syst. Nat. ed. 10, p. 28 (1758); Schreber, Säugthiere, i. p. 105 (1775).

THE WHITE-CROWNED MANGABEY.

Hab. West Africa.

132. Hyoid bone.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1870.

Cercocebus albigena.

Presbytis albigena, Gray, Proc. Zool. Soc. 1850, p. 77.

THE GREY-CHEEKED MANGABEY.

Hab. West Africa.

133. Hyoid bone.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1870.

Genus MACACUS.

Macaque (French), Cuvier et Geoffroy, Magasin encyclopédique, 1795 (fide Is. Geoff.).

Macaca, Lacépède, Mémoires de l'Institut, iii. p. 490 (1801).

Macacus, Desmarest, Mammalogie, p. 63 (1820).

Inuus and Cercocebus, Geoffroy, Ann. du Muséum, xix. pp. 97-100 (1812).

The crania of animals of this genus can be distinguished from those of *Cercopithecus* by the front margin of the interorbital septum being concave in profile, and depressed below a transverse supraorbital ridge, and by the lower border of the nasals being broader. In most species the muzzle is more produced, giving greater length between the lower margin of the orbit and the upper margin of the anterior narial aperture than in the *Cercopitheci*. They all are natives of the Oriental or the Palæarctic region.

a. Species with the tail as long as or longer than the body. These are included by Geoffroy (Ann. du Mus. xix.) and Schlegel (Cat. Muséum des Pay-Bas, 1876) in the genus Cercocebus.

Macacus cynomolgus.

? Simia cynomolgus, Linn. Syst. Nat. ed. 12, i. p. 38 (1766). Simia cynamolgus, Schreber, Säugthiere, p. 81, tab. xiii. (1775). Cercocebus cynomolgus, Geoffroy, Ann. du Muséum, xix. p. 99 (1812); Schlegel, Cat. Mus. Pays-Bas, p. 101 (1876).

THE COMMON MACAQUE MONKEY.

Hab. India and Indo-Malayan Archipelago.

Macacus cynomolgus.

134. Skeleton, wanting the hands and feet, of male.

Vertebræ: C. 7, D. 12, L. 6, S. 3, C. 26.

The Sumatran variety of this Macaque was described by Sir Stamford Raffles as a distinct species under the name of *Simia fascicularis*, the "Kra" of the Malays (Trans. Linn. Soc. vol. xiii. p. 246).

From Sumatra.

Presented by Sir T. Stamford Raffles.

135. Skeleton of nearly adult male.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 21 (imperfect). From Sumatra.

Presented by Sir T. Stamford Raffles.

136. Skeleton of female.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 20 (imperfect).

Although the animal is somewhat smaller, the bones of the tail are longer than in either of the preceding specimens.

Presented by Sir T. Stamford Raffles.

137. Skull of male of the variety described as *M. philippinensis* by Is. Geoff. (Archiv. du Mus. ii. p. 568, 1843).

Collected by Mr. Everett at Zamboanga, Mindanao Island, Philippines.

Purchased, 1878.

The following specimens are probably of this species.

138. Skull, J. O. C. 4999.

The facial bones have undergone pathological changes.

Hunterian.

139. Skull, the bones of which are separated and mounted at short distances apart.

Prepared in Paris.

Purchased.

140. Skull of nearly adult. 2.

141. Skull of young. O. C. 4998.

The permanent earlies are not fully developed, and the last molars are still eenecaled in their alveeli.

Hunterian.

142. Skull of young. O. C. 5024.

The milk-toeth are present, with the first permanent molars. The lower permanent incisors are just appearing.

Purchased.

Macacus pileatus.

Simia pileata, Shaw, Gen. Zool. p. 53 (1800). Cercocebus sinicus, Geoffroy, Ann. du Mus. xix. p. 98 (1812). Cercocebus pileatus, Sehlegel, Cat. Mus. Pays-Bas, p. 98 (1876).

THE TOQUE MONKEY.

Hab. Ceylon.

143. Skull of male.

Frem an animal which died in the Zeological Gardens, 1875.

Presented by the Zoological Society.

144. Articulated skeleton of nearly adult, probably of this species.

Vertobræ: C. 7, D. 12, L. 7, S. 3, C. 24.

The tail is intermediate in length between those of Nos. 135 and 145. The posterior melars are not in place.

Macacus sinicus.

Simia sinica, Linnœus, Mantissa Plantarum, Appendix, p. 521 (1771) (ex Buffon, vol. xiv. p. 241, Bonnet Chinois*).

* This name was not given from any idea that it was a native of China, but on account of the resemblance of the arrangement of the hair on the scalp to a Chinese hat.

PART II.

Macacus sinicus.

Cercocebus radiatus, Geoffroy, Ann. du Muséum, xix. p. 98 (1812). Macacus sinicus, Is. Geoff. Cat. Mus. d'Hist. Nat. p. 26 (1851). Cercocebus sinicus, Schlegel, Cat. Mus. Pays-Bas, p. 99 (1876). Macacus radiatus, Sclater's List of Animals, p. 13 (1879).

THE BONNET-MONKEY.

Hab. Continental India.

The following specimens appear to belong to this species:—

145. Articulated skeleton of adult male. O. C. 4996.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 22.

South Collection. Purchased, 1835.

146. Skull of female. O. C. 5001.

Brookes Collection. Purchased, 1828.

147. Skull of young. O. C. 4997.

All the permanent teeth have come into place; but the last molars and the canines are not fully developed. The facial bones bear marks of inflammatory action, so frequently to be seen in Monkeys which have died in captivity in this country.

Hunterian.

148. Skull of young.

The milk-molars and upper milk-canines are retained.

b. Macaques with the tail considerably shorter than the body.

Macacus silenus.

Simia silenus, Linnæus, Syst. Nat. edit. 12, i. p. 36 (1766).

THE WANDEROO MONKEY.

Hab. Malabar coast of India.

149. Skull of male, probably of this species. O. C. 4854.

Hunterian.

150. Skull of young. O. C. 5003.

The permanent eanines and third molars are not in place.

Hunterian.

Macacus rhesus.

Simia rhesus, Audebert, Hist. Nat. des Singes, &c., 1797.

Inuus rhesus, Geoff. Ann. du Muséum, xix. p. 101 (1812).

Macacus rhesus, Desmarest, Mammalogie, p. 66 (1820).

? Simia erythrea, Schreber, Säugthiere, Supp. tab. viii. D (date?).

Macacus erythreus, Schlegel, Cat. Mus. Pays-Bas, p. 112 (1876).

THE RHESUS MONKEY.

Hab. India.

151. Articulated skeleton of male. O. C. 4991.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 15 (not quite eomplete).

Purchased.

152. Articulated skeleton of male.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 18.

153. Articulated skeleton of a not quite adult Monkey, stated in O. C. (No. 4990) to be the Rhesus.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 15 (a few missing).

Purchased.

154. Articulated skeleton of young. O. C. 4992.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 12 (incomplete).

South Collection. Purchased, 1835.

155. Incomplete skeleton, ♀.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 17.

Macacus rhesus.

156. Skull, ♀. O. C. 4995.

The teeth have been removed from the right side of both jaws.

Hunterian.

- 157. Skull assigned to this species. O. C. 4994. 2.
- 158. Skull of young female.

Prepared from a specimen in the spirit-stores.

159. Skull of a new-born male.

Prepared from a specimen which was born and died in the Gardens of the Zoological Society, 12 May, 1863.

Presented by the Zoological Society.

Macacus nemestrinus.

Simia nemestrina, Linnæus, Syst. Nat. edit. 12, i. p. 35 (1766).

THE PIG-TAILED MONKEY.

Hab. Sumatra, Java, Borneo.

160. Articulated skeleton of male. O. C. 4826.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 17.

Brookes Collection. Purchased, 1828.

161. Skeleton, not quite complete, of male.

(Many of the bones are mounted in the separate series.)

162. Skull of male.

From near Sarawak, Borneo.

Purchased, 1879.

163. Skull of adult male. O. C. 4828.

Hunterian.

164. Skull of male. O. C. 4918.

Hunterian.

165. Skull of female.

Prepared from a specimen in the spirit-stores.

166. Skeleton (not perfect) of young female.

The posterior molars are not in place. From Sumatra.

Presented by Sir T. Stamford Raffles.

167. Skull of young.

The milk-molars are retained with the permanent incisors and the first and second permanent molars.

From Sumatra.

Presented by Sir T. Stamford Raffles.

168. The skull of a younger individual.

The central permanent incisors and the first molars only are in place.

From Sumatra.

Presented by Sir T. Stamford Raffles.

169. The skull of a still younger individual.

The milk-dentition only is in place.

From Sumatra.

Presented by Sir T. Stamford Raffles.

c. Macaques with the tail rudimentary or obsolete. Genus Inuus, Geoff. Ann. du Muséum, xix. p. 100 (1812).

Macacus inuus.

Simia inuus et Simia sylvanus, Linnæus, Syst. Nat. ed. 12, i. pp. 34 and 35 (1766).

Inuus ecaudatus, Geoffroy, Ann. du Muséum, xix. p. 100 (1812).

Macacus inuus.

Macacus inuus, Desmarest, Mammalogie, p. 67 (1820). Inuus pithecus, Is. Geoff. Cat. Mus. Paris, p. 31 (1851). Macacus sylvanus, Schlegel, Cat. Mus. Pays-Bas, p. 115 (1876).

THE BARBARY APE.

Hab. North Africa and Gibraltar.

170. Articulated skeleton of nearly adult male. O. C. 4919.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 3 (imperfect). The skull differs from that of other Macaques in the small extent of contact between the præmaxillæ and nasals.

Purchased.

171. Skull of young male.

The milk-dentition only is in place. Prepared from an authenticated specimen in the spirit-stores.

172. Skull of nearly adult female (probably of this species, but called *M. rhesus* in O. C. 4993).

Hunterian.

173. Pelvis of young.

From an animal which died in the Zoological Society's Gardens.

Presented by the Zoological Society.

Macacus priscus.

174. Cast of anterior portion of right ramus of lower jaw.

The original was found in a fluviatile deposit of pliocene ago at Montpellier, and is described and figured by the donor in his 'Zoologie et Paléontologie Françaises,' 2nd edit. 1859, p. 11.

Presented by Professor Gervais.

Genus CYNOPITHECUS.

Is. Geoffroy, Voyage do Bélanger, p. 66 (1834).

Cynopithecus niger.

Cynocephalus niger, Desmarest, Mammalogie, Supp. p. 534 (1822). Cynopithecus niger, Is. Geoff. Cat. Mus. Paris, p. 32 (1851). Macacus niger, Schlegel, Cat. Mus. Pays-Pas, p. 119 (1876).

THE BLACK APE.

Hab. Celebes.

The skull of this species differs from that of the Macaques in the development of longitudinal ridges on the sides of the upper surface of the maxillæ, as in some of the Baboons.

175. Skeleton of young female. O. C. 4855 to 4917.

The posterior molars are still conecaled in the alveoli.

Presented by the Zoological Society.

176. Skull of male.

Collected by Mr. A. R. Wallace in Celebes.

Purchased, 1872.

177. Skull of young.

The milk-molars are retained, with the permanent ineisors and first and second true molars.

From the same collection.

Purchased, 1872.

Genus THEROPITHECUS.

Is. Geoffroy, Archives du Muséum, ii. p. 576 (1841).

Theropithecus gelada.

Macacus gelada, Rüppell, Neuo Wirbelthiero von Abyssinien, p. 5 (1835); Schlogel, Cat. Mus. Pays-Bas, p. 107 (1876).

Theropithecus gelada.

Cynocephalus gelada, Sclater, List of Animals, p. 23 (1879). Gelada riippellii, Gray, List Mammals Brit. Museum, p. 9 (1843).

THE GELADA.

Hab. Abyssinia.

178. Articulated skeleton of male.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 26.
Prepared from an animal brought alive to England from Abyssinia by Mr. Hagenbeck.

Purchased, 1877.

179. Skeleton of female.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 26. Brought from Abyssinia with the last.

These specimens supplied the materials for Mr. A. H. Garrod's "Notes on the Anatomy of *Gelada rueppelli*" (Proc. Zool. Soc. 1879, pp. 451-457).

Purchased, 1877.

Genus CYNOCEPHALUS.

Cynocephalus*, Lacépède, "Nouvelle table méthodique" (1799) in Mém. de l'Institut, iii. p. 490 (1801).

Papio*, Erxleben, Syst. Reg. Animal. p. 15 (1777).

* These two names are of equal antiquity in zoological literature, both occurring in Brisson (1756), but applied to different members of the group. In a generic sense Papio has the priority. The Baboons were separated from the other Simiæ by Linnæus, in the 'Systema Naturæ,' as a distinct group or subgenus under the name of Papiones, and were definitely formed into a genus called Papio by Erxleben (1777). This name was adopted by Geoffroy (Ann. du Muséum, xix. 1812), and is revived by Schlegel in the 'Cat. Mus. Pays-Bas.' On the other hand, Cynocephalus, which does not appear in post-Linnean literature till Lacépède in 1799, has received the sanction of the two Cuviers, Desmarest ('Mammalogie'), Wagner ('Schreber'), Is. Geoffroy ('Cat. Mus. Paris'), and Sclater ('List of Animals') and is now almost universally used.

Cynocephalus hamadryas, Linn.

Simia hamadryas, Linnæus, Syst. Nat. edit. 12, i. p. 36 (1766).

THE ARABIAN BABOON.

Hab. Arabia and Abyssinia.

180. Incomplete skeleton of male. O. C. 4920 to 4989.

The facial portion of the skull displays an unusual defect of symmetry.

Hunterian.

181. Skull of an adolescent male.

All the milk-teeth have been shed; but the last true molars are not in place, and the upper canines but partially developed. From an animal which died in the Gardens of the Zoological Society, 9 June, 1863.

Purchased.

Cynocephalus babouin.

? Simia cynocephalus, Linnæus, Syst. Nat. edit. 12, i. p. 38 (1766). Cynocephalus babouin, Desmarest, Mammalogie, p. 68 (1820). Papio cynocephalus, Geoffroy, Ann. du Muséum, xix. p. 102 (1812).

THE YELLOW BABOON.

Hab. West Africa.

182. Skull of young male.

The milk-molars are retained; and the last permanent molars have not yet appeared.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1868.

183. Skull of young female.

The last molars have not appeared; and the upper milk-canines have not been shed.

From an animal which died in the Gardens of the Zoological Society.

Presented by the Zoological Society, 1878.

Cynocephalus babouin.

184. Skeleton of an adolescent male.

All the milk-teeth have been shed; but the last molars are not in place.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 20.

Tho last lumbar has assumed the form of a saeral vertebra.

From an animal which died 19 June, 1863, in the Zoologieal Society's Gardens, where it bore the name of Cynocephalus papioides, Gray. Externally and osteologically it closely resombles C. babouin, of which it is probably only a variety. The molar teeth are smaller than those of No. 182, but about the same size as the last.

Purchased, 1863.

185. Imperfect skeleton of a male Baboon, probably of this species. O. C. 4829 to 4853.

Hunterian.

186. Cranium of a female long-tailed Baboon, of this or an allied species.

Shot by the denor at Logier Hill, Zambesi river, 26 Jan., 1863.

Presented by T. Baines, Esq., 1865.

Cynocephalus anubis.

Cynocephalus anubis, F. Cuv. Hist. Nat. des Mammifères, pl. 50 (1825).

Papio anubis, Sehlegel, Cat. Mus. Pays-Bas, p. 125 (1876).

THE ANUBIS BABOON.

Hab. West Africa.

187. Skeleton of male.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 23.

Some of the vertebræ have exostoses growing from their bodies; and the bones of the left lower extremity are unnaturally eurved; otherwise the skeleton is in good condition. Many of the bones are mounted in the separate series.

Propared from an animal which lived in the Gardens of the Zoological Society from 16 Nov., 1860, to 25 May, 1868.

Purchased, 1868.

188. Anterior part of skull of young.

The milk-dentition and first permanent molars are in place. From an animal which died in the Zoological Society's Gardens in 1875.

Presented by the Zoological Society, 1875.

189. Hyoid bone.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1871.

190. Skull of young, apparently of this species. O. C. 4823 and 4824.

The permanent canines and last molars are not in place.

Hunterian.

Cynocephalus porcarius.

Simia porcaria, Boddaert, Naturforscher, xxii. p. 17 (1795).

Papio porcarius, Geoffroy, Ann. du Mus. xix. p. 102 (1812);

Schlegel, Cat. Mus. Pays-Bas, p. 124 (1876).

THE CHACMA BABOON.

Hab. South Africa.

191. Skull of male.

From Dr. W. G. Atherston of Port Elizabeth.

Barnard Davis Collection. Purchased, 1880.

192. Skeleton of young male. O. C. 4747 to 4821.

The permanent teeth, with the exception of the canines and last molars, are in place.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 14 (imperfect).

Hunterian.

193. Skull of young male.

The milk-teeth, except the central upper incisors, are retained. The first permanent molars are also in place.

Cynocephalus porcarius.

From an animal which died in the Zoological Society's Gardens, 19 Feb., 1862.

Purchased, 1862.

194. Hyoid bone.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1875.

195. Skull of young female, apparently of this species. O. C. 4722.

The upper permanent canine and first premolar, completely formed but still concealed within the alveoli, have been exposed on the left side. The posterior molars are not yet fully in place.

Hunterian.

Cynocephalus leucophæus.

Simia leucophæa, F. Cuvier, Ann. du Mus. t. ix. p. 477 (1807).

THE DRILL.

Hab. West Africa.

196. Articulated skeleton of male. O. C. 4720 (where it is assigned to C. maimon).

Vertebræ: C. 7, D. 12, L. 7, S. 2, C. (imperfect).

Purchased.

197. Skeleton of male. O. C. 4723 to 4746.

Hunterian.

Cynocephalus maimon.

Simia maimon, Linnæus, Syst. Nat. ed. 12, i. p. 35 (1766).Simia maimon and S. mormon (Alstrocmer), Schreber, Säugthiere, i. pp. 74 and 75 (1775).

Papio maimon, Schlegel, Cat. Mus. Pays-Bas, p. 130 (1876).

Cynocephalus mormon, Is. Geoffroy, Cat. Mus. Paris, p. 35 (1851); Sclater, List of Animals, p. 22 (1879).

THE MANDRILL.

Hab. Tropical West Africa.

198. Articulated skeleton of male. O. C. 4719.

Vertebræ: C. 7, D. 12, L. 6, S. 4, C. 9 (not quite perfect).

Brookes Collection. Purchased, 1828.

199. Skull of young female. O. C. 4721.

All the milk-teeth have been shed; but the posterior permanent molars and the upper canines have not yet emerged from their alveoli.

Hunterian.

200. Skull of female.

From the Gaboon.

Purchased, 1876.

201. Skull of young female, probably of this species.

The milk-teeth and first permanent molars are in place. The latter are rather small for the Mandrill; but the locality from which it was obtained, and the statement of the collector that the tail was only $1\frac{1}{2}$ inch long, are strong indications in favour of its belonging to this species.

From the Gaboon.

Purchased, 1876.

Family CEBIDÆ.

Dentition :—i. $\frac{2}{2}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3} = \frac{9}{9}$, total 36.

This with the next family constitute the *Platyrrhini* of Geoff. St.-Hilaire. They are all natives of the New World.

The skulls of both families of American Monkeys are distinguished at a glance from those of the Old World by the absence of a prolonged bony auditory meatus, the *annulus tympanicus* remaining through life near the surface of the eranium, as in the new-born *Simiida* and Man.

Genus CHRYSOTHRIX.

Chrysothrix, Kaup, Thierreich, i. p. 51 (1835). Saimiris, Is. Geoffroy, Leçons de Mammalogie, p. 19 (1835).

In osteological and dental characters *Chrysothrix* closely resembles *Cebus*.

Chrysothrix sciurea.

Simia sciurea, Linn. Syst. Nat. ed. 12, i. p. 43 (1766). Saïmiri sciureus, Schlegel, Cat. Mus. Pays-Bas, p. 242 (1876).

THE SQUIRREL MONKEY.

Hab. Northern part of South America.

202. Articulated skeleton of male. O. C. 4667.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 26.

Presented by Henry Cline, Esq., 1824.

203. Articulated skeleton of nearly adult male. O. C. 4666.
Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 23 (incomplete).
Brookes Collection. Purchased, 1828.

204. Skeleton. O. C. 4668. J.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 23 (incomplete).

South Collection. Purchased, 1835.

205. Skull. O. C. 4669.

Purchased.

206. Skull of nearly adult female.

Genus CEBUS.

Erxleben, Syst. Reg. An. p. 44 (1777).

Cebus capucinus.

? Simia capucina, Linnæus, Syst. Nat. edit. 12, i. p. 42 (1766). Cebus capucinus, Geoffroy, Ann. du Muséum, xix. p. 111 (1812).

THE WEEPER CAPUCHIN.

Hab. Guiana, Brazil.

207. Skull of a nearly adult female.

The posterior upper molars are not fully in place. From an animal received from the Gardens of the Zoological Society, 17 Feb., 1872.

Purchased, 1872.

Of uncertain Species.

208. Articulated skeleton of Capuchin Monkey (*Cebus capucinus*, Geoffroy?). O. C. 4670.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 23.

Presented by John Gunning, Esq., 1818.

209. Skeleton of Capuchin Monkey. O. C. 4673, 4677, 4678, and 4679.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 24.

Hunterian.

210. Skull. O. C. 4675.

Presented by Henry Cline, Esq., 1824.

211. Skull. O. C. 4674.

British Museum.

212. Skull.

213. Separated bones of cranium. O. C. 4676.

Presented by Prof. Owen.

Cebus ---- ?

214. Skeleton of young Capuchin Monkey. O. C. 4672.

The milk-molars and first permanent molars are in place. Vertebræ: C. 7, D. 14, L. 5, S. 3, C. 25.

Purchased.

215. Skull, vertebral column, sternum, and ribs, with the bones of the right anterior and posterior extremities of a young Cebus. O. C. 4680 to 4686.

The alveolar wall of both jaws has been removed on the right side, showing the roots of the three milk-molars and milk-canine and their successors. The first permanent molar is in place.

Vertebræ: C. 7, D. 14, L. 5, S. 3, C. 24.

Hunterian.

Genus ATELES.

Geoffroy, Ann. du Muséum, vii. p. 260 (1806).

Distinguished from the other *Cebidæ* by the absence, or very rudimentary condition, of the pollex, and by the very long and highly prehensile tail.

SPIDER MONKEYS.

(Excopt in the case of animals received from the Zoological Society's Gardens, the specific names given to the specimens of this genus cannot be relied upon, as the osteological differences are very slight, and have not yet been properly determined.)

Ateles paniscus.

Simia paniscus, Linnæus, Syst. Nat. edit. 12, i. p. 37 (1766).

THE RED-FACED SPIDER MONKEY.

Hab. Guiana.

216. Imperfect skeleton. O. C. 4691 to 4716.

Hunterian.

Ateles geoffroyi.

Kuhl, Beiträge zur Zoologie, p. 26 (1820).

THE BLACK-HANDED SPIDER MONKEY.

Hab. Central America.

217. Skeleton. O. C. 4687.

Vertebræ: C. 7, D. 14, L. 4, S. 3, C. 31. The fourteenth pair of ribs is missing.

Brookes Collection. Purchased, 1828.

218. Skull of young male.

The milk-dentition is in place, with the first permanent molars of the lower jaw.

From a specimen which died in the Zoological Society's Gardens, 19 Jan. 1863, then referred to A. belzebuth, Geoff.

Purchased, 1863.

Ateles ater.

F. Cuvier, Hist. Nat. des Mammifères, pl. 64 (1823).

THE BLACK-FACED SPIDER MONKEY.

Hab. Eastern Peru.

219. Skull of young female.

The milk-canines are in place, with all the permanent teeth except the last molars.

From an animal which died in the Zoological Society's Gardens, 29 Nov. 1866.

Purchased, 1866.

Ateles hybridus.

Is. Geoffroy, Mém. du Muséum, xvii. p. 121 (1829).

THE BROWN SPIDER MONKEY.

Hab. U. S. of Colombia.

PART II.

Ateles hybridus.

220. Skull of young.

The milk-canines and second and third milk-molars are retained, with the permanent incisors and first true molars.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1871.

Ateles bartletti.

Gray, Proc. Zool. Soc. 1867, p. 992.

BARTLETT'S SPIDER MONKEY.

221. Skull of young female.

The permanent canines are just coming into place; but the last true molars are still concealed in the alveoli.

From Ecuador. Collected by Mr. Buckley.

Received in exchange, 1878.

Ateles marginatus.

Gcoffroy, Ann. du Muséum, xiii. p. 90 (1809).

THE CHUVA SPIDER MONKEY.

Hab. Lower Amazons.

222. Hyoid bone.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1870.

Of uncertain species.

223. Skull of young Spider Monkey. O. C. 4689.

The permanent teeth are in place, except the canines and posterior molars.

Hunterian.

224. Skull, hyoid, and bones of the left upper extremity of a Spider Monkey.

CEBIDÆ. 51

225. Portions of the upper and lower jaws of a Spider Monkey. O. C. 4717.

The mode of implantation of the teeth is exhibited on the right side.

Presented by Professor Owen.

Genus LAGOTHRIX.

Geoffroy, Ann. du Muséum, xix. p. 106 (1812).

Distinguished from *Ateles* by the possession of a well-developed pollex.

Lagothrix humboldti.

Geoffroy, Ann. du Muséum, xix. p. 107 (1812).

HUMBOLDT'S LAGOTHRIX.

Hab. Upper Amazons.

226. Articulated skeleton of male.

Vertebræ: C. 7, D. 14, L. 4, S. 3, C. 29. The fourteenth pair of ribs is rudimentary.

Prepared from a specimen which lived in the Zoological Society's Gardens from 2 Oct. 1863, to 8 Feb. 1864. Figured in Proc. Zool. Soc. 1863, pl. xxxi.

Purchased, 1864.

Genus NYCTIPITHECUS.

Spix, Simiarum et Vespertilionum species novæ, p. 24 (1823).

Nyctipithecus vociferans.

Spix, loc. cit. p. 25 (1823).

THE FELINE DOUROUCOULL.

Hab. Brazil and Ecuador.

Nyctipithecus vociferans.

227. Articulated skeleton of female.

The upper posterior molars and right upper canine are not fully in place.

Vertebræ: C. 7, D. 15, L. 7, S. 3, C. 27.

Prepared from an animal which died in the Gardens of the Zoological Society, 14 Feb. 1862.

Purchased, 1862.

228. Skull.

From Macas, Ecuador. Mr. Buckley's collection.

Purchased, 1872.

Genus CALLITHRIX.

Geoffroy, Ann. du Muséum, xix. p. 112 (1812).

Callithrix personata.

Geoffroy, Ann. du Muséum, xix. p. 112 (1812).

229. Skull, mutilated behind.

In the conformation of the mandible it resembles the two following genera.

Purchased, 1867.

Genus PITHECIA.

Geoffroy, Ann. du Muséum, xix. p. 115 (1812).

The angle of the mandible is expanded, though to a less extent than in Mycetes.

Pithecia monachus.

Geoffroy, Ann. du Muséum, xix. p. 116 (1812).

HUMBOLDT'S SAKI.

Hab. Amazons.

CEBIDÆ. 53

230. Articulated skeleton of young female.

All the permanent melars are in place; but the two posterior milk-melars have not been replaced by the premelars.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 23.

Prepared from an animal which lived in the Zoological Society's Gardens from 14 Oct. to 24 Oct. 1862. Described and figured in Proc. Zool. Soc. 1862, p. 326, pl. xxxvii.

Purchased, 1862.

231. Skull of male.

It is of much larger size than the last. Ecuador; from Mr. Buckley's collection.

Purchased, 1881.

232. Skull, probably of female.

Ecuador. Mr. Buckley's collection.

Purchased, 1881.

Pithecia satanas.

Cebus satanas, Hoffmannsegg, Mag. d. Gesellsch. z. naturf. Freunde Berlin, x. p. 93 (1807).

THE BLACK SAKI.

Hab. Lower Amazons.

233. Skull of young.

The premolars are in place, but not the posterior molars or permanent canines.

From an animal which died in the Gardens of the Zoological Society.

Purchased, 1875.

234. Skull, probably of this species, 3.

Genus MYCETES.

Illigor, Prodromus Syst. Mamm. et Av. p. 70 (1811).

HOWLING MONKEYS.

The truncated occipital region, and the extraordinary development of the rami of the mandible, especially of their angular and ascending portions, are the chief peculiarities by which the skulls

of animals of this genus are characterized. The latter, which is more marked in the male than the female sex, is related to the enormous size of the vocal organs, which the rami of the mandible enclose and protect.

Mycetes seniculus.

Simia seniculus, Linn. Syst. Nat. edit. 12, i. p. 37.

THE RED HOWLER.

Hab. U.S. of Columbia.

235. Articulated skeleton of male.

Vertebræ: C. 7, D. 13, L. 5, S. 3, C. 27.

Prepared from an animal brought from the Dekke river, near Cartagena (see Proc. Zool. Soc. 1863, p. 374), and which lived in the Gardens of the Zoological Society from 28 Aug. to 7 Oct. 1863.

The hyoid bones are with the vocal organs in the Physiological Series.

Purchased, 1863.

236. The left half of a vertically bisected skull and hyoid bones of an adult but younger male.

The other half is mounted in spirit in the Physiological Series. The dilatation of the basihyal is less pronounced than in the last.

From an animal from the same locality, which died in the Zoological Society's Gardens, 25 Sept. 1863.

Purchased, 1863.

237. Skull of male. O. C. 4718.

Langstaff's Collection. Purchased, 1835.

Mycetes laniger.

Gray, Ann. & Mag. Nat. Hist. 1845, xvi. p. 214.

THE SILKY HOWLER.

The four following specimens belong to the form so named by Gray, probably only a variety of *M. seniculus*. They were collected by Mr. Buekley at Macas, Ecuador.

238. Skull of male.

From Macas.

Purchased, 1872.

239. Skull of nearly adult female.

The canines and upper posterior molars are not fully in place.

From Macas.

Purchased, 1872.

240. The expanded basinyal of a male.

From Macas.

Purchased, 1872.

241. The less expanded basinyal and the thyro-hyals of a female.

From Macas.

Purchased, 1872.

Mycetes palliatus.

Gray, Proc. Zool. Soc. 1848, p. 138.

THE MANTLED HOWLER.

Hab. Central America.

242. Skull of nearly adult, probably female.

The posterior upper molars are not fully developed. From Costa Rica.

Purchased, 1879.

Of uncertain species.

243. The anterior portion of the upper jaw of a *Mycetes*, including the incisors, canines, premolars, and first molar teeth.

Family HAPALIDÆ.

Dentition:—i. $\frac{2}{2}$, c. $\frac{1}{1}$, pm. $\frac{3}{3}$, m. $\frac{2}{2} = \frac{8}{8}$: total 32.

Genus MIDAS.

Geoffroy, Ann. du Muséum, xix. p. 120 (1812).

Midas ædipus.

Simia ædipus, Linnæus, Syst. Nat. edit. 12, i. p. 41 (1766).

THE PINCHE MONKEY.

Hab. U.S. of Colombia.

244. Articulated skeleton of male.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 25. The thirteenth pair of ribs is rudimentary.

Prepared from an animal which died in the Zoological Society's Gardens, 3 Dec. 1863.

Purchased, 1863.

Midas rosalia.

Simia rosalia, Linnæus, Syst. Nat. edit. 12, i. p. 41 (1766).

THE SILKY MARMOSET.

Hab. South-eastern Brazil.

245. Skull.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1879.

Genus HAPALE.

Hapale, Illigor, Prodromus Syst. Mamm. et Av. p. 71 (1811) Jacchus, Geoffroy, Ann. du Muséum, xix. p. 118 (1812).

Hapale jacchus.

Simia jacchus, Linnæus, Syst. Nat. edit. 12, i. p. 40 (1766).

COMMON MARMOSET.

Hab. South-eastern Brazil.

246. Articulated skeleton. O. C. 4664.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 23. The thirteenth pair of ribs is missing.

Purchased.

247. Articulated skeleton. O. C. 4663.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 19 (incomplete).

Purchased.

248. Imperfect skeleton of adult.

249. Skeleton. O. C. 4665.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 18 (incomplete).

South Collection. Purchased, 1835.

250. Skull.

Presented by the Zoological Society, 1867.

Hapale penicillata.

Jacchus penicillatus, Geoffroy, Ann. du Muséum, xix. p. 119 (1812).

THE BLACK-EARED MARMOSET.

Hab. South-eastern Brazil.

251. Skull of young.

Presented by C. E. Flower, Esq., 1871.

Suborder LEMUROIDEA.

Family LEMURIDÆ. Subfamily IndrisinÆ.

Dentition:—i. $\frac{2}{1}$, e. $\frac{1}{1}$, p. $\frac{2}{2}$, m. $\frac{3}{3} = \frac{8}{7}$: total 30.

The homologies of the lower procumbent front teeth are not satisfactorily determined; but the above formula is that usually adopted. The presence of a small tooth in the milk-dentition (see No. 256), first noticed by A. Milne-Edwards, between the posterior of the predecessors of these and the first milk-molar, is against this view, as it looks like the homologue of a canine not represented in the permanent dentition.

Genus INDRIS.*

Indri, Geoffroy, Rapport nat. des Makis, Mag. Encyclop. 2^e année, t. i. p. 46 (1796).

Lichanotus, Illiger, Prodromus Syst. Mamm. et Av. 1811. Indris, Geoffroy (1812) and many modern authors.

Indris brevicaudatus.

Lemur indri, Gmelin, Syst. Nat. i. p. 17 (1788). Indri brevicaudatus, Geoffroy, loc. cit. p. 46 (1796).

THE INDRI.

Hab. Madagascar.

252. Articulated skeleton. O. C. 4631.

Vertebræ: C. 7, D. 12, L. 9, S. 4, C. 9 (according to O. C.; several are now missing).

Purchased.

253. Skull.

Purchased, 1882.

254. Right pes.

Presented by J. W. Clark, Esq., 1871.

Genus PROPITHECUS.

Bennett, Proc. Zool. Soc. 1832, p. 20.

Propithecus diadema.

Bennett, loc. cit. 1832.

Hab. Madagascar.

255. Articulated skeleton.

Vertebræ: C. 7, D. 12, L. 8, S. 3, C. 28.

Received in exchange, 1874.

* This genus was first separated from the other Lemurs by Cuvier and Geoffroy in their "Mémoire sur une nouvelle division des Mammifères" (Mag. Encyclop. 1795, t. i. p. 182), but not distinguished by any Latin name, the animals composing it being only spoken of as 'les Indris.' Geoffroy in 1796 (ut suprà) first used Indri as a Latin generic name; but he subsequently (Mém. du Mus. xix. p. 157, 1812) modified it to Indris. Later anthors have used both forms about equally, as seen in the copious bibliography in the 'Mammifères de Madagascar' of A. Milne-Edwards and Grandidier.

256. Skull of very young.

The milk-dontition is in place, consisting apparently of i. $\frac{2}{2}$, c. $\frac{1}{1}$, m. $\frac{2}{3}$.

Purchased, 1875.

Propithecus verreauxii.

Grandidier, Rev. et Mag. de Zoologie, 1867, p. 84.

257. Skull, mutilated at the base.

Taken from a damaged skin assigned to *P. coquerelii*, A. Milne-Edwards; now considered to be a variety of *P. verreauxii* (see A. Milno-Edwards and Grandidier, Mammifères de Madagascar, i. p. 314, 1875).

Purchased, 1872.

Genus AVAHIS.

Microrhynchus, Jourdain, Thèse inaug. à la Fac. dos Sciences de Grenoble, 1834.

Avahis, Jourdain, l'Institut, t. ii. p. 231 (1834).

The former name was proposed first, but was withdrawn by its author in consequence of its having previously been applied to a genus of Coleoptera. Nevertheless it has been revived by Gray and others.

Avahis laniger.

Lemur laniger, Gmelin, Syst. Nat. i. p. 44 (1788).

THE WOOLLY LEMUR.

Hab. Madagasear.

258. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 8, S. 3, C. 23.

Purchased, 1871.

259. Skull.

Subfamily LEMURINÆ.

Dentition:—i. $\frac{2}{2}$, e. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3} = \frac{9}{9}$: total 36.

In the fore part of the lower jaw are six, closely approximated, elongated, procumbent teeth. It is usual (after Geoff. St.-Hilaire) to consider the outermost of these as representing the

eanine, and thus to reduce the dental formula to that of the Cebidæ. The tooth generally considered as the first premolar, on account of its situation, assumes the form and function of a canine.

Genus HAPALEMUR.

Is. Geoffroy, Cat. Mus. Hist. Nat. Paris, p. 74 (1851).

Hapalemur griseus.

Lemur griseus, Geoffroy, Rapport nat. des Makis, Mag. Encyclop. 2º année, i. p. 48 (1796).

THE GREY LEMUR.

Hab. Madagascar.

260. Articulated skeleton.

Vertebræ: C. 7, D. 12, L. 6, S. 3, C. 27.

Received in exchange, 1874.

Hapalemur simus.

Gray, Proc. Zool. Soc. 1870, p. 829.

261. Skull and boncs of the right fore and hind extremities.

 $Purchased,\,1870.$

Genus LEMUR.

Linnæus, Syst. Nat. edit. 12, i. p. 44 (1766).

Lemur varius.

Is. Geoffroy, Cat. Mus. Hist. Nat. Paris, p. 71 (1851).

THE RUFFED LEMUR.

Hab. Madagascar.

The skull of this species is readily distinguished from that of any other members of the genus by its superior size.

262. Articulated skeleton of female.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 27.

Prepared from an animal received from the Gardens of the Zoological Society, 27 Oct. 1862.

Purchased, 1862.

263. Skull. O. C. 4661.

The roots of the teeth are exposed on the left side.

Purchased.

The specific determinations of most of the remaining specimens of the genus cannot be relied upon, as no fixed osteological or dental characters have as yet been shown to accompany the numerous variations of external colouring and character of the fur to which these animals are liable. The specimens in the collection are, however, readily divisible into two sections by the characters of the skull.

A. With comparatively narrow muzzle, and with the anterior part of the frontal bone depressed between the orbits, in consequence of the small size of the frontal sinus. Some, if not all the individuals of this section belong to

Lemur catta.

Linnæus, Syst. Nat. edit. 12, i. p. 44 (1766).

THE RING-TAILED LEMUR.

Hab. Madagascar.

264. Skull.

Purchased, 1879.

265. Skeleton, wanting the right hinder extremity. O. C. 4641-4651.

Vertebræ: C. 7, D. 13, L. 5, S. 3, C. 18 (incompleto).

Though the fore limbs are smaller, the hind limbs are fully as large as in *L. varius*; and the tail, if emplete, would be longer, the individual vertebræ being much more elongated.

Hunterian.

266. The cranium and right humerus, radius, ulna, femur, and tibia longitudinally bisected. O. C. 4652-4657.

The proportions of the bones agree with the last.

Hunterian.

Lemur catta.

267. Skull. O. C. 4639.

Hunterian.

268. Skull. O. C. 4640.

British Museum.

269. The separate bones of the cranium of young. O. C. 4660.

Purchased.

B. With comparatively short, broad muzzle, and large frontal sinuses, causing a rounded prominence of the frontals between the orbits.

a. Large size.

Lemur albifrons?

Geoffroy, Rap. nat. des Makis, Mag. Encyclop. 2^e ann. t. i. p. 48 (1796).

270. Skeleton. O. C. 4638.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 18 (incomplete).

Brookes Collection. Purchased, 1828.

b. Smaller size.

Lemur mongoz?

Linnæus, Syst. Nat. edit. 12, i. p. 44 (1766).

271. Articulated skeleton. O. C. 4635.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 22 (incomplete).

Purchased.

272. Articulated skeleton. O. C. 4636.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 27.

Brookes Museum. Purchased, 1828.

273. Skull. O. C. 4637.

The teeth have been removed from the left side of both upper and lower jaws, and are separately displayed.

Hunterian.

274. Skull.

Presented by the Zoological Society, 1867.

275. Cranium, vertically and transversely bisected through the auditory bullæ. O. C. 4659.

Presented by Professor Owen.

Lemur rufipes.

Gray, Proc. Zool. Soc. 1872, p. 852.

276. Natural skeleton of very young.

The milk-incisors only are in place. Collected by Mr. Crossley in Madagascar.

Purchased, 1875.

Genus LEPIDOLEMUR.

Lepilemur, Is. Geoff. Cat. Mus. Hist. Nat. Paris, p. 75 (1851). Galeocebus, Wagner, Schreber, Säugthiere, Supp. p. 147, 1855. Lepidolemur, Peters, Monatsbericht. Acad. Berlin, 1874, p. 690.

The animals of this genus have no ineisors, except in the very young state.

Lepidolemur mustelinus.

Is. Geoffroy, loc. cit. p. 76.

Hab. Madagascar.

277. Skull.

Purchased, 1872.

278. Skull.

Purchased, 1879.

Genus CHIROGALEUS.

Chirogaleus, Geoffroy, Ann. du Muséum, t. xix. p. 171 (1812). Microcebus, Geoffroy, Cours de l'Hist. Nat. des Mammifères, 1828.

In this genus and the next the tarsus is elongated by the great development of the anterior portion of the os calcis and the naviculare.

Chirogaleus furcifer.

Lemur furcifer (not described), Blainville, Ostéographie, Lemur, p. 35, pl. vii. fig. 2 (1839).

Chirogaleus furcifer, Is. Geoffroy, Comptes Rendus de l'Acad. des Sc. xxxi. p. 876 (1850); Cat. Mus. Paris, p. 77 (1854).

Phaner furcifer, Schlegel, Cat. Mus. Pays-Bas, p. 319 (1876).

Hab. Madagascar.

279. Skeleton.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 28.

Received in exchange, 1874.

Chirogaleus milii.

Geoffroy, Cours de l'Hist. Nat. des Mammifères, p. 25 (1828).

Hab. Madagascar.

280. Anterior portion of skull and lower jaw, with complete dentition.

Purchased, 1882.

Chirogaleus pusillus.

Lemur pusillus, Geoffroy, Bull. Soc. Philomat. i. p. 89 (1795). Chirogaleus smithii, Gray, Ann. & Mag. Nat. Hist. 1842, x. p. 257.

Hab. Madagascar.

281. Articulated skeleton of nearly adult.

The posterior milk-molars of both jaws are still in place, with all the permanent molars, causing the dentition to simulate that of *Galago*.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 24. From Mr. Crossley's Madagascar collection.

Purchased, 1875.

282. Imperfect skull.

All the permanent teeth are in place.

Purchased, 1879.

Genus GALAGO.

Galago, Geoffroy, Rapp. Nat. dos Makis, Mag. Encyclop. 2° ann. t. i. p. 49 (1796).

Otolicnus, Illiger, Prodromus Mamm. et Avium, p. 74 (1811).

Distinguished from the last by the quadrituberculated third upper premolar. All the known species inhabit continental Africa.

Galago crassicaudatus.

Geoffroy, Ann. du Muséum, t. xix. p. 166 (1812).

THE GRAND GALAGO.

Hab. Eastern Africa.

283. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 25.

Purchased, 1869.

284. Imperfect skeleton.

Many of the bones are mounted in the separate series.

Purchased, 1870.

Galago monteiri.

Bartlett, Proc. Zool. Soc. 1863, p. 231.

MONTEIRO'S GALAGO.

285. Skull.

From Angola. Taken from the type specimen described and figured in the Proceedings of the Zoological Society, 1863.

Presented by J. Monteiro, Esq., 1864.

Galago sennariensis.

Gray, Proc. Zool. Soc. 1863, p. 147.

286. Skull.

Obtained by the donor on the White Nile.

Presented by Dr. James Murie, 1863.

Galago alleni.

Waterhouse, Proc. Zool. Soc. 1857, p. 87.

ALLEN'S GALAGO.

Hab. West Africa.

287. Skeleton of young.

The milk-teeth and the first permanent molars are in place. Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 21.

Prepared from a specimen in the spirit stores, 1867.

Subfamily LORISINE.

Genus LORIS.

Loris, Geoffroy, Rapp. Nat. des Makis, Mag. Encyclop. 2° ann. i. p. 48 (1796).

Stenops, Illiger, Prod. Syst. Mamm. et Av. p. 73 (1811).

Loris and Nycticebus, Geoffroy, Ann. du Muséum, xix. pp. 162 and 163 (1812).

Loris gracilis.

Loris gracilis, Geoffroy, loc. cit. 1796.

THE SLENDER LORIS.

Hab. Ceylon.

288. Articulated skeleton. O. C. 4633.

Vertebræ: C. 7, D. 15, L. 8, S. 2, C. imperfect.

The fifteenth ribs are rudimentary and ankylosed to the vertebra on both sides.

Purchased.

289. Articulated skeleton. O. C. 4632.

Vertebræ: C. 7, D. 14, L. 9, S. 2, C. 7.

Hunterian.

290. Skeleton (not quite perfect) of female.

Vertebræ: C. 7, D. 14, S. 9.

From an animal which died in the Zoological Society's Gardens, 24 June, 1862.

Purchased, 1862.

Loris tardigradus.

Lemur tardigradus, Linnœus, Syst. Nat. edit. 12, i. p. 44 (1766). Loris tardigradus, Geoffroy, loc. cit. (1796).

Stenops tardigradus, Illiger, Prod. Syst. Nat. Mamm. et Av. p. 73 (1811).

Nycticebus bengalensis, Geoffroy, Ann. du Muséum, xix. p. 164 (1812).

THE SLOW LORIS.

Hab. Malay countries, Sumatra, Borneo.

291. Imperfect skeleton.

Vertebræ: C. 7, D. 16, L. 7, S. 3, C. 12. From Sumatra.

Presented by Sir T. Stamford Raffles.

Loris javanicus.

Nycticebus javanicus, Geoff. Ann. du Muséum, xix. p. 164 (1812). Stenops javanicus, auct.

THE JAVAN LORIS.

Hab. Java.

292. Articulated skeleton.

Vertebræ: C. 7, D. 17, L. 6, S. 3, C. 12.

Purchased, 1875.

Loris javanicus.

293. Skull of female.

From an animal which died in the Zoological Society's Gardens, Jan. 1862.

Genus PERODICTICUS.

Bennett, Proc. Zool. Soc. 1831, p. 109.

Perodicticus potto.

Lemur potto, Gmelin, Syst. Nat. p. 42 (1788).

Nycticebus potto, Geoffroy, Ann. du Muséum, t. xix. p. 165 (1812); Schlegel, Cat. Mus. Pays-Bas, p. 287 (1876).

Perodicticus geoffroyi, Bennett, loc. cit.

Bosman's Potto.

Hab. West Africa.

294. Articulated skeleton of female.

The right manus and pes are mounted in the Physiological Series (Organs of Motion).

Vertebræ: C. 7, D. 15, L. 6, S. 3, C. 20.

Prepared from the animal described in the Proceedings of the Zoological Society, 1869, p. 1.

Presented by F. M. Skues, Esq., 1869.

295. Skull, mutilated in the occipital region.

From the Gold Coast.

Presented by Staff-Surgeon J. R. Thomas, 1868.

296. Hyoid bones of male.

Purchased, 1874.

Perodicticus calabarensis.

Perodicticus calabarensis, J. A. Smith, Proc. R. Phys. Soc. Edin. 1860, p. 172.

Arctocebus calabarensis, Gray, Proc. Zool. Soc. 1863, p. 150.

THE "AWANTIBO" OR TAILLESS POTTO.

Hab. West Africa.

297. Skeleton.

Vortebræ: C. 7, D. 15, L. 7, S. 3, C. 9.

Prepared from the specimen (from Old Calabar) described in Professor Huxley's memoir in Proc. Zool. Soc. 1864, p. 314.

Presented by Andrew Murray, Esq., 1864.

Genus ADAPIS.

Cuvier, Ossemens Fossiles, iii. p. 265 (1822).

Adapis parisiensis.

Adapis parisiensis, Cuvier, loc. cit.

Paleolemur betillei, Delfortrie, Comptes Rendus de l'Acad. des Sciences, lxxvii. p. 64 (1873).

298. Cast of the cranium.

The original was found in the phosphate-of-lime beds (Uppor Miocene) at Béduer, Dopartment du Lot, France, and described by M. Delfortrie in the 'Actes de la Société Linnéenne de Bordeaux,' t. xxix. 1^{re} liv. 1872. It was subsequently idontified by Prof. Gaudry with the genus called Adapis by Cuvier, which, when only known by imperfect remains, was attributed to a pachyderm. This identification was afterwards fully confirmed by Filhol, who, however, does not consider it a true Lemurine, but as belonging to a group intermediate between the Lomurs and Pachyderms, to which he gives the name of Pachylemur (Annales des Sciences Géologiques, t. v. no. 4, 1874).

299. Cast of portion of the ramus of the mandible.

From the same locality.

Presented, with the above, by the Museum of Natural History at Paris, per Professor Gervais, 1873.

7() PRIMATES.

Family TARSIIDÆ.

Dentition:—i. $\frac{2}{1}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, $=\frac{9}{8}$: total 34.

Genus TARSIUS.

Storr, Prodromus Methodi Mammalium, 1780.

Tarsius spectrum.

Lemur tarsier, Erxleben, Syst. Reg. Animal. p. 71 (1777). Lemur spectrum, Pallas, Glires, p. 275 (1778).

THE TARSIER.

Hab. Borneo, Celebes.

300. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 27.

Besides the very large size of the orbits, which, unlike those of the Lemuridæ, are separated by a nearly complete bony partition from the temporal fossæ, the chief peculiarity of the skeleton of this animal is the excessive elongation of the os calcis and naviculare, far exceeding that of Galago and Cheirogaleus. The fibula differs from that of all the other Lemurs in being united at its distal end to the tibia.

Prepared from a specimen in the spirit stores, 1867.

Family CHIROMYIDÆ.

Dentition of adult :—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{0}$, m. $\frac{3}{3}$, $=\frac{5}{4}$: total 18. Incisors greatly developed, scalpriform, laterally compressed and of persistent growth.

Milk-dentition :—i. $\frac{2}{5}$, c. $\frac{1}{5}$, m. $\frac{2}{5}$.

Genus CHIROMYS.

Daubentonia, Geoffroy, Décado Philosophiquo, iv. p. 193 (1795)*.
 Cheiromys, Cuvior, Tab. do Classif. in Leçons d'Anatomie Comparée,
 i. (1800).

Chiromys, Illiger, Prodromus Syst. Mamm. et Av. p. 75 (1811).

Chiromys madagascariensis.

Sciurus madagascariensis, Gmelin, Syst. Nat. p. 152 (1788).

THE AYE-AYE.

Hab. Madagascar.

301. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 27.

The extreme attenuation of the third digit of the manus is a remarkable feature in the skoleton of this animal.

Purchased, 1865,

302. Skull and portions of the skeleton of female.

Prepared from the animal which lived in the Zoological Society's Gardens from August 1862 to April 1867, having been presented by Edward Mellish, Esq. The incisor teeth, which have grown abnormally, are figured by Dr. Murie in the 'Trans. Odontological Soc.,' vol. vi. pp. 63, 65, and 66 (1868).

Presented by the Zoological Society, 1867.

303. Cast of skull.

Purchased, 1862.

[•] Subsequently withdrawn by the author in favour of Cuvier's name, *Daubentonia* having been previously given to a genus of plants. It therefore should not have been revived, as by Gray (Cat. Monkeys &c. Brit. Mus. 1870) and Schlegel (Cat. Mus. Pays-Bas).

Order CARNIVORA.

Suborder CARNIVORA VERA or FISSIPEDIA.

Family FELIDÆ.

Genus FELIS.

Linnæus, Syst. Nat. ed. 12, i. p. 60 (1766).

Dentition:—i. $\frac{3}{2}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{1}{1}$, $\frac{8}{7}$: total 30. Upper anterior premolar $(\frac{p.2}{2})$, sometimes absent.

Felis leo.

Linnæus, Syst. Nat. ed. 12, i. p. 60 (1766).

THE LION.

Hab. Africa and South-western Asia.

304. Articulated skeleton. O. C. 4475.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 19 (incomplete).

Hunterian.

305. Skeleton of rather small size, probably female.

Many of the bones are mounted in the separate series. The atlas, axis, and some other vertebræ are missing.

Hunterian?

306. Skull, J. O. C. 4480.

Purchased.

307. Skull, *3*. O. C. 4479.

Hunterian.

308. Skull of an old animal, in which many of the teeth are absent or broken, 3. O. C. 4478.

Hunterian.

309. Skull, ♀. O. C. 4481.

Hunterian.

310. Skull, ♀. O. C. 4482.

Hunterian.

311. Cranium, vertically and longitudinally bisected, φ . O. C. 4483.

312. Skull.

The left zygoma has been broken during life. The anterior line of fracture (across the malar bone, just behind its junction with the maxilla) has been smoothly rounded, showing that the injury must have happened long before death. From this point to the junction of the malar and the squamosal the arch is deficient; but whether all was lost during life, or a portion remained united by suture with the squamosal and has been lost in cleaning the skull, cannot be ascertained, as no history was obtained with the specimen.

Presented by John Birkett, Esq., 1876.

313. Skull of young, probably female.

The first lower milk-molars are retained.

- 314. A section of the left superior maxilla with the three premolars and the tubercular molar. O. C. 4486.
- **315.** A left lower molar. O. C. 4487.
- 316. Deciduous canine and sectorial tooth shed by a young lion at the Zoological Society's Gardens, June 1849.

Presented by the Zoological Society.

317. Articulated bones of the right anterior and posterior extremities. O. C. 4476 and 4477.

Hunterian.

Felis leo.

318. Right and left clavicles of female.

Presented by the Zoological Society, 1880.

319. Hyoid of adult female.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1873.

320. Skull of an Asiatic Lion. O. C. 4484.

From Northern Guzerat.

Presented by Dr. B. C. Henderson, 1822.

321. Skull of an Asiatic Lion, J. O. C. 4485.

From an animal killed 20 May, 1827, near Assund, Northwestern Hindoostan.

Presented by Colonel Finch, 1830.

Felis spelka.

Goldfuss, Nov. Act. Acad. Nat. Cur. x. p. 489 (1821).

THE CAVE-LION.

This nominal species is probably identical with Felis leo.

322. Cranium and part of the left ramus of the lower jaw.

From a cave in Belgium.

Presented by Professor D. T. Ansted, 1845.

323. Left superior canine tooth. O. C. F. 167.

From Kent's Holo, Torquay, Devon.

Presented by Gerard Smith, Esq.

324. Casts of various bones found in the Bone-cave at Gailen-reuth, near Streitburg, Bavaria. O. C. F. 168 to 209.

Presented by Sir Philip de M. Grey-Egerton, Bart.

FELIDÆ. 75

Felis tigris.

Linnœus, Syst. Nat. ed. 12, i. p. 61 (1766).

THE TIGER.

Hab. Southern and Eastern Asia.

325. Articulated skeleton, J.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 22 (incomplete).

326. Articulated skeleton of female.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 25. Shot by the donor at Joypore, North India, 5 Feb. 1876.

Presented by H.R.H. The Prince of Wales, K.G., 1876.

327. Incomplete skeleton of adult male, wanting the skull and bones of the feet.

Northern India.

Presented by H.R.H. The Prince of Wales, K.G., 1876.

328. Skeleton of adult male.

The animal measured 10 feet 4 inches long from the nose to the tip of the tail before skinning. Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 12. The remaining caudal vertebræ and some of the phalanges are wanting.

Shot by Captain Renniek at Erinpoora, Rajputana.

Presented by Sir Joseph Fayrer, M.D., K.C.S.I., 1877.

329. Imperfect skeleton.

From Assam.

Presented by Captain W. J. Williamson, Inspector of Police, Shillong, Assam, 1878.

Felis tigris.

330. Imperfect skeleton.

From Assam.

Presented by Captain W. J. Williamson, 1878.

331. Imperfect skeleton.

Many of the bones are mounted in the separate series.

Hunterian?

332. Imperfect skeleton. O. C. 4523 to 4534. Hunterian.

333. Skull, J. O. C. 4506. Hunterian.

334. Skull. O. C. 4507. *Hunterian*.

335. Skull. O. C. 4508. *Hunterian*.

336. Skull. O. C. 4509. *Hunterian*.

337. Skull, ♀. O. C. 4511. *Hunterian*.

338. Skull, ♀. O. C. 4515. *Hunterian*.

339. Skull, ♀. C. C. 4516. *Hunterian.*

340. Cranium, 9. O. C. 4517. *Hunterian*.

341. Cranium. O. C. 4520. *Hunterian*.

342. Skull, 3. O. C. 4510. Presented by Colonel Finch, 1830.

343. Skull, longitudinally and vertically bisected, &.

344. Skull, &

345. Skull of female.

From Bengal.

Presented by R. C. Beavan, Esq., 1867.

346. Skull. O. C. 4514.

Artificially stained a dark colour to show by contrast the dental system.

Presented by Sir William Blizard, 1813.

347. Skull, ?.

From Nepal.

Presented by Bryan H. Hodgson, Esq., 1846.

348. Cranium, ♂.

Prepared to show the structure of the tympanic cavities. Figured in Proc. Zool. Soc. 1869, p. 16.

349. Anterior portion of the skull of an albino, or white variety, of the Bengal Tiger, 3. O. C. 4519.

The head of the recent animal is depicted in the oil-painting by Robert Homo in the Conservator's Office.

Presented by Sir Everard Home, Bart., 1807.

350. Skull of young male. O. C. 4513.

The pormanont dentition has been acquired.

Presented by Sir T. Stamford Raffles, 1821.

Felis tigris.

351. Skull (much mutilated) of a Chinese Tiger.

From an animal killed in a pitfall near Amoy.

Presented by George Hughes, Esq., Commissioner of Customs at Amoy, 1865.

352. The anterior part of the skull and lower jaw of a Tiger, with perfect dentition.

From Bengal.

353. Skull of a new-born Tiger.

From an animal born in the Gardens of the Zoological Society. Purchased, 1868.

354. Eight canine teeth. O. C. 4535.

Hunterian.

355. Canine tooth longitudinally bisected. O. C. 4536. Presented by Sir Everard Home, Bart., 1807.

356. Hyoid bones.

Purchased, 1875.

357. Right clavicle. Presented by Prof. Struthers, 1868.

Felis cristata.

Falconer and Cautley, Asiatic Researches, xix. p. 135 (1836).

358. Cranium. O. C. F. 210.

From the tertiary strata of the Sivalik Hills.

Presented by Walter Ewer, Esq.

Felis pardus.

Linnœus, Syst. Nat. od. 12, i. p. 61 (1766).

THE LEOPARD OF PANTHER.

Hab. Southern Asia and Africa.

359. Skull and imperfect skeleton of adult of large size, 3.

From the West Coast of Africa.

Du Chaillu Collection. Purchased, 1866.

360. Skull, J. O. C. 4540.

From Africa.

Purchased.

361. Articulated skeleton. O. C. 4585.

Described in the Osteological Catalogue of 1831, p. 63, as a "small Indian Tiger, which died in the menagerie at Exeter Change."

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 23.

Purchased.

362. Skeleton.

From an animal killed in North-east Bengal by Captain Lewins.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 23.

Presented by Sir Joseph Fayrer, M.D., K.C.S.I., 1876.

363. Skull of a Black Leopard, J. O. C. 4561.

From India.

Presented by Dr. B. C. Henderson, 1822.

364. Skull of a Black Leopard, J. O. C. 4560.

From India.

Presented by Dr. B. C. Henderson, 1822.

Felis pardus.

365. Skull of a Black Leopard, \circ . O. C. 4562.

From India.

Presented by Dr. B. C. Henderson, 1822.

366. Incomplete skeleton of a Leopard. O. C. 4544 to 4559 inclusive.

The skull has been divided into three transverse sections.

Purchased.

- 367. Skeleton (nearly complete)*.
- 368. Skeleton (nearly complete).

 Labelled "Benes of a Tiger."
- 369. Imperfect skeleton.
- 370. Imperfect skeleton.
- 371. Imperfect skeleton.

 Labelled "Black Leopard."
- 372. Skull, &.
- 373. Skull, ♂.
- 374. Skull of small size.
- This and the nine following specimens were found in the stores in 1862 without histories. Some are probably Hunterian.

FELIDÆ. 81

375. Skull. O. C. 4541.

Purchased.

376. Mutilated cranium, vertically and longitudinally bisceted.
O. C. 4543.

Hunterian.

377. Skull of young. O. C. 4542.

The milk-teeth are still mostly in place.

Hunterian.

378. Mutilated cranium of young.

The premaxillary and nasal bones are wanting; but the maxillary dentition is shown. The milk-canines and sectorial teeth are still in place. The permanent sectorial and tubercular molars are just appearing.

379. Skull of young.

The milk-dentition is in place.

Shot at Maunbhoom, Ambekanuggar, 1865. Marked "Small hill variety."

Presented by R. C. Beavan, Esq., 1867.

380. Skull of very young.

From an animal born in the Zoological Society's Gardens.

Purchased, 1868.

381. Hyoid bones.

From the west coast of Africa.

Presented by Andrew Murray, Esq.

382. Hyoid bones.

From an animal which died in the Zoological Society's Gardens.

Purehased, 1873.

Felis uncia.

Schreber, Säugthiere, iii. tab. c. (1778).

THE OUNCE.

Hab. Central Asia.

383. Skeleton.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. incomplete. From Thibet.

Presented by Maj.-Gen. Richard Strachey, R.E., 1851.

Felis onca.

Linnæus, Syst. Nat. ed. 12, i. p. 61 (1766).

THE JAGUAR.

Hab. America.

384. Skeleton, nearly complete. 3.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 18 (incomplete).

385. Skull, J. O.C. 4537.

Purchased.

386. Skull, J. O. C. 4538.

Purchased.

387. The right upper jaw and both rami of lower jaw of a young Jaguar, with a great part of the deciduous dentition. O. C. 4539.

Presented by Prof. Owen.

Felis concolor.

Linnæus, Mantissa Plantarum, p. 522 (1771).

THE PUMA.

Hab. America.

83

388. Imperfect skeleton. O. C. 4563 to 4579 inclusive.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. incomplete.

"The animal was for some time alive, in the possession of Edmund Kean, Esq., by whom it was presented after death to Mr. Brookes."—Osteological Catalogue, 1831.

Brookes Collection. Purchased, 1828.

389. Skull.

Of very small size, probably Q. From Costa Rica.

Purchased, 1879.

390. Maxillary and palatal bones and mandible of a young Puma. O. C. 4580.

The milk sectorial teeth are retained in both jaws.

Hunterian.

391. Hyoid bones.

Purchased, 1870.

Felis macrocelis.

Temminek, Monographies de Mammalogio, i. p. 102 (1827).

THE CLOUDED TIGER.

Hab. Assam, Malay countries.

392. Skull. O. C. 4586.

Dentition:—i. $\frac{3}{3}$, e. $\frac{1}{1}$, p. $\frac{2}{2}$, m. $\frac{1}{1}$: total 28.

This was originally labelled "Leopard, killed at Casir, North Africa." No specific determination was assigned to it in the Old Catalogue; but as it presents the usual cranial characters of this species, it must be supposed that there has been some error as to the locality.

Purchased.

Felis chrysothrix.

Felis aurata, Temminck, Monographies do Mammalogie, i. p. 120 (1827) (withdrawn).

F. chrysothrix, Tomminek, ibid. p. 251.

F. rutilus, Waterhouse, Proc. Zool. Soc. 1842, p. 130.

THE AFRICAN GOLDEN CAT.

Hab. West Africa.

Felis chrysothrix.

393. Skeleton.

The anterior upper premolar is extremely small, and has one root.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 19.

From the west coast of Africa.

Presented by Staff-Surgeon J. R. Thomas, 1873.

Felis serval.

Schreber, Säugthiere, iii. tab. cviii. (1778).

THE SERVAL.

Hab. Africa.

394. Hyoid bones.

Purchased, 1869.

395. Hyoid bones.

Purchased, 1870.

Felis viverrina.

Felis viverrinus, Bennett, Proc. Zool. Soc. 1833, p. 68.

THE VIVERRINE CAT.

Hab. India.

396. Skull.

Of small size; probably female. From Nepal.

Presented by Bryan H. Hodgson, Esq., 1846.

Felis bengalensis.

Felis bengalensis, Desmarest, Mammalogie, Suppl. p. 541 (1822). Leopardus ellioti, Gray, Ann. & Mag. Nat. Hist. x. p. 260.

THE BENGAL LEOPARD CAT.

397. Skull.

From Nepal.

Presented by Bryan H. Hodgson, Esq., 1846.

Felis pardalis.

Linneus, Syst. Nat. od. 12, i. p. 62 (1766).

THE OCELOT.

Hab. America.

398. Hyoid bones.

Purchased, 1874.

Felis yaguarundi.

F. yaguarundi, Wagner, Schreber Supp. ii. p. 542 (1841). F. yagouaroundi, Desmarest, Mammalogie, p. 230 (1820).

Hab. Central and South America.

399. Hyoid bones.

From an animal which died in the Zoological Society's Gardens in 1874.

Purchased.

Felis catus.

Linnæus, Syst. Nat. ed. 12, i. p. 62 (1766).

THE EUROPEAN WILD CAT.

400. Articulated skeleton of male.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 20. Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{2}$, m. $\frac{1}{1}$, = 30.

From Scotland. The animal was presented to the Zoological Society by the Earl of Seafield, 7 May, 1864, and lived in the Gardens till 22 Nov., 1866. The skin is in the British Museum.

Purchased, 1866.

Felis catus.

401. Skull.

From Dunrobin, Sutherland.

Presented by Colonel Teesdale, 1872.

402. Skull, wanting the oeeiput.

Presented by the Earl of Selkirk.

403. Cranium of male.

Killed in Sutherlandshire in 1867.

Presented by Lawson Tait, Esq., 1881.

404. Skeleton of hybrid between *F. catus* and *F. domestica*.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 22.

Presented by Frank Buckland, Esq., 1871.

Felis caffra.

Felis cafra, Desmarest, Mammalogie, Suppl. p. 540 (1822).

F. maniculata, Rüppell, MS. in Temminek, Monographies de Mammalogie, i. p. 128 (1827).

F. caligata, Temminek, op. cit. p. 123.

THE AFRICAN WILD CAT.

IIab. Africa and Southern Asia.

405. Skull, d. O. C. 4606.

Purchased.

Felis domestica.

THE DOMESTIC CAT.

The Common Cat of English households was imported into Europe from the East, probably from Egypt, and is supposed to be derived from the last-mentioned species, and not from the Wild Cat of our own country.

406. Articulated skeleton. O. C. 4608.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{2}$, m. $\frac{1}{1}$, total 30. Vertobræ: C. 7, D. 13, L. 7, S. 3, C. 19.

South Collection. Purchased, 1835.

407. Skeleton of male.

Many of the bones are mounted in the separate series.

Presented by Mr. J. M'Ava, 1865.

408. Skeleton.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 22.

Presented by W. Clift, Esq., 1834.

409. Cranium, vertically and longitudinally bisected. O. C. 4609. Hunterian.

410. Skull. O. C. 4610.

Presented by W. Clift, Esq.

411. Skull. Presented by Mr. Philip Wright, 1866.

412. Skull. O. C. 4611. Presented by Henry Cline, Esq.

413. Skull. O. C. 4612. Presented by Henry Cline, Esq.

414. Skull.

It has a supernumerary premolar on the left side of the upper jaw, internally and partly posteriorly to p. 3, of which it appears to be a reduplication.

Presented by R. Lydekker, Esq., 1872.

415. Cranium. O. C. 4613.

The usual anterior premolar $(\frac{p-2}{2})$ is absent on both sides.

Prepared in 1845.

416. The separate bones of the skull. O. C. 4615.

Presented by William Home Clift, Esq.

417. Skeleton of a kitten, six weeks old. Purchased, 1875.

Felis domestica.

- 418. Skeleton of a kitten, fourteen days old. Purchased, 1875.
- 419. Skeleton of a new-born kitten.

Presented by Mr. Philip Wright, 1868.

420. Skull of a kitten, about three months old.

Most of the milk-teeth are retained.

Prepared in 1867.

- 421. Skull of young cat, showing changing dentition. O. C. 4614. Prepared in 1845.
- **422.** Skull of a kitten. Parker Collection. Purchased, 1858.
- 423. Skull and hyoid bones of a kitten eight weeks old.

Purchased, 1870.

424. Skull of a new-born kitten.

Parker Collection. Purchased, 1858.

425. Skull of a new-born kitten.

Parker Collection. Purchased, 1858.

426. Skull of a new-born kitten.

Parker Collection. Purchased, 1858.

427. A series of preparations illustrating the development of the teeth of the Domestic Cat.

The numbers on the bones show the age of each animal in weeks. A MS. description by the donor accompanies the specimens.

Presented by Caleb B. Rose, Esq., 1856.

428. Articulated skeleton of a female of the tailless or Manx variety of cat.

The caudal vertobræ are quite rudimentary; and two of the lumbar are ankylosed together, although the animal was quite young, having died in labour with her first litter of kittons.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 3.

Presented by Lawson Tait, Esq., 1877.

429. The reduced caudal vertebræ of a short-tailed variety, called Malay Cat. O. C. 4616.

From Manilla. The specimen is described and figured in the 'London Medical Gazetto,' vol. viii. (1831), p. 333.

Presented by Dr. George Bennett, 1831.

430. The reduced caudal vertebræ of another Malay Cat, from Manilla. O. C. 4617.

Presented by Dr. George Bennett, 1831.

Felis caracal.

Gueldenstaedt, Nov. Cemm. Acad. Imp. Petrep. xx. p. 500 (1776).

THE CARACAL OF PERSIAN LYNX.

Hab. South Asia and Africa.

431. Skeleton, not quite complete.

Labelled formorly, "Bones of a Shargoss"*. In the Hunterian MS. published by Pref. Owen, vol. ii. p. 50, is an account of the dissection of the "Shargess," doubtless the individual which furnished this skeleton.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 11 (incomplete).

Hunterian.

^{*} The Persian name of the Caracal is Siyah Gosh=black ear.

Felis caracal.

432. Incomplete skeleton. O. C. 4587 to 4605 inclusive.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{2}{2}$, m. $\frac{1}{1}$,= 28.

Hunterian.

433. Skull of female.

From an animal which died in the Gardens of the Zoological Society, after a short residence there.

Purchased, 1868.

434. Skull of young male.

The milk-dentition is present.

Taken from a skin of a wild animal.

Purchased, 1868.

435. Hyoid bones of female.

Presented by J. B. Perrin, Esq., 1870.

Felis lynx.

Linnæus, Syst. Nat. ed. 12, i. p. 62 (1766).

THE NORTHERN LYNX.

Hab. North Europe.

436. Skeleton.

From Mezen, North Russia.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{2}{2}$, m. $\frac{1}{1}$, =28. Vertebræ: C. 7, D. 13, L. 7, C. 3, C. 14.

Purchased, 1873.

Felis pardina.

Lynx pardina, Oken, in Temminck, Monographies de Mammalogie, p. 116 (1827).

THE SPANISH LYNX.

Hab. Spain.

437. Skull, mutilated in occipital region.

From an animal killed near Cordova.

Presented by Howard Saunders, Esq., 1869.

Felis brebirostris.

Felis brevirostris, Croiset et Johert, Oss. fossiles du Puy de Dôme, i. p. 200 (1828); Gervais, Zool. et Paléontol. Françaises, 2° édit. p. 229 (1859).

F. leptorhyncha, Gervais, ibidem, pl. xxvii. figs. 3 & 4.

438. Cast of skull.

The original was found in the "alluvions ponceuses de Perrier" at Ardé, near Issoire (Puy de Dôme), France.

> Presented by the Paris Museum of Natural History, per Prof. Gervais, 1869.

Genus CYNÆLURUS.

Cynailurus, Wagler, System der Amphibien, &c. p. 30 (1830).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{2}$, m. $\frac{1}{1}$, $=\frac{8}{7}$: total 30. Inner tubercle of the upper sectorial ($\frac{p.4}{2}$) nearly obsolete, though the root is present.

Cynælurus jubatus.

Felis jubata, Schreber, Säugthiere, iii. tab. ev. (1778).

THE CHEETAH.

Hab. Africa and South-west Asia.

439. Articulated skeleton of female.

Prepared from a specimen from South Africa, which lived in the Zoological Society's Gardens from 14 Octobor, 1857, to 6 March, 1863.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 22.

The anterior upper premolar (p.2) is retained on the left side, but is absent on the right side.

Purchased, 1863.

Cynælurus jubatus.

440. Imperfect skeleton, without eranium, of young.

From the stores; labelled "Hunting Tiger, young."

Hunterian.

441. Skull and atlas vertebra. O. C. 4581 and 4582.

The calvarium has been removed. The anterior upper premolar $(\frac{p.2}{})$ is retained on the right side, but is of extremely small size. It is wanting on the left side.

Presented by the Zoological Society.

442. Right and left clavicles of female.

Presented by the Zoological Society.

Genus MACHÆRODUS.

Machairodus, Kaup, Ossements Fossiles do Darmstadt, ii. p. 24 (1833).

Macharodus latidens.

Owen, British Fossil Mammals and Birds, p. 179 (1846).

443. Canine tooth. O. C. F. 103.

Figured in Owen's 'British Fossil Mammals,' p. 180. From Kent's Hole Cavern, Torquay.

Presented by the Earl of Enniskillen.

444. Two easts of eanine teeth. O. C. F. 103'.

The originals are from the same locality as the above.

Presented by Very Rev. Dr. Buckland.

445. Cast of upper left lateral ineisor.

Apparently the one figured by Owen, op. cit. p. 182, reversed. The original, from Kent's Holo, is in the British Museum.

Received in exchange.

Machærodus cultridens.

Ursus cultridens, Cuvier, Ossemens Fossiles, t. v. pt. ii. p. 517 (1824).

446. Cast of canine tooth. O. C. F. 104.

The original is from the drift or diluvium of the Val d'Arno, Italy.

Presented by J. B. Pentland, Esq.

Machierodus megantereon.

Felis meganthereon, Bravard, Monographie de deux Felis d'Auvergne, p. 143 (1828).

447. Cast of cranium.

The original, from "les alluvions ponceuses de la montagne de Perrier," near Issoire (Puy de Dôme), France, is figured by Gervais, 'Zoologie et Paléontologie Françaises,' pl. 27. fig. 1, where it is considered to be only a small variety of M. cultridens.

Presented by the Paris Museum of Natural History.

Machierodus neogeeus.

Hyana neogea, Lund, Kong. Danske Vidensk. Selskabs, viii. p. 94 (1841), mcmoir dated 1837.

Smilodon populator, Lund, ibid. ix. p. 293 (1842).

SABRE-TOOTHED TIGER.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{2}{1}$, m. $\frac{1}{1}$, = 26.

448. Anterior part of the cranium and lower jaw.

The immense sabre-like upper canines have been broken off two inches from the alveolar border.

From South America.

Machterodus neogeeus.

449. Cast of skull, with canine teeth complete.

In this specimen, the original of which is in the Paris Museum, and is figured in De Blainville's 'Ostéographie,' there is (as pointed out by Gervais, in the 'Comptes Rendus,' t. 87. p. 582, 1878) a small premolar tooth, of different sizes on the two sides of the lower jaw, not usually found in examples of this species.

Presented by the Paris Museum of Natural History, 1847.

Family VIVERRIDÆ.

Genus CRYPTOPROCTA.

E. T. Bennett, Trans. Zool. Soc. vol. i. p. 137 (1833). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{4}$, p. $\frac{4}{4}$, m. $\frac{1}{1} = \frac{9}{9}$, = 36.

Cryptoprocta ferox.

Bennett, loc. cit.

Hab. Madagascar.

450. Articulated skeleton of male.

In this specimen p.1 is very minute on the left side, and has been lost on the right side.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 29.

Purchased, 1872.

Genus VIVERRA.

Linnæus, Syst. Nat. ed. 12, i. p. 63 (1766).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{3 \text{ or } 4}$, m. $\frac{2}{2}$,=40 or 38.

Viverra civetta.

Schreber, Säugthiere, iii. tab. exi. (1778).

THE AFRICAN CIVET CAT.

Hab. Africa.

451. Articulated skeleton. O. C. 4264.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 19 (imperfect).

Brookes Collection. Purchased, 1828.

452. Skeleton, nearly complete. O. C. 4266 to 4282.

Hunterian.

453. Hyoid bones of female.

From an animal which died in the Zoological Society's Gardens, December 1870.

Purchased, 1871.

454. Skull of young, with the milk-dentition.

Purchased, 1871.

Viverra zibetha.

Linnæus, Syst. Nat. ed. 12, i. p. 65 (1766).

THE ZIBET.

Hab. India; Malay peninsula; South China.

455. Skull.

 $\frac{1}{p.1}$ is absent on the left, but present on the right side. From Malacca.

Purchased, 1871.

Viverra tangalunga.

Gray, Proc. Zool. Soc. 1832, p. 63.

THE SUMATRAN CIVET.

Hab. Malay peninsula and islands.

456. Skull.

From Malacca.

Purchased, 1871.

457. Anterior portion of skull, with complete dentition.

Purchased, 1868.

Viverra malaccensis.

Viverra malaccensis, Gmelin, Syst. Nat. i. p. 92 (1788).

Viverra indica, Geoffroy, in Desmarest, Nouv. Diet. d'Hist. Nat. vii. p. 170; Mammalogie, p. 210 (1820).

Viverricula indica, Hodgson, J. Asiatic Soc. Beng. x. p. 909 (1841).

THE RASSE.

Hab. India; Malay countries; China; Madagascar.

458. Skull.

From Umballah.

Presented by W. Crozier, Esq., 1852.

459. Skull.

Distinct alisphenoid eanals are present, as is usual in the family Viverridæ, but not in this species. The eanine and last upper molar of the right side are absent.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

460. Skull.

It has an alisphenoid eanal on the left side only.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

461. Skull.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

462. Skull.

From Nepal.

Presented by Bryan II. Hodgson, Esq.

463. Skull.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

464. Skull of young.

All the permanent teeth have been acquired; but the canines and posterior premolars are not fully developed.

From Nepal.

Presented by Bryan II. Hodgson, Esq.

Viverra schlegeli.

Pollen, Nederl. Tijdschr. voor de Dierkunde, iii. p. 78 (1866).

SCHLEGEL'S CIVET.

Hab. Comoro Islands.

465. Hyoid bones.

From an animal which died in the Zoological Society's Gardens, September 1874.

Viberra antiqua.

Pomel, Bull. Soc. géol. Fr. 1846, p. 379.

466. Cast of skull.

The original is from the Miocene at Tretoau, Département de l'Allier, France.

Presented by Professor Gervais, 1869.

Wiberra lemanensis.

467. Cast of skull.

Miocene, France.

Presented by Professor Gervais, 1869.

Genus GENETTA.

Cuvier, Règne Animal, i. p. 156 (1817), subgonus of *Viverra*. Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{4}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, =40.

Genetta vulgaris.

Viverra genetta, Linnœus, Syst. Nat. ed. 12, i. p. 65 (1766). Genetta vulgaris, Lesson, Manuel de Mammalogie, p. 173 (1827).

THE COMMON GENET.

Hab. South Europe.

PART II.

Genetta vulgaris.

468. Skull. O. C. 4284.

Said in O. C. to be of this species; but it wants the lobe on the inner side of the third upper premolar, usually present in the genus *Genetta*.

The teeth are removed from the right side and are separately displayed.

Hunterian.

Genetta tigrina.

Viverra tigrina, Schreber, Säugthiere, iii. p. 425, pl. exv. (1778).

THE BLOTCHED GENET.

IIab. South Africa.

469. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 7, S. 2, C. 29.

Presented by St. George Mivart, Esq., 1881.

470. Anterior part of skull.

Genus NANDINIA.

Gray, List of Mammalia Brit. Mus. p. 54 (1843).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{2}$ or $\frac{2}{2}$, = 38-40.

Nandinia binotata.

Viverra binotata, Reinwardt, in Gray's Spicilegia Zoologica, ii. p. 9 (1830).

THE TWO-SPOTTED PARADOXURE.

Hab. West Africa.

471. Articulated skeleton. O. C. 4285.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 26 (incomplete).

South Collection. Purchased, 1835.

472. Skull and imperfect skeleton of male.

The second upper molar is rudimentary on the right side and absent on the left.

From an animal (received from the Gold Coast) which had lived two years in the Gardons of the Zoological Society.

Presented by the Zoological Society, 1872.

473. Skull.

The second upper molar is absent on both sides.

Purchased, 1868.

Genus HEMIGALEA.

Hemigalus, Jourdan, Comptes Rendus de l'Acad. des Seiences, v. p. 442 (1837).

Hemigalea, Gray, Proc. Zool. Soc. 1864, p. 524.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, =40.

Hemigalea hardwickii.

Viverra hardwickii, Gray, Spicilegia Zoologiea, ii. p. 9 (1830). Paradoxurus derbianus, Gray, Proc. Zool. Soc. 1837, p. 67.

Hab. Borneo and Malacca.

474. Skeleton.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 26.

Presented by St. George Mivart, Esq., 1881.

Genus PARADOXURUS.

F. Cuvier, Hist. Nat. des Mammifères, No. 186 (1821). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, =40.

Paradoxurus typus.

F. Cuvier, loc. cit.

THE COMMON PARADOXURE OF PALM-CIVET.

Hab. India.

475. Skeleton, not complete. O. C. 4286 to 4303.

Presented by the Zoological Society.

Paradoxurus typus.

476. Skull of young.

The teeth are in process of being changed. From an animal that lived in the Zoological Society's Gardens.

Presented by J. Beswick Perrin, Esq., 1871.

Paradoxurus tytlerii.

Tytler, J. Asiat. Soc. Bengal, 1864, p. 188.

TYTLER'S PARADOXURE.

Hab. Andaman Islands.

477. Hyoid bones.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1871.

Paradoxurus larvatus.

Viverra larvata, Gray, Spieilegia Zoologiea, ii. p. 9 (1830). Paguma larvata, Gray, Proc. Zool. Soc. 1831, p. 95.

THE MASKED PARADOXURE.

Hab. China.

478. Hyoid bones of male.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1871.

Paradoxurus musanga.

Viverra musanga, Raffles, Trans. Linn. Soe. xiii. p. 252 (1822).

THE MUSANGA PARADOXURE.

Hab. Indian Archipelago.

479. Skeleton of male.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 25.

Presented by Sir T. Stamford Raffles.

480. Skull.

Presented by Sir T. Stamford Raffles.

Paradoxurus bondar.

Ichneumon bondar, MS. Dr. F. B. Hamilton, Drawing in Mus. India Company; on which was founded Viverra bondar, Blainville, in Desmarest, Mammalogie, p. 210 (1820).

481. Skull.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

Of uncertain species.

482. Skull.

The second upper molar $(\frac{m \cdot 2}{})$, usually present in the Viverridæ, is absent on both sides.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

483. Skull.

484. Skull of young, showing milk-dentition. O. C. 4304.

Purchased.

Genus ARCTICTIS.

Arctictis, Temminek, Prospectus de Monogr. des Mammifères, March 1824; Monographies, i. p. xxi, and ii. p. 310 (1827). Ictides*, Valenciennes, Ann. des Sciences Nat. iv. p. 57 (1824).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, =40. $\frac{m.2}{2}$ and $\frac{m.2}{p.1}$ often absent.

* The priority of these two names has been a subject of dispute; but, as in the first publication of *Ictides* by Valenciennes (*loc. cit.*) a reference is made in a footnote to Temminck's name *Arcticis* as occurring in the Prospectus of the Monographs, the latter has clearly the priority, even if the earlier publication (in 1820) referred to by Temminck cannot be verified: *cf.* F. Cuvier, Mammifères, article Binturong (footnote), and Temminck's Monographies as cited above.

Arctictis binturong.

Viverra? binturong, Raffles, Trans. Linn. Soc. [Dec. 5, 1820], xiii. p. 253 (1822).

Paradoxurus albifrons, F. Cuv. Mém. du Muséum, ix. p. 41 (1822).

THE BINTURONG.

Hab. Malay Peninsula and Islands.

485. Articulated skeleton.

The ungual phalanges and hyoid bones are wanting.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{3}$, m. $\frac{1}{2}$, =36. Vertebræ: C. 7, D. 14, L. 5, S. 3, C. 34.

Purchased, 1868.

486. Skeleton of young.

Many of the milk-teeth are still retained. Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 34.

Purchased, 1868.

487. Hyoid bones.

From an animal which died in the Zoological Society's Gardens in 1873.

488. Skull of young, with milk-dentition.

From Malacca.

Purchased, 1871.

Genus CYNOGALE.

Gray, Proc. Zool. Soc. 1836, p. 88.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, =40.

Cynogale bennettii.

Cynogale bennettii, Gray, loc. cit.

Potamophilus barbatus, S. Müller, Tijdschrift v. natuurl. Geschiedenis, v. p. 142 (1838–39).

Hab. Borneo.

489. Skull and bones of the limbs.

From Borneo.

Purchased, 1876.

Genus EUPLERES.

Doyèro, Ann. Sci. Nat. 1835, iv. p. 281.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, =40.

Eupleres goudoti.

Doyèro, loc. cit.

Hab. Madagascar.

490. Articulated skeleton.

Vortebræ: C. 7, D. 13, L. 7, S. 3, C. 20.

Purchased, 1872.

Genus GALIDIA.

Is. Geoffroy, Mag. de Zool. 1839, pp. 27, 37.

Galidia elegans.

Is. Geoffroy, loc. cit.

Hab. Madagascar.

491. Imperfect skeleton of female.

From an animal which died in the Zoological Society's Gardens, 1869.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{2}{2}$, =36.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 10 (incomplete).

Purchased, 1869.

Genus HERPESTES.

Illigor, Prodr. Syst. Mamm. p. 135 (1811).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$ or $\frac{3}{3}$, m. $\frac{2}{2}$, = 40-36.

Herpestes ichneumon.

Viverra ichneumon, Linnæus, Syst. Nat. od. 12, i. p. 63 (1766).

Herpestes pharaonis, Geoffroy, Descr. do l'Egypto, Hist. Nat. ii.
p. 139 (1812).

THE EGYPTIAN ICHNEUMON.

Hab. North Africa.

Herpestes ichneumon.

492. Articulated skeleton of young. O. C. 4306.

The milk-eanines and some of the milk-molars are still in place.

South Collection. Purchased, 1835.

Herpestes griseus.

Desmarest, Mammalogie, p. 212 (1820).

THE GREY ICHNEUMON.

Hab. India.

493. Incomplete skeleton of female. O. C. 4309 to 4312.

Dentition: i. $\frac{3}{3}$, e. $\frac{1}{1}$, p. $\frac{3}{4}$, m. $\frac{2}{2}$, =38.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 2 (incomplete).

Purchased.

494. Skeleton.

Dentition: i. $\frac{3}{3}$, e. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, =40.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 21.

From Umballah.

Presented by W. Crozier, Esq., 1849.

495. Skull.

From Umballah.

Presented by W. Crozier, Esq., 1849.

496. Skull and incomplete skeleton. O. C. 4313 to 4322.

Hunterian.

497. Skull. O. C. 4307.

Hunterian

498. Skull.

Probably of this species.

Herpestes nepalensis.

Gray, Mag. Nat. Hist. 1836, p. 578.

THE NEPALESE ICHNEUMON.

Hab. Nepal, Assam, and Malay Peninsula.

499. Skull.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

500. Skull.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

501. Cranium.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

Herpestes galera.

Mustela galera, Erxleben, Syst. Reg. Animal. p. 453 (1777). Herpestes paludinosus, Cuvier, Règ. Animal, ed. 2, i. p. 158 (1829).

Mangusta urinatrix, A. Smith, Zool. Journ. iv. p. 437 (1829).

THE MARSH ICHNEUMON.

Hab. South Africa.

502. Skull. O. C. 4324.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{2}{2}$, = 36.

Purchased.

503. Skull of young. O. C. 4325.

All the permanent teeth are in place, except the canines.

Purchased.

Of uncertain species.

504. Skull. O. C. 4323.

Attributed to the "Egyptian Ichneumon (Mangusta pharaonis)."

Purchased.

Genus CROSSARCHUS.

F. Cuvier, Hist. Nat. des Mammifères, No. 199 (1825). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{4}$, p. $\frac{3}{3}$, m. $\frac{2}{2}$, =36.

Crossarchus obscurus.

F. Cuv. loc. cit.

THE KUSIMANSE.

Hab. West Africa.

505. Skeleton of female.

Vertebræ: C. 7, D. 14, L. 6, S. 2, C. 19.

From an animal which died in the Zoological Society's Gardens, 11 Sept. 1870.

Purchased, 1870.

Genus SURICATA.

Suricata, Desmarest, Tabl. Méth. Mamm. in Nouv. Diet. d'Hist. Nat. ed. 1, xxiv. (1804).

Rhyzana, Illiger, Prodromus Syst. Mamm. et Av. p. 134 (1811).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{2}{2}$, =36.

Suricata tetradactyla.

Viverra suricatta, Erxleben, Syst. Reg. An. p. 488 (1777). Viverra tetradactyla, Schreber, Säug. iii. p. 434, tab. exvii. (1778).

THE SURICATE.

Hab. South Africa.

506. Articulated skeleton. O. C. 4326.

Vertebræ: C. 7, D. 15, L. 6, S. 3, C. 20.

Brookes Collection. Purchased, 1828.

507. Skeleton.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 20.

Purchased, 1871.

508. Skull of young female. O. C. 4327.

Soveral of the milk-teeth are retained.

Purchased.

Family PROTELIDÆ.

Genus PROTELES.

Is. Geoffroy, Mém. du Muséum, xi. p. 354 (1824).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. and m. $\frac{4}{3 \text{ or } 4}$: total 30 or 32. Molar teeth very small and rudimentary in character.

Proteles cristatus.

Viverra cristata, Sparrman, Resa till Goda Hopps-Udden, &c. p. 581 (1783).

Proteles lalandii, Is. Geoffroy, loc. cit.

THE AARD-WOLF.

Hab. South Africa.

509. Skeleton of male.

Vertebræ: C. 7, D. 15, L. 5, S. 2, C. 24.

Propared from an animal which died in the Zoological Society's Gardens in June 1869, and which furnished the materials for the memoir on its anatomy in the Proceedings of the Society, 1869, p. 474.

Purchased, 1869.

510. Anterior portion of upper and lower jaws with the teeth. O. C. 4359.

Presented by Henry Salt, Esq.

Family HYÆNIDÆ.

Gonus HYÆNA.

Zimmermann, Specimen Zoologiæ Goographicæ, p. 365 (1777). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{4}$, p. $\frac{4}{3}$, m. $\frac{1}{4}$, $=\frac{9}{8}$: total 34.

Hyæna striata.

Canis hyæna, Linnæus, Syst. Nat. ed. 12, i. p. 50 (1766). Hyæna striata, Zimmermann, Speeimen Zool. Geogr. p. 366 (1777), and Geographische Gesehichte, ii. p. 256 (1780). Hyæna vulgaris, Desmarest, Mammalogie, p. 215 (1820).

THE STRIPED HYÆNA.

Hab. South-western Asia and North Africa.

511. Skeleton, not quite complete. O. C. 4449 to 4473.

Hunterian.

512. Skeleton, incomplete.

Many of the bones are mounted in the separate series.

Hunterian.

513. Skeleton, incomplete. O. C. 4474.

Hunterian.

514. Skull. O. C. 4448.

From the Himalaya Mountains.

Presented by Colonel Finch, 1830.

515. Skull.

From the Punjab.

Purchased, 1868.

516. Imperfect skeleton of young.

Most of the milk-teeth are present. The skull has been much mutilated.

From Umballah.

Presented by W. Crozier, Esq., 1852.

517. Skull of young.

Many of the milk-teeth remain. The occiput is broken away

Hyæna brunnea.

Thunberg, Svonska Vetenkaps Akad. Handl. 1820, p. 59.

BROWN HYÆNA.

Hab. South Africa.

518. Skeleton of an old female.

The teeth are much worn, and the bones, especially the vertebræ, much disfigured by exostoses.

Vertebræ: C. 7, D. 16, L. 4, S. 4, C. (incomplete).

The sixteenth rib is ankylosed on the left side, but articulated on the right, the corresponding vertebra being intermediate in character between a dorsal and a lumbar.

From an animal which lived for more than thirteen years in the Zoological Society's Gardens.

Purchased, 1866.

519. Skull.

From the Cape of Good Hope.

Purchased, 1866.

520. Skull.

From a collection formed in South Africa by the late R. Gordon Cumming, Esq.

Purchased, 1866.

521. Hyoid bones.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1871.

Hyæna crocuta.

Canis crocuta, Erxleben, Syst. Reg. Animalis, p. 578 (1777).
Hyana maculata, Zimmermann, Specimen Zoologiæ Geographicæ, p. 470 (1777).

In the 'Geographische Geschichte' &c., p. 256 (1780), Zimmermann abandoned maculata and adopted crocuta from Erxleben.

This species is sometimes separated generically from the two former, under the name of *Crocuta maculata* (Zimm.).

THE SPOTTED HYÆNA.

Hab. Africa.

Hyæna crocuta.

522. Articulated skeleton of an old male. O. C. 4446.

Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 19.

The animal from which this skoleton was prepared was purchased by Dr. Buckland in the year 1821, in order that observations upon its mode of feeding and other habits might throw light upon the nature of the remains found in ancient caves inhabited by Hyænas, as detailed in the 'Reliquiæ Diluvianæ,' p. 15 et seq. It lived in Mr. Cross's Menagerie until 1845.

Presented by the Very Rev. Dr. Buckland, Dean of Westminster.

523. Skull.

From the collection formed in South Africa by the late R. Gordon Cumming, Esq.

Purchased, 1866.

524. Skull. O. C. 4447.

The alveolar border has been removed on the right side, to show the form and relations of the teeth in their sockets.

Purchased.

Mysena spelcea.

Goldfuss, Nova Acta Acad. Leop. xi. pt. 2, p. 456 (1823).

THE CAVE-HYÆNA.

Hab. Europe in Pleistocene Period.

This species is closely allied to, if not identical with, the last.

- 525. A third premolar tooth of the left side of the lower jaw.
 O. C. F. 152.

 Hunterian.
- 526. Several fragments of bones and teeth. O. C. F. 105, &c.

From a cavern in the limestono quarries at Oreston, near Plymouth.

For a description of the cave and the fossils found in it, see the memoir by Messrs. Whidbey and Clift in the 'Philosophical Transactions' for 1823.

Presented by Sir John Barrow.

527. Several portions of the jaws and teeth. O. C. F. 108, &c. From Kent's Hole Cavo, Torquay.

Presented by Gerard Smith, Esq.

528. Portions of jaws and teeth. O. C. F. 107, &c. From Kirkdale Cavo, Yorkshiro.

Presented by John Gibson, Esq.

529. Fragments of bones and teeth. O. C. F. 126, &c. From Kirby Moorside, Yorkshire.

Presented by John Gibson, Esq.

530. Portions of jaws and teeth.

Locality unknown.

Presented by John Gibson, Esq.

Family CANIDÆ.

Genus LYCAON.

Brookes, Griffith's Animal Kingdom, vol. v. p. 151 (1827).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{3}$, = 42.

Lycaon differs from all the other Canidæ in the absence of the pollex.

Lycaon pictus.

Hyana picta, Temminek, Ann. gén. des Sciences physiques, iii. p. 54, pl. 35 (1820).

Hyena venatica, Burchell, Travels in Southern Africa, i. p. 456 (1822).

Canis pictus, Desmarest, Mammalogie, Suppl. p. 538 (1822).

THE CAPE HUNTING DOG.

Hab. South Africa.

Lycaon pictus.

531. Skeleton of male.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 14 (incomplete). From an animal which lived in the Gardens of the Zoological Society from 15 Feb. 1871 to 29 Nov. 1875.

Purchased, 1875.

532. Skull.

From the collection of the late R. Gordon Cumming, Esq.

Purchased, 1866.

Genus ICTICYON.

Lund, Kong. Danske Vidensk. Selskabs Afhand. xi. p. 62 (1845). Dentition (usually):—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{2}$, = 38.

Icticyon venaticus.

Cynogale venatica, Lund, Kong. Danske Vidensk. Selskabs Afhand. ix. p. 201 (1842).

THE BUSH-DOG.

Hab. Guiana and Brazil.

533. Articulated skeleton of female.

Dentition: i. $\frac{3}{3}$, e. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, = 40. Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 14.

From an animal from British Guiana, which lived in the Gardens of the Zoological Society from 20 Aug. to 12 Dec. 1879, and is figured, with notes on its anatomy, in Proc. Zool. Soc. 1880, p. 70, pl. x. In the possession of two upper true molar teeth on each side, it differs from all the previously described specimens.

Purchased, 1879.

Gonus CANIS.

Canis, Linnæus, Syst. Nat. ed. 12, i. p. 56 (1766).

A. Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, = 40. Cuon, Hodgson, Calcutta Journ. Nat. Hist. ii. p. 205 (1842).

Canis javanicus.

Canis javanicus, Desmarest, Mammalogie, p. 198 (1820).

Canis familiaris, var. sumatrensis, Hardwicke, Trans. Linn. Soc. (read 1820), xiii. p. 235 (published 1822).

Canis rutilans S. Müller. Zoogdieren Indisch. Archipol. p. 27. in

Canis rutilans, S. Müller, Zoogdieren Indisch. Archipol, p. 27, in Verhandl. Neederl. Bezitt. (1839–44).

THE SUMATRAN WILD DOG.

Hab. Java and Sumatra.

534. Skeleton of young.

The dentition is in a transitional state: most of the permanent teeth have been acquired; but some of the milk-molars still remain in place.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 17. Obtained in Java by Dr. Ploem.

Presented by the Zoological Society, 1872.

Canis primævus.

Hodgson, Proc. Zool. Soc. 1833, p. 111.

THE INDIAN WILD DOG.

Hab. India and Malay Peninsula.

Probably not specifically distinct from the last, or from C. dukhunensis, Sykes (Proc. Zool. Soc. 1831, p. 100).

535. Bones of the trunk.

Vortebræ: C. 7, D. 13, L. 7, S. 3, C. incomplete. From Nepal.

Presented by Bryan H. Hodgson, Esq.

PART II.

Canis primævus.

536. Skeleton, wanting the skull.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 16.

Presented by Bryan II. Hodgson, Esq.

537. Skull.

From Cuttack, Lower Bengal.

Presented by Mrs. J. P. H. Walker, 1873.

B. Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{3}$, =42.

Canis familiaris.

Linnæus, Syst. Nat. ed. 12, i. p. 56 (1766).

THE COMMON DOG.

Hab. The whole habitable world.

538. Articulated skeleton of a Dingo or Australian Dog. O. C. 4389.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 19.

From an animal which died in the Menagerie at Exeter Change.

Presented by Sir Everard Home, Bart.

539. Skull and atlas vertebra of a Dingo. O. C. 4390.

Presented by Sir George Grey.

540. Skull, somewhat mutilated, of a female Dingo. O. C. 4391.

Presented by Sir George Grey.

541. Articulated skeleton of a female Eskimo Dog, about two years of age.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 18. From Disco Island.

Presented by R. McCormick, Esq., R.N., 1852.

542. Skeleton of a female Eskimo Dog.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{2}{3}$. The first premolars are not present in either jaw.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 14 (incomplete).

From Winter Island, Molville Peninsula.

Arctic Expedition, 1822.

543. A skull, longitudinally and vertically bisected. O. C. 4398.

Said to be that of an East-Indian wild dog.

Purchased.

544. Skull of a dog.

"Picked up at Tamouy, in the North-western part of the island of Formosa, being that of one of the ordinary dogs kept there by the Chinese. It is in most respects similar to the form prevalent in South China, and known in Europe as the 'Wolf Dog.' This dog has doubtless been introduced into Formosa by the Chinese colonists, as the Dutch, according to early records, found the Formosan aborigines without dogs."

Presented by R. Swinhoe, Esq., H.M. Vice-Consul at Formosa, 1865.

545. Bones of a young dog.

Found buried with the mummy of a Peruvian child, No. 1009 (Osteol. Cat. part i. p. 176), in an ancient burial-ground at Arica.

Presented by the Rev. F. W. Holland, 1869.

546. Cranium of a dog. O. C. 4400.

From a bog near Drogheda, Ireland.

Presented by the Earl of Enniskillen.

547. Cranium of a dog. O. C. 4401.

From the same place as the last specimen.

Presented by the Earl of Enniskillen.

Canis familiaris.

548. Skeleton of a large Newfoundland Dog. O. C. 4392.

Vertebræ: C. 7, D. 13, L. 8, S. 3, C. 17 (incomplete).

Hunterian.

549. Skull of a Newfoundland Dog. O. C. 4403.

Purchased.

550. Skull of a Newfoundland Dog.

"Neptune," aged 10 years and 8 months, winner of about one hundred prizes, champion for three years. The occiput has been cut off.

Presented by W. Waller, Esq., of Redcar, 1874.

551. Skull, hyoid, and three cervical vertebræ of a Newfoundland Dog.

"Franklin," aged 3 years 7 months.

For full particulars regarding the breeding &c. of these two fine Newfoundland dogs, see letter from the donor, dated 3 August, 1874 (Museum letter-book).

Presented by W. Waller, Esq., of Redcar, 1874.

552. Skull of a St. Bernard's Dog.

The animal was of the long-haired or rough-coated variety, and brought by the owner from the Monastery of St. Bernard, where it was bred.

Presented by Dr. Albert Günther, 1872.

553. Articulated skeleton of a large Mastiff. O. C. 4393.

Vertebræ: C. 7, D. 13, L. 8, S. 3, C. 23.

The hallux or inner toe of the hind foot is fully developed, but small.

The animal from which it was prepared belonged to Count A. d'Orsay.

Presented by G. J. Guthrie, Esq., 1832.

554. Skeleton of an old female Mastiff.

Mr. Edwin Nichols's 'Venus.' Winner of several prizes. Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 16.

Presented by Mr. W. Shaw, 1872.

555. Skull of a female Mastiff.

The premolar teeth of beth jaws are of unusually small size.

Presented by H. Lainson, Esq., 1874.

556. Skeleton of a thorough-bred German Boarhound.

The animal was three years of age, and measured 82.5 centimeters in height at the shoulders.

Vertebræ: C. 7, D. 14, L. 7, S. 3, C. 20.

Presented by Mr. George Richmond, 1875.

557. Articulated skeleton of a male French Bloodhound.

A remarkably handsome and well-bred dog, about six years old.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 20.

Presented by S. A. Lane, Esq., 1867.

558. Imperfect skeleton of a very large dog. Hunterian.

559. Skull of a Bloodhound. O. C. 4404. Purchased.

560. Articulated skeleton of Sir Edwin Landseer's favourite Deerhound "Hafed."

Purchased at the sale of Sir Edwin's effects by the donor, July 1874.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 20.

Presented by Thomas Taylor, Esq., 1874.

Canis familiaris.

561. Skull of a Scotch Deerhound.

Presented by J. Walters, Esq., M.B., 1874.

562. Articulated skeleton of a Greyhound. O. C. 4394.

Vertebræ: C. 7, D. 13, L. 7, S. 4, C. 19.

South Collection. Purchased, 1835.

563. Skull of a Greyhound. O. C. 4405.

Purchased.

564. Skeleton of a male Foxhound.

"Fugleman." From the North-Hampshire pack. A particularly well-bred dog, born May 1867, died Nov. 1869.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 22.

Some of the vertebræ and other bones are diseased.

Presented by James Salter, Esq., 1870.

565. Skeleton of a Pointer Dog. O. C. 4009.

Purchased.

566. Skull of a Pointer about 10 years of age.

Presented by T. Carr Jackson, Esq., 1872.

567. Skull of a male Pointer.

Presented by Thomas Taylor, Esq., 1879.

568. Skeleton of a Black Retriever.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 19.

Many of the bones are mounted in the Separato Series.

Presented by Mr. Philip Wright, 1866.

569. Skull of a Water-Spaniel. O. C. 4411.

Purchased.

570. Skull of a male Prize Field-Spaniel.

"Sailor," 18 years of age. See lettors from Mr. W. H. Leslie, 3 August and 29 August, 1872.

Presented by Chas. Read, Esq., of Bedford, 1872.

571. Skull, vertically and longitudinally bisected, of a Common Spaniel. O. C. 4413.

Purchased.

572. Cranium of a Blenheim Spaniel. O. C. 4415.

The teeth are closely crowded together.

Purchased.

573. Skull (wanting the right ramus of the lower jaw) and os penis of a Spaniel. O. C. 4414.

Presented by Wm. Clift, Esq.

574. Skull of a Common Spaniel. O. C. 4412.

Purchased.

575. Skull of a King Charles Spaniel. O. C. 4416.

The teeth are closely packed, and p. 3 is placed quite transversely to the axis of the skull.

Presented by Wm. Clift, Esq.

576. Skull of a young King Charles Spaniel. O. C. 4417.

The milk-dontition is present.

Purchased.

577. Skull of a large Terrier. O. C. 4406.

Purchased.

Canis familiaris.

578. Skull of a Terrier. O. C. 4407.

Purchased.

579. Skull of a Terrier. O. C. 4408.

Purchased.

580. Skull of a Fox Terrier four years old.

From Scotland.

Presented by Mr. John M'Ara, 1873.

581. Skull of a female smooth-haired English Bull Terrier.

Presented by E. F. Flower, Esq., 1872.

582. Skull of a female smooth-haired Toy Terrier.

The ossification of the skull is very defective. The dentition in the upper jaw is complete; but in the lower jaw $_{\overline{m},3}$ is undeveloped and also $l_{\overline{p},-1}$. The upper milk-canines are retained in addition to the permanent canines.

Presented by Henry Searle, Esq., 1872.

583. Articulated skeleton of a very small male smooth-haired black-and-tan Toy Terrier.

The animal was one year and nine months old. Some of the milk-teeth are still present. Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 15.

Presented by Mr. S. Sutton, 1877.

584. Skeleton of a well-bred male Skye Terrier.

Several of the teeth are wanting. The third upper premolars are placed transversely to the long axis of the skull. Owing to the unequal length of the jaws, the lower canines pass in front of the outer incisors when the mouth is closed.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 19.

Presented by John Hilton, Esq., 1874.

585. Cranium of a pure-bred Scotch Collie Dog.

From the Isle of Skye. An animal of first-rate intelligence, four years old. Most of the teeth have been lost.

Presented by Edward Greaves, Esq., M.P., 1872.

586. Skull of a Shepherd's Dog. O. C. 4399.

Purchased.

587. Skull of a Shepherd's Dog.

588. Skeleton of a Shepherd's Dog about seven months old.

The skull is mounted in the Separate Series. Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 20.

Purchased.

589. Articulated skeleton of a female Bulldog.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 20. "Nell." Bred by the Duke of Hamilton.

Among many deformities perpetuated and intensified by selective breeding in this race of dogs, that affecting the skull is the most remarkable. The facial bones (maxillæ, præmaxillæ, and nasals) are shortened, without corresponding alteration in the mandible, the anterior part of which consequently projects far beyond the upper jaw. The upper teeth, especially the premolars, having undergone no diminution in size corresponding to that of the bone in which they are implanted, are excessively crowded, and placed obliquely or even transversely to the long axis of the skull.

Presented by Mr. W. Shaw, 1872.

590. Imperfect skeleton of a male Bulldog of very pure breed.

Presented by R. J. Lloyd Price, Esq., 1871.

591. Skeleton of a female Bulldog of very pure breed.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. wanting.

Presented by R. J. Lloyd Price, Esq., 1871.

Canis familiaris.

592. Skeleton of a thoroughbred Bulldog.

Vertebræ: C. 7, D. 14, L. 7, S. 3, C. incomplete.

As an individual peculiarity there is an additional vertebra interposed between the dorsal and lumbar region, with a riblike transverse process 6 centimeters in length.

Presented by F. Adcock, Esq., 1874.

593. Skeleton of a female Bulldog.

"The Abbess," winner of numerous prizes, by the "Abbot," out of "Lola." See entry-book, 21 February, 1877.

 $l^{\frac{p.3}{n}}$ undeveloped; $\frac{1}{n,3}$ also undeveloped in either ramus.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 7 (incomplete).

Presented by F. Adcock, Esq., 1877.

594. Skull of a very pure-bred Bulldog.

The "Abbot," aged 2 years and weighing 68 lb.

The upper premolars are closely packed and set in an oblique position.

Presented by F. Adcock, Esq., 1872.

595. Skull of a female Bulldog.

Presented by F. Adcock, Esq., 1876.

596. Skeleton of a new-born thoroughbred Bulldog.

(For pedigree see letter-book, Aug. 1874.)

Presented by F. Adcock, Esq., 1874.

597. Skull of a young brindled Terrier.

With milk-dentition.

Presented by Mr. Philip Wright, 1867.

598. Skull of a young thoroughbred Pug Dog.
Some of the milk-teeth are retained.

Presented by F. Adeock, Esq., 1873.

599. Skull of a Japanese Dog.

Presented by Wm. Lockhart, Esq.

600. Skull and imperfect skeleton of a dog. O. C. 4420–4438.

Hunterian.

601. The right anterior and posterior extremities of a Newfoundland Dog. O. C. 4440 and 4441.

Hunterian.

602. The right anterior and posterior extremities of a Greyhound.

O. C. 4442 and 4443.

Hunterian.

603. The right humerus of a dog longitudinally and vertically bisected. O. C. 4445.

Hunterian.

604. The bones of the anterior extremity of a Spaniel. O. C. 4444.

Hunterian.

605. The vertebral column and innominate bones of a dog (Greyhound?).

Parker Collection. Purchased, 1858.

606. The cranium of a dog divided transversely into three sections. O. C. 4439.

Presented by Prof. Owen.

Canis familiaris.

607. Skeleton of a Black Retriever Dog, wanting the skull.

Well-developed free ribs are attached to the seventh cervical vertebra.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. imperfect.

Purchased, 1871.

608. Skeleton of a young dog.

The complete dentition is present; but the teeth are perfectly unworn. The epiphyses are not united to the shafts of the long bones.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 19.

Purchased, 1870.

609. Skeleton of a dog six weeks old, showing an os centrale in the carpus.

This specimen is described and figured in the 'Journal of Anatomy and Physiology,' vol. vi. p. 62 (1872).

Purchased, 1870.

610. Skull of a young dog in the transitional stage of dentition.

In the upper jaw the milk-incisors are retained, though the permanent ones are almost fully in place. The latter are situated directly behind or within the former. $l^{p,1}$ is undeveloped.

Presented by Mr. Philip Wright, 1870.

611. Skull of a young dog.

The bones are mounted a slight distance apart from one another.

Parker Collection. Purchased, 1858.

612. Skeleton of a new-born North-German Boarhound.

Presented by Mr. Richmond, 1873.

613. Skeleton of a new-born North-German Boarhound.

Presented by Mr. Hopkins, 1873.

614. Incomplete skeleton of a new-born North-German Boarhound of the same litter as the last.

Presented by Mr. Hopkins, 1873.

615. Skeleton of a dog at birth.

Purchased, 1873.

616. Skull of a dog three days old.

Purchased, 1870.

617. Skull of a feetal dog near the time of birth. O. C. 4419.

Purchased.

618. Teeth of a dog separately displayed.

Parker Collection. Purchased, 1858.

619. A preparation showing the milk-teeth and the germs of the permanent teeth of a young dog.

Parker Collection. Purchased, 1858.

Canis lupus.

Linnæus, Syst. Nat. ed. 12, i. p. 58 (1766).

THE COMMON WOLF.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{3}$, =42.

Hab. Europe and North Asia.

620. Skull.

From Mezen, North Russia.

Purchased, 1873.

Canis lupus.

621. Skull of a large male. O. C. 4365.

Presented by Henry Cline, Esq., 1824.

622. Skull of male. O. C. 4366.

Presented by Sir T. Stamford Raffles, 1821.

623. Skull.

624. Skull.

Stores.

625. Skull of female. O. C. 4369.

Purchased.

626. The anterior portion of a skull and the mandible.

Canis occidentalis.

Canis lupus occidentalis, Richardson, Fauna Boreali Americana, p. 60 (1829).

Lupus occidentalis, De Kay, Zoology of New York, i. 1842, p. 42.

THE ARCTIC WOLF.

Hab. North America.

This is probably not specifically distinct from the last.

627. Articulated skeleton. O. C. 4364.

Presented by Alexander Fisher, Esq.

628. Skull of a male. O. C. 4367.

From Melville Island.

Presented by Captain Sir E. Parry, R.N., 1820.

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629. Skull of a female. O. C. 4370.

From Melville Island.

Presented by Capt. Sir E. Parry, R.N., 1820.

630. Skull.

From Alaska.

Presented by the Smithsonian Institution, 1871.

631. Skull.

The teeth are much worn.

From Alaska.

Presented by the Smithsonian Institution, 1869.

632. Upper and lower jaws, showing dentition. O. C. 4372. From Labrador.

Hunterian.

Canis latrans.

Say, in Long's Exped. Rocky Mts. i. p. 168 (1823).

THE PRAIRIE-WOLF.

Hab. North America.

633. Skull of male.

From Fort Kearney.

Presented by the Smithsonian Institution, 1871.

634. Skull.

From Grand Isle, Platte River.

Presented by Smithsonian Institution, 1871.

Canis antarcticus.

Shaw, General Zoology, i. pt. 2, p. 331 (1800).

THE ANTARCTIC FOX.

Hab. Falkland Islands.

635. Skull. O. C. 4363.

Presented by Admiral Sir Francis Beaufort.

636. Skull.

Found by the donor on West Falkland Island.

Presented by E. A. Holmsted, Esq., 1878.

Canis aureus.

Linnæus, Syst. Nat. ed. 12, i. p. 59 (1766).

THE COMMON JACKAL.

Hab. India.

637. Skull. O. C. 4360.

From India.

Presented by Dr. B. C. Henderson, 1822.

638. Skull. O. C. 4361.

From the Himalaya Mountains.

Presented by Colonel Finch, 1830.

639. Skull of an aged animal.

From India.

Presented by Dr. B. C. Henderson, 1822.

640. Skull, with perfect dentition.

From Maunbhoom.

Presented by R. C. Beavan, Esq., 1867.

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641. A skull.

Picked up at Maunbhoom.

Presented by R. C. Beavan, Esq., 1867.

642. A cranium.

The upper part of the supraoccipital bone bears a median conical osseous process.

Presented by Prof. Quekett, F.R.S.

Canis mesomelas.

CANIDÆ.

Schreber, Säugthiere, iii. p. 370 (1778).

THE BLACK-BACKED JACKAL.

Hab. South Africa.

643. Skull. O. C. 4362.

Purchased.

Canis vulpes.

Linnæus, Syst. Nat. ed. 12, i. p. 59 (1766).

THE COMMON Fox.

Hab. Europe.

644. Articulated skeleton. O. C. 4328.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{3}$, =42.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 18 (not quite complete).

Hunterian.

645. Skeleton of a female.

From Stratford-on-Avon.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 20 (probably one missing).

Presented by Mr. G. W. Quatremaine, 1875.

646. Skull. O. C. 4329.

Brookes Collection. Purchased, 1828.

PART II.

Canis vulpes.

647. Skull, hyoid, and atlas.

From Stratford-on-Avon.

Presented by Mr. G. W. Quatremaine, 1874.

648. Skull.

From an animal killed near Stratford-on-Avon, with defective development of the anterior part of the lower jaw. The lower canino of the right side shuts behind the corresponding tooth of the upper jaw; but on the left side the teeth maintain their normal relative positions. Several foxes killed in the same neighbourhood have exhibited a similar peculiarity.

Presented by Mr. G. W. Quatremaine, 1878.

649. Skull. O.C. 4330.

Purchased.

650. Skull.

From Sutherlandshire. Killed in 1867.

Presented by Lawson Tait, Esq., 1881.

651. Skull of a "Black Fox." O. C. 4332.

Presented by Henry Cline, Esq., 1824.

652. Skeleton of young.

The milk-teeth are still in position.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 19.

One of the fore feet has been injured by the trap in which the animal was eaught.

Presented by J. B. Perrin, Esq., 1870.

653. Skull of the variety called by the donor *Vulpes melanogaster*. O. C. 4333.

From Italy.

Presented by Charles Lucien Bonaparte, Prince of Canino.

654. A skull, said to be that of "a female Fox," but apparently not of this species. O. C. 4331.

Purchased.

Canis decussatus.

Desmarest, Mammalogie, p. 203 (1820).

THE AMERICAN CROSS-Fox.

Hab. North America.

655. Skull. O.C. 4334.

Presented by Sir John Richardson, M.D., 1822.

Canis fulvus.

Desmarest, Mammalogie, p. 203 (1820).

THE RED Fox.

Hab. North America.

656. Skull.

Presented by the Smithsonian Institution.

657. Skull and hyoid bone of a female.

From an animal which lived in the Gardens of the Zoological Society of London.

Presented by the Zoological Society, 1869.

Canis velox.

Say, in Long's Exped. Rocky Mts. i. p. 487 (1823).

THE KIT FOX.

Hab. North America.

658. Skull.

Presented by the Smithsonian Institution, 1871.

Canis virginianus.

Erxleben, Syst. Reg. Animal. p. 567 (1777).

THE GREY Fox.

Hab. North America.

659. Skull.

Presented by the Smithsonian Institution, 1871.

Canis lagopus.

Linnæus, Syst. Nat. ed. 12, i. p. 59 (1766).

THE ARCTIC FOX.

Hab. Arctic Regions.

660. Skeleton of female.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 20.

Arctic Expedition, 1821.

661. Skeleton of male: white variety.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 20.

The right fore foot is mounted in the Physiological Series.

From Exeter Fiord, lat. 66° 26' N.

Presented by J. W. Taylor, Esq., 1868.

662. Skeleton of female: blue variety.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 21.

From Exeter Fiord, lat. 66° 26' N.

Further information about these two specimens, and the distinction between the "white" and "blue" Arctic Foxes is contained in letters from the donor, dated 28 October and 30 October, 1868 (Museum Letter-Book).

Presented by J. W. Taylor, Esq., 1868.

663. Skull and incomplete skeleton of female. O. C. 4337-4357.

Hunterian.

664. Skull. O. C. 4335.

Presented by Henry Cline, Esq.

665. A mutilated cranium. O. C. 4336.

Brookes Collection. Purchased, 1828.

666. Skull, with milk-dentition.

Purchased, 1874.

Canis bengalensis.

Shaw, General Zoology, i. pt. ii. p. 330 (1800).

THE BENGAL FOX.

Hab. India.

667. Skeleton.

From India.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 15 (incomplete).

Presented by W. Crozier, Esq.

668. Skull.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

669. Cranium.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

Canis bengalensis.

670. Cranium.

From Maunbhoom.

Presented by R. C. Beavan, Esq., 1865.

Canis zerda.

Vulpes minimus saarensis, Skiödebrand, K. Vetensk. Akad. Hand. 1777, p. 265.

Canis zerda, Zimmermann, Geogr. Geschichte, ii. p. 247 (1780). Canis cerdo, Gmelin, Syst. Nat. i. p. 75 (1788). Fennecus zaarensis, Gray, Proc. Zool. Soc. 1868, p. 519.

THE FENNEC Fox.

Hab. North Africa.

671. Skull. O. C. 4358.

Presented by the Zoological Society.

Canis procynoides.

Canis procyonoides, Gray, Illustr. Indian Zool. ii. pl. i. (1834); Loudon's Mag. Nat. Hist. 1837, p. 578.

Nyctereutes viverrinus, Temminck, V. der Hoeven's Tijdschrift, v. p. 285 (1838).

Nyctereutes procynides, Sclater, Proc. Zool. Soc. 1874, p. 323, pl. L.; List of Animals Zool. Gardens, p. 70 (1879).

THE RACCOON-LIKE DOG.

Hab. North-eastern Asia.

672. Skeleton of male.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 15 (incomplete). From an animal received from Amoorland, which died in the Gardens of the Zoological Society.

Presented by the Zoological Society, 1878.

Genus OTOCYON.

Lichtenstein, Wiegm. Archiv, 1838, i. p. 290*.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3 \text{ or } 4}{4}$, =46 or 48.

Otocyon megalotis.

Canis megalotis, Cuvier, Desmarest, Mammalogie, Suppl. p. 538 (1822).

Canis lalandii, Desmoulins, Diet. Classique d'Hist. Nat. iv. p. 18 (1823).

Otocyon caffer, Lichtenstein, Wiegm. Archiv, 1838. .. p. 290. Otocyon lalandii (Desm.), Sclater's List of Animals Zool. Gardens, p. 70 (1879).

THE LONG-EARED FOX.

Hab. South Africa.

673. Articulated skeleton of male.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{4}$, =46.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 18 (incomplete).

From an animal which died in the Gardens of the Zoological Society.

Purchased, 1866.

674. Natural skeleton.

Dentition: i. $\frac{3}{3}$, e. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{4}$, =46. Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 22.

Probably from a wild animal.

In Museum before 1862. History unknown.

675. Imperfeet skeleton.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{4}{4}$, = 48.

In Museum before 1862. History unknown.

^{*} Wiegmann speaks of the animal under the name of Otocyon caffer of Lichtenstein; but whether the name had been previously published by that author or not I have been unable to discover.

Genus AMPHICYON.

Lartet, Comptes Rendus Acad. Sciences, v. p. 424 (1837).

Amphicyon major.

Blainville, Ostéographie (Subursus), p. 78, pls. 14, 15 (1839).

676. Cast of left upper jaw and teeth.

From the original (from the Miocene of Sansans) in the Paris Museum, figured in De Blainville's 'Ostéographie.'

Presented by the Paris Museum.

Family MUSTELIDÆ*.

Genus MUSTELA.

Linnæus, Syst. Nat. ed. 12, i. p. 66 (1766).

Section A. Subgenus Mustela.

Mustela, Cuvier, Règne Animal. i. p. 149 (1817). Martes, Nilsson, Skand. Fauna, i. p. 41 (1820).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{2}$, $=\frac{9}{10}$: total 38.

Mustela martes.

Mustela martes, Linnæus, Syst. Nat. ed. 12, i. p. 67 (1766). Martes sylvatica, Nilsson, Skand. Fauna, i. p. 41 (1820).

THE PINE-MARTEN.

Hab. Northern Europe, including the British Isles.

• For critical remarks upon the nomenclature of many members of this family, see Elliott Coues's "Fur-bearing Animals, a Monograph of North-American Mustelidæ," U.S. Geological Survey of the Territories (Washington, 1877).

677. Articulated skeleton. O. C. 4152.

The upper milk-canincs are net yet shed, although all the permanent teeth are in place.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 10 (incemplete).

Hunterian.

678. Skull and imperfect skeleton. O.C. 4154-4166.

Hunterian.

679. Skull. O. C. 4153.

Presented by Henry Cline, Esq.

680. Skull. O. C. 4171.

The teeth have been removed from the right side of both upper and lower jaws, and are separately displayed.

Hunterian.

681. Skull, assigned to this species.

The anterier premelars are absent in both jaws, as in the next section.

Mustela flavigula.

Beddaert, Elenchus Animalium, i. p. 88 (1785).

THE YELLOW-THROATED MARTEN.

Hab. India, Malay Peninsula, Java, Sumatra.

682. Skull. O. C. 4167.

From the Himalaya Meuntains.

Presented by Colonel Finch, 1830.

683. Skull.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

Mustela zibellina.

Linnæus, Syst. Nat. ed. 12, i. p. 68 (1766).

THE ASIATIC SABLE.

Hab. Northern Asia.

Mustela zibellina.

684. Articulated skeleton. O. C. 4168.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 16 (incomplete).

Hunterian.

Mustela americana.

Mustela americanus, Turton, ed. Linn. Syst. Nat. i. p. 60 (1806).

THE AMERICAN SABLE.

Hab. North America.

685. Skull. O. C. 4169.

Presented by Sir John Richardson, M.D., 1822.

686. Skull. ♀. O. C. 4170.

Presented by Sir John Richardson, M.D., 1822.

687. Skull.

From Alaska.

Presented by the Smithsonian Institution, 1871.

688. Skull.

From Alaska.

Presented by the Smithsonian Institution, 1871.

Mustela pennanti.

Mustela pennanti, Erxleben, Syst. Reg. An. p. 470 (1777). Mustela canadensis, Schreber, Säugthiere, iii. p. 492 (1778).

THE PEKAN OF CANADIAN MARTIN.

Hab. North America.

689. Skull.

From Lake Superior.

Presented by the Smithsonian Institution, 1871.

Section B. Subgenus Putorius.

Putorius, Cuvier, Règne Animal, i. p. 141 (1817). Mustela, Nilsson, Skand. Fauna, i. p. 41 (1820).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{7}$, p. $\frac{3}{3}$, m. $\frac{1}{2}$, $=\frac{8}{9}$: total 34.

Mustela putorius.

Mustela putorius, Linnæus, Syst. Nat. ed. 12, i. p. 67 (1766). Putorius fætidus, Gray, List Mamm. Brit. Mus. p. 64 (1843).

690. Articulated skeleton, called "Alpine Polecat" in O. C. 4196.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 8 (incomplete).

British Museum.

691. Skeleton.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 18.

Hunterian.

692. Skeleton, nearly complete. O. C. 4201-4213.

Hunterian.

- 693. Skull and almost complete skeleton.
- 694. Skeleton.

From the neighbourhood of Oxford.

Many of the bones are mounted in the Separate Series.

Purchased, 1864.

695. Skull. O. C. 4197.

Hunterian.

696. Skull. Q. O. C. 4198.

British Museum.

697. Skull. 3. O. C. 4199.

Presented by Henry Cline, Esq.

Mustela putorius.

698. Skull. J.

Purchased, 1858.

699. Skull. ♀.

700. Skull.

701. Skull, vertically and longitudinally bisected. O. C. 4200.

Hunterian.

The following specimens belong to the albino domesticated variety, commonly called "Ferret," *Mustela furo*, Linnæus, Syst. Nat. ed. 12, i. p. 68 (1766):—

702. Skeleton.

Vertebræ: C. 7, D. 15, L. 6, S. 3, C. 18.

The 15th dorsal vertebra has a rib articulated to it on the left side, while the right side has all the characters of a lumbar vertebra. It may be considered a typical transitional vertebra.

Presented by J. B. Perrin, Esq., 1870.

703. Skeleton, wanting the cranium.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 7 (incomplete).

704. Imperfect skeleton, of small size. ??

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 16.

705. Imperfect skeleton. O. C. **421**8–4229.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 16.

Hunterian.

706. Skull. O. C. 4214.

Hunterian.

707. Skull, transversely bisected. O. C. 4217.

Hunterian.

708. Skull, vertically and longitudinally bisected. O. C. 4216.

Presented by Henry Cline, Esq.

Mustela siberica:

Pallas, Reise, ii. p. 701 (1773).

THE SIBERIAN MINK.

Hab. Northern and Eastern Asia.

709. Skeleton.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 21.

From Pekin.

Presented by R. Swinhoe, Esq., 1867.

Mustela erminea.

Linnæus, Syst. Nat. ed. 12, i. p. 68 (1766).

THE STOAT OF ERMINE.

Hab. Northern Europe, Asia, and America.

710. Natural skeleton of male. O. C. 4188.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 18 (complete).

Purchased.

711. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. incomplete.

712. Cranium.

From Chigwell Row, Essex, Feb. 9th, 1811.

Mustela vulgaris.

Erxleben, Syst. Reg. Animal. p. 471 (1777).

THE WEASEL.

Hab. Northern Europe, Asia, and America.

Mustela vulgaris.

713. Articulated skeleton. O. C. 4193.

Vertebræ: C. 7, D. 15, L. 6, S. 3, C. 16.

Brookes Museum. Purchased, 1828.

714. Skeleton.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 15.

715. Articulated skeleton. O. C. 4189.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. incomplete.

The last dorsal is transitional in character between a dorsal and a lumbar vertebra.

South Collection. Purchased, 1835.

716. Skull. Parker Collection. Purchased, 1858.

717. Skull. O. C. 4191.

Presented by Henry Cline, Esq.

718. Skull. O. C. 4190.

Hunterian.

719. Skull. O. C. 4192.

The teeth on one side of both jaws have been removed, and are displayed separately.

Hunterian.

720. Skull.

From Speldhurst, Kent.

Presented by Prof. Flower, 1869.

721. Skull.

From Speldhurst, Kent.

Presented by Prof. Flower, 1869.

722. Skull.

From Speldhurst, Kent.

Presented by Prof. Flower, 1869.

723. Skull. O. C. 4195.

Purchased.

724. Cranium. O. C. 4194.

Presented by Henry Cline, Esq.

Mustela lutreola.

Linnæus, Syst. Nat. ed 12, i. p. 66 (1766).

THE MINK.

Hab. Northern Europe and Asia.

725. Skull. O. C. 4231.

Presented by Henry Cline, Esq.

726. Skull, mutilated posteriorly.

Hunterian (?).

Mustela vison.

Schreber, Säugthiere, iii. p. 463 (1778).

THE AMERICAN MINK.

Hab. North America.

727. Skull.

Presented by the Smithsonian Institution, 1871.

Genus GULO.

Storr, Prodromus Method. Mamm. p. 34 (1780).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{2}$, $=\frac{9}{10}$: total 38.

Gulo luscus.

Mustela gulo, Linnæus, Syst. Nat. ed. 12, i. p. 67 (1766). Ursus luscus, id. ibid. p. 71.

Gulo borealis, Nilsson, Illum. fig. till Skand. faun. (fide Wagner, Schrober, Suppl. ii. p. 245, 1841).

THE GLUTTON OF WOLVERENE.

Hab. Northern Europe and America.

Gulo luscus.

728. Skeleton. O. C. 4133-4148.

The incisors of the lower jaw are closely packed together, so that $\frac{1}{12}$ is quite behind the line of the others.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 8 (incomplete).

Hunterian.

729. Skeleton.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 15. Many of the bones are mounted in the Separate Series. Obtained by Mr. Wheelwright in Lapland.

Purchased, 1864.

730. Imperfect skeleton.

Hunterian.

731. Skull. O. C. 4149.

Presented by the Lords of the Admiralty.

732. Skull. O. C. 4150.

Presented by Henry Cline, Esq.

733. Cranium of large size. O. C. 4151.

From Melville Island.

Presented by the Lords of the Admiralty.

734. A mutilated cranium. No. 266, Catalogue of 1831.

The teeth have been removed from the upper and lower jaws of one side, and are displayed separately.

Hunterian.

Genus GALICTIS.

Bell, Proc. Zool. Soc. 1837, p. 45.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{1}{2}$, $=\frac{8}{9}$: total 34.

Galictis barbara.

Mustela barbara, Linnæus, Syst. Nat. ed. 12, i. p. 67 (1766). Galera barbara, Gray, List of Mamm. Brit. Mus. 1843, p. 69.

THE TAYRA.

Hab. South America.

735. Skull and bones of the limbs.

The skull is mutilated behind; but the teeth are perfect. Taken from a skin received from Bogota.

Purchased, 1868.

736. Skull. O. C. 4132.

Purchased.

737. Skull.

Purchased.

From Brazil.

Galictis vittata.

Viverra vittata, Schreber, Säugthiero, iii. p. 447 (1778). Grisonia vittata, Gray, Proc. Zool. Soc. 1865, p. 122.

THE GRISON.

Hab. South America.

738. Skeleton of male.

Vertebræ: C. 7, D. 16, L. 5, S. 3, C. 21.

Many of the bones are mounted in the Separate Series.

Prepared from an animal which lived in the Gardens of the Zoological Society.

Purchased, 1868.

Genus ICTONYX.

Ictonyx, Kaup, Thierreich, i. p. 352 (1835). Rhabdogale, Wiegmann, Archiv, 1838, iii. p. 278.

Dentition: -i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{1}{2}$, $=\frac{8}{9}$: total 34.

Ictonyx zorilla.

? Viverra zorilla, Schreber, Säugthiere, iii. p. 445 (1778). ex Buffon. Viverra zorilla, Thunberg, Mém. de l'Acad. de St. Pétorsbourg, iii. p. 306 (1811).

Ictonyx capensis, Kaup, Thierreich, i. p. 353 (1835).

Rhabdogale mustelina, Wagner, Schreber, Suppl. ii. p. 219 (1841). Zorilla striata (Shaw), Gray, List Mammalia Brit. Mus. p. 67 (1843).

Hab. South Africa.

PART II.

Ictonyx zorilla.

739. Skull. O. C. 4172.

From the Cape of Good Hope.

Purchased.

740. Skull and atlas and axis vertebræ.

Genus HELICTIS.

Gray, Proc. Zool. Soc. 1831, p. 94.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{2}$, $=\frac{9}{10}$: total 38.

Helictis nepalensis.

Gulo nipalensis, Hodgson, Journ. As. Soc. Bengal, v. p. 237 (1836).Hab. Nepal.

741. Skull.

Presented by R. C. Beavan, Esq., 1867.

Genus MELLIVORA.

Storr, Prodromus Method. Mamm. p. 34 (1780).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{1}{1}$, $=\frac{8}{8}$: total 32.

Mellivora indica.

Meles indicus, Boddaert, Elenchus Animalium, i. p. 80 (1785).

THE INDIAN RATEL.

Hab. India.

742. Skeleton. O. C. 4112.

Vertebræ: C. 7, D. 14, L. 4, S. 4, C. 15.

Presented by William Crozier, Esq., 1852.

743. Skeleton, nearly complete. O. C. 4113-4131.

Presented by Colonel Everest, 1841.

744. Skull, Q. O. C. 4114.

Hunterian.

Genus TAXIDEA.

Waterhouse, Proc. Zool. Soc. 1838, p. 154.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{1}{2}$, $=\frac{8}{9}$: total 34.

Taxidea americana.

Ursus taxus*, Schreber, Säugthiere, iii. tab. exlii. B. (1778).

Meles taxus β. Americanus, Boddaert, Elenchus Animalium, i. p. 80 (1785).

Meles americanus, Zimmermann, Pennant's Arktische Zool. i. p. 74 (1787).

Ursus labradorius, Gmelin, Syst. Nat. i. p. 102 (1788).

THE AMERICAN BADGER.

Hab. North America.

745. Articulated skeleton.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 16 (incomplete).

Presented by the Smithsonian Institution, 1871.

746. Skull.

From Labrador.

Presented by the Smithsonian Institution, 1869.

Genus MELES.

Storr, Prodromus Method. Mamm. (1780).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{2}$, $=\frac{9}{10}$: total 38.

* This specific name is now universally adopted for the European Badger, though the above appears to have been its first application after the establishment of the binomial system of nomenclature.

Meles taxus.

Ursus meles, Linnæus, Syst. Nat. ed. 12, i. p. 70 (1766); Schreber, Säugthiere, iii. p. 516, tab. exlii. (1778).

Meles taxus, Boddaert, Elenchus Animalium, i. p. 80 (1785). Meles vulgaris, Desmarest, Mammalogie, p. 173 (1820).

THE COMMON BADGER.

Hab. Europe and Northern Asia.

747. Skeleton. O. C. 4091.

The first premolar is absent on both sides above and quite rudimentary below.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 18.

Hunterian.

748. Skeleton. O. C. 4092.

The first premolar is absent from both maxillæ. The eorresponding tooth of the right side of the mandible is extremely small; the left is also small.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 18.

Presented by Wm. Clift, Esq.

749. Skull, and nearly complete skeleton. O. C. 4097-4110.

The first premolar is absent from both maxillæ, and of small size in the mandible.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. absent.

The last or fifteenth dorsal vertebra is intermediate in form between a dorsal and a lumbar vertebra, having a small ankylosed pleurapophysis on the right side.

South Collection. Purchased, 1835.

750. Skull, vertebral column, and pelvis.

The full dentition is present.

Vertebræ: C. 7, D. 14, L. 5, S. 3, C. incomplete.

Purchased, 1858.

751. Skull, vertically and longitudinally bisected. O. C. 4094.

The full dentition is present.

Hunterian.

752. Skull. O. C. 4095.

There is no trace of the first premolar in either maxilla; but the corresponding teeth are present in the mandible.

Presented by Henry Cline, Esq.

753. Skull. O. C. 4096.

There is no sign of a first premolar ever having been developed in either maxilla; and $\frac{p+2}{p-1}$ is close to the earline tooth. $l_{\overline{p-1}}$ is absent, but $r_{\overline{p-1}}$ present.

Presented by Henry Cline, Esq.

754. Skull. O. C. 4093.

The first premolar is absent on both sides in the upper jaw and mandible.

Presented by Sir R. W. Vaughan.

755. Skull of young.

The permanent dentition has been acquired; and the full number of teeth is present. The first premolar is of very small size, both in the maxillæ and mandible.

From Worcestershire.

Purchased, 1875.

Genus MYDAUS.

Fréd. Cuvier, Hist. Nat. des Mammifères (1821). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{1}{2}$, $=\frac{8}{9}$: total 34.

Mydaus meliceps.

Fréd. Cuvier, loc. cit.

THE JAVAN SKUNK OF TELEDU.

Hab. Java.

Mydaus meliceps.

756. Articulated skeleton. O. C. 4111.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 9 (not complete).

Hunterian.

Genus ARCTONYX.

Fréd. Cuvier, Hist. Nat. des Mammifères (1825).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{2}$, $=\frac{9}{10}$: total 38.

Arctonyx collaris.

Fréd. Cuvier, loc. cit.

THE INDIAN BADGER OF BHALU-SOOR.

Hab. Northern India.

757. Articulated skeleton of female.

The first and second upper premolars are very feebly developed, as is the first in the mandible.

Vertebræ: C. 7, D. 16, L. 4, S. 4, C. 20.

The skeleton was prepared from an animal (from Tavoy) which lived in the Gardens of the Zoological Society from 6 August 1867 to 29 January 1874.

Purchased, 1874.

Genus MEPHITIS.

Cuvier, Tab. de Classif. in Leçons d'Anat. Comp. i. (1800). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{1}{2}$, $=\frac{8}{9}$: total 34.

Mephitis mephitica.

Viverra mephitica, Shaw, Mus. Leverianum, p. 173 (1792).

THE COMMON SKUNK.

Hab. North America.

758. Skeleton.

Vertebræ: C. 7, D. 16, L. 6, S. 2, C. 21.

Purchased, 1868.

759. Skull. O. C. 4232.

Presented by Henry Cline, Esq.

Genus CONEPATUS.

Gray, Ann. & Mag. Nat. Hist. ser. 2, i. p. 581 (1837). Teeth usually:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{2}{3}$, m. $\frac{1}{2}$, $=\frac{7}{9}$: total 32.

Conepatus mapurito.

Viverra mapurito, Gmelin, Syst. Nat. i. p. 88 (1788). Mephitis nasuta, Bennett, Proc. Zool. Soc. 1833, p. 39.

Hab. Central America, and parts of North and South America.

760. Skull.

From Costa Rica.

Purchased, 1879.

Genus LUTRA.

Erxleben, Syst. Regn. Animal. p. 445 (1777). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{4}$, p. $\frac{4}{3}$, m. $\frac{1}{2}$, $=\frac{9}{9}$: total 36.

Lutra vulgaris.

Mustela lutra, Linnæus, Syst. Nat. ed. 12, i. p. 66 (1766). Lutra vulgaris, Erxleben, op. eit. p. 448.

THE COMMON OTTER.

Hab. Europe and North Asia.

Lutra vulgaris.

761. Articulated skeleton of male.

Vertebræ: C. 7, D. 14, L. 6, S. 2, C. 26. From Norfolk.

Purchased, 1872.

762. Skeleton. O. C. 4233.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 21 (incomplete).

Presented by William Yarrell, Esq.

763. Skeleton of a male. O. C. 4234.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 25.

South Collection. Purchased, 1835.

764. Incomplete skeleton. O. C. 4242-4262.

Hunterian.

765. Incomplete skeleton. O. C. 4237 & 4238.

Hunterian.

766. Skull of male. O. C. 4235.

The teeth have been removed from the upper and lower jaws on the right side and are displayed separately.

Hunterian.

767. Skull of male. O. C. 4236.

Hunterian.

768. Skull. O. C. 4263.

Hunterian.

769. Skeleton of young.

The dentition is in a transitional state.

Purchased.

770. Skull of young female. O. C. 4239.

Presented by Henry Cline, Esq.

The two following specimens belong to the variety described by the donor (Journ. Asiatic Society of Bengal, viii. 1839, p. 320) under the name of *Lutra monticola*:—

771. Skull.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

772. Mutilated eranium.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

Lutra canadensis.

Mustela canadensis, Turton, ed. Linn. Syst. Naturæ, i. p. 57 (1806).

THE NORTH-AMERICAN OTTER.

Hab. North America.

773. Skull of female. O. C. 4240.

Hunterian.

774. Skull.

The first premolar is absent in both maxillæ.

Presented by the Smithsonian Institution, 1871.

775. Vertically and longitudinally bisected skull of an old female. O. C. 4241.

All the sutures are obliterated.

Presented by Henry Cline, Esq.

Lutra felina.

Mustela felina, Molina, Saggio Stor. Nat. del Chili, p. 284 (1782). 776. Skull.

From San Lorenzo, Ecuador.

Presented by Charles Ede, Esq., R.N.

Genus AONYX.

Lesson, Manuel de Mammalogie, p. 157 (1827). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{3}$, m. $\frac{1}{2}$, $=\frac{9}{9}$: total 36.

Aonyx leptonyx.

Lutra leptonyx, Horsfield, Zoological Researches, no. viii. 1823-4.

THE JAVAN OTTER.

Hab. Java, Sumatra, Borneo.

777. Articulated skeleton.

p. 1 is absent on the left side.
Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 20.
From Java, collected by Dr. Ploem.

Presented by the Zoological Society, 1872.

Genus ENHYDRA.

Fleming, Philosophy of Zoology, ii. p. 187 (1822). Dentition:—i. $\frac{3}{2}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{1}{2}$, $=\frac{8}{8}$: total 32.

Enhydra lutris.

Mustela lutris, Linnæus, Syst. Nat. ed. 12, i. p. 66 (1766). Lutra marina, Erxleben, Syst. Animal. p. 445 (1777). Enhydris marina of many authors.

THE SEA-OTTER.

Hab. Coasts of North Pacific.

778. Articulated skeleton.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 16 (incomplete).

Presented by Wallis Nash, Esq., and II. N. Moseley, 1881.

779. Articulated skeleton of female.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 21. From Alaska.

Received in exchange from the Smithsonian Institution, 1868.

780. Mutilated skull of young.

The permanent incisors of both upper and lower jaws have been acquired. The upper left milk-canine is in place; close to this is a very minute tooth, evidently $\frac{p.1}{}$ (absent on the right side). The small permanent $\frac{p.2}{}$ is next; and then follow $\frac{dm.1}{}$ and $\frac{dm.2}{}$.

Purchased, 1877.

Family PROCYONIDÆ.

Genus PROCYON.

Storr, Prodromus Method. Mamm. p. 35 (1780). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, $=\frac{10}{10}$: total 40.

Procyon lotor.

Ursus lotor, Linnæus, Syst. Nat. ed. 12, i. p. 70 (1766).

THE RACCOON.

Hab. North America.

781. Articulated skeleton. O. C. 4051.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 16 (incompleto).

Hunterian.

Procyon lotor.

782. Skeleton. O. C. 4052.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 15 (incomplete).

Hunterian.

783. Skeleton.

The first upper premolar is absent on both sides.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 18.

The first lumbar vertebra appears to have borne a rudimentary free rib on the left side, but has the normal lumbar transverse process on the right.

Hunterian.

784. Skeleton. O. C. 4053-4056.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 14 (incomplete).

Hunterian.

785. Skull and bones of the extremities.

Of smaller size than the others, probably Q. The first upper premolar is absent on both sides.

786. Skull. O. C. 4057.

The teeth have been removed from the upper and lower jaws of the left side, and are displayed separately.

Hunterian.

787. Skull.

From New Jersey.

Presented by the Smithsonian Institution, 1871.

788. Skull of young.

The milk-molars are still present, although much worn. Both first and second permanent molars are also in place.

Purchased, 1881.

789. Four specimens of the os penis. O. C. 4060-4063.

Hunterian.

Genus NASUA.

Storr, Prodromus Meth. Mamm. p. 35 (1780)*. Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, $=\frac{10}{10}$: total 40.

Nasua rufa.

Viverra nasua, Linnæus, Syst. Nat. ed. 12, i. p. 64 (1766). Nasua rufa, Desmarest, Mammalogie, p. 170 (1820).

THE RING-TAILED COATI; BRAZILIAN COATI.

Hab. South America.

790. Articulated skeleton. O. C. 4065.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 19 (incomplete).

South Collection. Purchased, 1835.

791. Skeleton. O. C. 4064.

Vertebræ: C. 7, D. 14, L. 6, S. 2, C. 19 (incomplete).

Hunterian.

792. Skeleton. O. C. 4070-4079.

The cranium has been injured; and the atlas and some other bones are missing.

Hunterian.

793. Skeleton. O. C. 4068 and 4080-4084.

The cranium has been vertically and longitudinally bisected, and the right half only preserved.

Presented by Professor Owen.

* For the nomenclature of the species of this genus, see J. A. Allen, 'Bull. U. S. Geol. and Geograph. Survey of the Territories,' vol. v. no. 2 (1879).

Nasua rufa.

794. Skull. O. C. 4066.

The teeth of the left side of the upper and lower jaws have been removed and are separately displayed.

Hunterian.

795. Skull. O. C. 4067.

Purchased.

796. Skull of male.

From an animal which died in the Gardens of the Zoological Society.

Presented by the Zoological Society, 1870.

797. Some of the bones of the skull of a young Coati.

The deciduous canines and molars are retained.

Hunterian.

Nasua narica.

Viverra narica, Linnæus, Syst. Nat. ed. 12, i. p. 64 (1766). Nasua nasica, Alston, Biologia Centrali-Americana, Mamm. p. 74 (1880).

THE WHITE-NOSED COATI; MEXICAN COATI.

Hab. Central America and Peru.

798. Skull of young, with milk-dentition.

From Central America.

Presented by Osbert Salvin, Esq., 1867.

Genus BASSARIS.

Lichtenstein, Isis, 1831, p. 512.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{2}$, $=\frac{10}{10}$: total 40.

Bassaris astuta.

Lichtenstein, loc. cit. p. 513.

Hab. Mexico.

799. Skeleton of male.

Vertebræ: C. 7, D. 13, L. 7, S. 3, C. 23.

From an animal which died in the Gardens of the Zoological Society, 1854.

Presented by the Zoological Society, 1854.

Genus CERCOLEPTES.

Illiger, Prodromus Syst. Mamm. et Av. p. 127 (1811). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{2}{2}$, $=\frac{9}{9}$: total 36.

Cercoleptes caudivolvulus.

Viverra caudivolvula (Pallas), Schreber, Säugthiere, iii. p. 453 (1778).

THE KINKAJOU.

Hab. South America.

800. Articulated skeleton.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 26 (complete). From a wild animal, shot in South America.

Purchased, 1869.

801. Articulated skeleton. O. C. 4085.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 28.

Hunterian.

802. Skeleton of male.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 26.

From an animal which died in the Gardens of the Zoological Society, May 1871.

Purchased, 1871.

803. Imperfect skeleton, wanting the skull. O. C. 4087-4090.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 29.

Hunterian.

Cercoleptes caudivolvulus.

804. Skull.

Presented by the Zoological Society, 1875.

805. Skull. O. C. 4086.

Hunterian.

Family AILURIDÆ.

Genus AILURUS.

Fréd. Cuvier, Hist. Nat. des Mammifères (1825).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{4}$, m. $\frac{2}{2}$, $=\frac{9}{10}$: total 38.

Ailurus fulgens.

Fréd. Cuvier, loc. cit.

THE PANDA.

Hab. Eastern Himalayas.

806. Articulated skeleton of male.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 18.

From the animal the anatomy of which formed the subject of a memoir in the 'Proceedings of the Zoological Society,' 1870, p. 752.

Purchased, 1869.

Family URSIDÆ.

Genus HYÆNARCTOS*.

Hyænarctos, Falconer and Cautley (1845?).

Agriotherium, Wagner, Münchener gelehrte Anz. 1837 (fide Agassiz).

Pyanarctos sibalensis.

Ursus sivalensis, Cautley and Falconer, Asiatic Researches, vol. xix. p. 193 (1836).

* For the history of this genus and the difficulties of its synonymy, see Quart. Journ. Geol. Soc. 1877, p. 535.

807. Cast of the right upper first molar tooth.

From the original, in the Canham Collection in the Ipswich Museum, from the Red Crag of Suffolk. Described and figured in the 'Quarterly Journal of the Geological Society of London,' August, 1877, p. 534.

Presented by the Rev. H. Canham, 1877.

808. Cast of the left upper first molar tooth.

The original, also from the Red Crag of Suffolk, is in the Reed Collection in the York Museum, and is referred to in the above-eited paper.

Presented by W. Reed, Esq.

Genus AILUROPUS.

Ailuropoda, Alph. Milne-Edwards, Ann. des Se. Nat. série 5, xiii. art. no. 40 (1870). Withdrawn in favour of

Ailuropus, Alph. Milne-Edwards, Nouvelles Archives du Muséum, vii. Bulletin, p. 88 (1871).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{3}$, m. $\frac{2}{3}$, = 40.

Ailuropus melanoleucus.

Ursus melanoleucus, David, Nouvelles Archives du Muséum, v. Bulletin, p. 13 (1869).

Hab. Eastern Tibet.

809. Cast of skull of male.

From the original in the Paris Museum.

Presented by Professor Gervais, 1874.

810. Casts of the upper and lower series of teeth of the right side of adult.

From the originals in the Paris Museum.

Presented by Professor Alphonse Milne-Edwards, 1872.

PART II.

Ailuropus melanoleucus.

811. Casts of the upper and lower series of teeth of the right side of a younger individual.

From the originals in the Paris Museum.

Presented by Professor Alphonse Milne-Edwards, 1872.

Genus URSUS.

Linnæus, Syst. Nat. ed. 12, i. p. 69 (1766).

Dentition :—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{3}$, =42.

The three anterior premolars above and below are very small, one-rooted, and often early deciduous, especially the second, which is rarely present in adult animals.

Ursus malayanus.

Ursus malayanus, Raffles, Trans. Linn. Sec. xiii. p. 254 (1822). Helarctos malayanus, Hersfield, Zoel. Jeurn. ii. pp. 221-234 (1825).

THE MALAYAN BEAR.

Hab. Malay Peninsula, Sumatra, and Borneo.

812. Skull.

From an animal which lived in the Gardens of the Zoological Society. The bones are in a rather porous state.

Purchased, 1868.

813. Skull of young.

The permanent teeth are in place.

Purchased, 1868.

814. Skull of a still younger individual.

The milk-canines remain; but the rest of the teeth present belong to the permanent series.

Purchased, 1868.

Ursus ornatus.

Fréd. Cuvier, Hist. Nat. des Mammifères (1825).

THE SPECTACLED BEAR.

Hab. Andes of Peru.

815. Skull.

Dentition complete, with a supernumerary tooth on the loft side of the maxilla, placed internally and slightly posteriorly to the third premolar.

Received in exchange from the Paris Museum, 1870.

816. Casts of the dentary portions of the left maxilla and the right ramus of the mandible, with the teeth.

Of larger size than the previous specimen. From originals in the Paris Museum.

Presented by George Busk, Esq., 1882.

Ursus americanus.

Pallas, Spicilegia Zoologica, xiv. p. 6 (1780).

THE AMERICAN BLACK BEAR.

Hab. North America.

817. Skeleton. O. C. 4013.

In the upper jaw the full dentition is present; but in the lower jaw p. 2 and p. 3 are absent.

Vortebræ: C. 7, D. 14, L. 6, S. 3, C. 10 (incomplete).

Brookes Collection. Purchased, 1828.

818. Skull and bones of female.

Vertebræ: C. 7, D. 14, L. 6, S. 5, C. incomplete. From a very old animal which died in the Gardens of the

Zoological Society, Nov. 1863.

Purchased, 1863.

Ursus americanus.

819. Skull. O. C. 4047.

Brookes Collection. Purchased, 1828.

820. Skull.

From Labrador.

Purchased, 1877.

821. Skull.

From Labrador.

This and the previous specimen were obtained at the same time and from the same locality; they are also of the same age, size, and general form, but show interesting individual variations in two characters often thought of specific or even generic importance, viz. the form of the hinder margin of the palate, and the extent to which the premaxillaries and frontals approach each other on the sides of the nasal bones.

Purchased, 1877.

822. Skull. O. C. 4015.

The teeth of the left side of the upper and lower jaws have been removed and are separately displayed.

Hunterian.

823. Skull. O. C. 4014.

Presented by the Lords of the Admiralty.

824. Skull of a Bear.

From the animal figured and described by Selater (Proc. Zool. Soc. 1868, p. 73, pl. viii., see also 1871, p. 232) from external characters when alive in the Society's Gardens, under the name of *Ursus nasutus*; the cranial and dental characters, however, correspond with those of *U. americanus*. The bones are in a very diseased state.

Presented by the Zoological Society, 1871.

Ursus tibetanus.

Fréd. Cuvier, Dict. des Sciences Nat. xxxvii. p. 56 (1825).

THE HIMALAYAN BLACK BEAR.

Hab. Northern India and China.

825. Skeleton.

Vertebræ: C. 7, D. 15, L. 5, S. 5, C. imperfect.

The patollæ are wanting.

From an animal shot near Mussourah, Bengal.

Presented by Dr. Alfred J. Wall and Sir Joseph Fayrer, K.C.S.I., 1877.

826. Skull, J. O. C. 4044.

From an animal shot on the Gogan range in Kumaon, North India.

Purchased.

827. Shull, ♀. O. C. 4045.

From the same locality.

Purchased.

828. Skull.

From Cashmere.

Presented by Colonel H. A. Smyth, R.A., 1871.

829. Skull.

From Cashmore.

Presented by Colonel H. A. Smyth, R.A., 1871.

830. Skull of young.

The milk-canines and outer incisors remain. The posterior permanent molars have not yet risen above the alveoli.

From Cashmere.

Presented by Captain H. V. Brooke, 92nd Regiment, 1876.

Ursus tibetanus.

831. Mutilated skull of young.

Of smaller size, but with the dentition slightly more advanced than the last, probably a female.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

832. Cranium of a Bear, apparently of this species.

Origin unknown.

833. Cranium of a Bear (*U.*—?).

Found in the stores among Hodgson's Nopal Collection, and eertainly from India.

It differs from all the other erania of bears in the eollection in the shortness of the premaxillary bones.

834. Cranium of a young Bear (U. ---?).

From India. Found in the stores with the last; without history.

Ursus arctos.

Linnæus, Syst. Nat. edit. 12, i. p. 69 (1766).

THE BROWN BEAR.

Hab. Europe and Northern Asia.

835. Skeleton of male.

Vertebræ: C. 7, D. 14, L. 6, S. 5, C. wanting.

From Telemarken, in Norway.

Received in exchange from the Christiania Museum, 1878.

836. Skull.

Purchased, 1868.

837. Skull of young. O. C. 4046.

The permanent dentition is acquired; but the canines are not fully exserted.

Presented by Samuel Stutchbury, Esq., 1820.

838. Skull of young.

All the permanent teeth are in place; but the canines are not fully developed. The specimen has probably been taken from an animal in confinement, as the teeth are not well formed.

839. Right ramus of mandible, with the canine and the majority of the premolar and molar teeth.

From the Gower Cave, South Wales. (Dr. Falconer's Collection).

Presented by George Busk, Esq., 1882.

The following casts, illustrating the range of variation of the teeth of this species, were presented by George Busk, Esq., in 1882.

840. Casts of the teeth of the right maxilla and of the left mandible.

From a specimen in the Paris Museum, marked "Martin."

841. Casts of the teeth of the left maxilla and of the left mandible.

From a specimen in the British Museum, No. 218 g.

842. Cast of the left maxillary teeth.

From a specimen in the British Museum, No. 218.

Ursus arctos.

843. Cast of the left mandibular teeth.

From a specimen in the British Museum (218 E), called Myrmarctos eversmanni by Dr. Gray.

844. Cast of the right maxillary and left mandibular teeth.

From a specimen in the Paris Museum, where it is marked *U. norvegicus*, Fréd. Cuvier.

845. Cast of left mandibular teeth.

From the same specimen.

846. Cast of the right mandibular teeth.

From a specimen found in the Genista cave in the Rock of Gibraltar*.

847. Cast of the left mandibular teeth.

From a specimen found in Brixham Cave, near Torquayt.

848. Three casts of canine teeth.

From specimens found in Brixham Cave.

849. Cast of left posterior upper molar tooth.

From a specimen found in Brixham Cave.

^{*} See Busk, "On the Ancient or Quaternary Fauna of Gibraltar," Trans. Zoological Society, vol. x. p. 73 (1876).

[†] See "Report on the Exploration of the Brixham Cave," Philosophical Transactions for 1873, vol. 163, p. 471.

Ursus isabellinus.

Horsfield, Trans. Linnean Soc. vol. xv. p. 332 (1826).

THE ISABELLINE BEAR.

Hab. The Himalaya Mountains.

This species is closely allied to, if not merely a local variety of, U. arctos.

850. Skull.

From Cashmere.

Presented by Colonel H. A. Smyth, R.A., 1871.

851. Skull.

From Cashmere.

Presented by Colonel H. A. Smyth, R.A., 1871.

852. Skull.

From Cashmere.

Presented by Colonel H. A. Smyth, R.A., 1871.

853. Skull.

The occiput is mutilated. From Simla.

Purchased, 1868.

Ursus horribilis.

Ursus horribilis, Ord, in Guthrie's Geography, 2nd American ed. ii. pp. 291, 299 (1815) (fide Baird); Journ. de Physique, lxxvii. p. 152 (1818); Say, in Long's Exped. Rocky Mountains, ii. p. 52 (1823); Baird, Mammals of North America, p. 219 (1859).

U. cinereus, Desmarest, Mammalogie, p. 164 (1820).

U. ferox (Lewis and Clarke, Travels to Missouri), ibid. p. 164*.

THE GRIZZLY BEAR.

Hab. North America.

• This name is given by Desmarest as a synonym of his *U. cinereus*. It was adopted by Richardson (Fauna Boreali-Americana, vol. i. p. 24, 1829); but it does not occur in the work of Lewis and Clarke cited, published in 1814.

Ursus horribilis.

854. Articulated skeleton of male.

Vertebræ: C. 7, D. 14, L. 6, S. 6, C. 9.

The os penis, sent with the skeleton, is in the Physiological Series.

Prepared from an animal killed on the Yellowstone River, Montana, U. S. America.

Purchased, 1875.

855. Skull and imperfect skeleton of adolescent male. O. C. 4016-4036.

From an animal which died in the Gardens of the Zoological Society.

Presented by the Zoological Society. (Hunterian Substitute, 1843.)

856. Skull.

From an animal killed near Fort Edmonston on the North Saskatchewan.

Presented by Dr. John Rae, 1878.

857. Skull.

From an animal "shot near Cheyenne in the Wyoming Territory, about 200 miles from the foot of the Rocky Mountains; regarded by the slayer as a young Grizzly."

Presented by George Busk, Esq., 1869.

858. Right ramus of mandible, assigned by the donor to this species.

From Gower Cave, South Wales. (Dr. Falconcr's Collection.)

Presented by George Busk, Esq., 1882.

859. Left ramus of mandible, assigned by the donor to this species.

From Gower Cave, South Wales. (Dr. Falconer's Collection.)

Presented by George Busk, Esq., 1882.

The following casts, illustrating the range of variation of the teeth of this species, were presented by George Busk, Esq., in 1882.

860. Casts of the left maxillary and left mandibular teeth.

From specimens from California in the Paris Museum, figured by De Blainville, 'Ostéographie,' vol. ii. pl. 6.

861. Casts of the left maxillary and mandibular teeth.

From a specimen in the Paris Museum.

862. Casts of the maxillary and mandibular teeth.

From a specimen in the Paris Museum marked Q, and presented by Col. Fremont, from California.

863. Casts of the right maxillary and mandibular teeth.

From a specimen in the museum at Haslar Hospital, presented by Sir J. Richardson.

864. Casts of the maxillary and mandibular teeth.

From a specimen in the Leeds Museum.

865. Cast of the right maxillary teeth.

From a specimen in the British Museum.

866. Cast of the left mandibular teeth.

From a specimen in the British Museum (No. 1137 E).

Ursus horribilis.

- 867. Cast of the dentary margin of the right ramus of the mandible with the milk-dentition.
- 868. Casts of the much-worn right and left maxillary and right mandibular teeth.

From a specimen in the British Museum marked "Barren-Ground Bear"*.

Ursus fossilis.

Ursus fossilis, Goldfuss, Acad. Cæs. Leop. Nov. Acta, x. (1821) pp. 259-276.

Ursus priscus, Goldfuss, ibidem, xi. pt. 2, p. 468 (1823); Cuvier, Ossem. fossiles, iv. p. 380 (1823).

This and the next nominal species are, according to Mr. Busk, undistinguishable by dental and osteological characters from the existing Grizzly Bear of North America†.

869. Anterior extremity of left ramus of mandible. O. C. F. 37.

This specimen was numbered r 18 in the original Hunterian Catalogue of Fossils, and is said to be from Germany.

Hunterian.

870. Six teeth (viz. upper incisor, three canines, right upper penultimate molar, and left lower penultimate molar) referred to this species. O. C. F. Nos. 22, 27, 28, 29, 30, and 41.

See Owen's 'British Fossil Mammals,' 1846, p. 84.

Found in 1820 in one of the limestone caverns at Oreston, near Plymouth‡.

Presented by Joseph Whidbey, Esq.

* This is regarded by Mr. Busk as in all probability a distinct species, apparently the form named *U. horriaeus* by Baird (see Phil. Trans. for 1873, p. 547).

† See Philosophical Transactions for 1873, vol. 163, p. 543; and Transactions of the Zoological Society, vol. x. p. 64.

‡ For an account of these caverns and their contents, see Philosophical Transactions, 1821, pp. 133-5, and 1823, pp. 78-90.

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The following easts from specimens attributed to this species were presented by George Busk, Esq., in 1882.

871. Casts of the right and left maxillary and right mandibular teeth.

From the type specimen of Goldfuss in the British Museum.

872. Cast of the dentary border, with some of the teeth, of the left ramus of a mandible.

From a specimen found in Brixham Cave.

873. Cast of a canine tooth.

From a specimen found in Brixham Cave.

Arsus bourguignati.

Lartet, Ann. Sciences Nat. sér. 5, vol. viii. p. 161 (1867).

874. Cast of eranium.

The original is from "la caverne de Mars," near Vence, Alpes Maritimes, France.

Presented by Prof. Milne Edwards, 1868.

Arsus arbernensis.

Croizet et Jobert, Rech. s. les ossemens fossiles du Dép. du Puy-de-Dôme, p. 188 (1828).

875. Cast of the dentary border and teeth of the right maxilla.

Presented by George Busk, Esq., 1882.

Arsus spelæus.

Rosenmueller, Oss. fossil. animal. p. 18 (1794).

876. Cranium, J. O. C. F. 1.

Described and figured by John Hunter, Phil. Trans. vol. lxxxiv. p. 416, pl. xix. fig. 1 (1794). It was presented to Hunter by the Margravo of Anspach.

From the Bone-cave at Gailenreuth near Streitburg, Bavaria.

Hunterian.

877. Cranium. O. C. F. 2.

Described and figured by Hunter, *loc. cit.* pl. xix. fig. 2. From Gailenreuth*.

Hunterian.

878. Mutilated cranium. O. C. F. 3.

Hunterian.

879. Poster or portion of cranium. O. C. F. 4.

Described and figured by Hunter, loc. cit. pl. xx. fig. 1.

Hunterian.

880. A mass of stalactite enveloping a portion of the cranium. O. C. F. 5.

Hunterian.

881. Portion of the left maxilla and palate-bones, including the three posterior molar teeth. O. C. F. 6.

^{*} When not otherwise expressed, all the Hunterian specimens of *Ursus spelæus* form part of the original collection from the bone-cave of Gailenreuth, presented to Hunter by the Margrave of Anspach, and noticed in the above-cited paper in the Philosophical Transactions.

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882. Left superior maxilla, with the three posterior molar teeth.

O. C. F. 7.

Hunterian.

883. Portion of the left superior maxilla with the last molar. O. C. F. 8.

The surface of the tooth is quite entire and unworn.

Hunterian.

- 884. Portion of the right superior maxilla containing the three unworn posterior molars. O. C. F. 9. Hunterian.
- 885. Præmaxillæ and part of the maxillæ, with the sockets of the incisor and canine teeth. O. C. F. 10.

 Hunterian.
- 886. Right ramus of mandible. O. C. F. 11.

- 887. Posterior part of left ramus of mandible, with the last two molar teeth.

 Hunterian.
- 888. Right ramus of mandible, with canine and molar teeth.
 O. C. F. 12.

 Hunterian.
- 889. Left ramus of mandible, with canine and molar teeth.
 O. C. F. 13.

 Hunterian.

Ursus spelieus.

890. Left ramus of mandible. O. C. F. 14.

Hunterian.

- 891. Posterior portion of left ramus of mandible. O. C. F. 15.
 Hunterian.
- 892. Fragment of left ramus of mandible. O. C. F. 16.

This specimen is included in the original Hunterian Catalogue of Fossils (No. r 17), where it is ascribed to the "White Bear," and stated to be from Bauman's Cavern in Germany.

Hunterian.

893. Portion of left ramus of mandible. O. C. F. 17.

- 894. Anterior portion of left ramus of mandible, with the canine tooth. O. C. F. 18.

 Hunterian.
- 895. Fragment of right ramus of mandible. O. C. F. 19.

 Hunterian.
- 896. Left upper first incisor. O. C. F. 21. Hunterian.
- 897. Left upper lateral incisor. O. C. F. 20. Hunterian.
- 898. Crown of canine tooth. O. C. F. 26. Hunterian.
- 899. Left upper penultimate molar. O. C. F. 31. Hunterian.

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900. Three upper posterior molars. O. C. F. 32, 33, & 34.

Hunterian.

901. Right upper posterior molar. O. C. F. 35.

This specimen was numbered "r 14" in the original Hunterian Catalogue of Fossils, in which it is stated to be from Bauman's Cavern in the Hartz Forest, Germany.

Hunterian.

902. Right lower sectorial or first molar. O. C. 36.

Hunterian.

903. Right lower posterior molar.

Hunterian?

904. Cranium of large size.

From the south of France.

This specimen was presented by M. Filhol, Director of the School of Medicine, Toulouse, to Mr. H. Christy, on whose decease, in 1865, it was transferred by his Executors to this Museum.

905. Anterior portion of both rami of the lower jaw.

From a cave in Belgium.

Presented by Professor D. T. Ansted, 1845.

906. Cast of the greater part of the left ramus of the lower jaw.

From a specimen found in a cave in the Apennines, with human remains of the polished-stone period.

Presented by Sir John Lubbock, 1868.

907. Right ramus of mandible.

The posterior portion is supposed to have been gnawed by Hyenas.

From L'Herm (Ariége), France.

Presented by George Busk, Esq., 1882.

PART II.

Ursus spelaus.

908. Two canine teeth. O. C. F. 23.

One of these is figured in Owen's 'British Fossil Mammals and Birds' (1846), fig. 29, p. 91, as a specimen from Kent's Hole, Torquay, which illustrates "the formidable size which the old males of the *Ursus spelæus* attained in this country;" but they are stated in the Catalogue to be both from the cave at Kühloeh, Saxony*, and presented by

M. Augustus Vautier de Saltikoff.

909. Three upper canine teeth.

From L'Herm (Ariége), France.

Presented by George Busk, Esq., 1882.

910. Three lower canine teeth.

From L'Herm (Ariégo), France.

Presented by George Busk, Esq., 1882.

911. Cast of a large lower canine tooth.

The original was found in Wokey Hole, Somersetshire.

Presented by George Busk, Esq., 1882.

912. Two posterior lower molars.

From L'Herm.

Presented by George Busk, Esq., 1882.

913. A left posterior lower molar.

From Victoria Cave, Settle.

Presented by George Busk, Esq., 1882.

* A graphic description of this cave is given in Buckland's 'Reliquiæ Diluvianæ, p. 137.

URSIDÆ. 179

914. Two small canine teeth. O. C. F. 24 & 25.

Doubtfully referred to *Ursus spelæus*. From Kent's Hole, near Torquay.

Presented by Gerard Smith, Esq.

915. Portion of the posterior part of left ramus of the lower jaw, with the three true molars in place. O. C. F. 38.

This specimen (which may not belong to *U. spelæus*) is "p 11" of the Hunterian Catalogue of Fossils; but the locality from which it was obtained is not given.

Hunterian.

916. Atlas, axis, and three lumbar vertebræ. O. C. 42, 43, 44, 45 & 46.

Hunterian.

917. Some lumbar vertebræ and other bones cemented together by a mass of stalactite. O. C. F. 47.

Hunterian.

918. Sacrum. O. C. F. 48.

Hunterian.

919. A right and a left humerus. O. C. F. 50 & 51.

The left corresponds with the lower figure of the humerus in pl. xx. of Hunter's memoir, Phil. Trans. (1794). It has a large intercondyloid foramen.

Hunterian.

920. Right humerus. O. C. F. 49.

Hunterian.

921. Right radius. O. C. F. 55.

From the bone-cave at Muggendorf.

Presented by M. August Vautier de Saltikoff, 1831.

Ursus spelceus.

922. Proximal half of left ulna. O. C. F. 53.

From Oreston.

Presented by Joseph Whidbey, Esq., 1820.

923. Right ulna. O. C. 52.

From Gailenreuth.

Presented by the Earl of Enniskillen.

924. Right femur. O. C. F. 58.

From the bone-cave at Muggendorf.

Presented by M. A. Vautier de Saltikoff, 1831.

925. Left femur. O. C. F. 59.

Hunterian.

926. Right femur, wanting the proximal extremity.

927. Right and left fibulæ.

From near Toulouse.

Presented by George Busk, Esq., 1882.

928. Left pisiform bone. O. C. F. 57.

Hunterian.

929. Middle metatarsal of right foot. O. C. F. 60.

Ursus maritimus.

Linnæus, Syst. Nat. ed. 12, i. p. 70 (1766).

THE POLAR BEAR.

Hab. Arctic regions.

930. Incomplete skeleton. O. C. 3988–4011.

The skull is divided transversely and vertically into three segments.

Hunterian.

931. Imperfect skeleton of an adolescent animal.

Vertebræ: C. 7, D. 14, L. 6, S. 5, C. incomplete. Several of the bones are mounted in the Separate Series.

932. Articulated skeleton, young. O. C. 3979.

Vertebræ: C. 7, D. 15, L. 5, S. 5, C. incomplete.

Brookes Collection. Purchased, 1828.

933. Skull. O. C. 3982.

Hunterian.

934. Skull, J. O. C. 3984.

Hunterian.

935. Skull, d.

936. Skull. O. C. 3985.

Presented by the Lords of the Admiralty.

937. Skull, 2.

Ursus maritimus.

938. Skull. O. C. 3886.

Presented by W. Gaitskell, Esq., 1820.

939. Skull. O. C. 3987.

Presented by Sir W. Blizard, 1812.

940. Skull, ♀.

From Novaia Zemlia.

Presented by J. Lamont, Esq., 1870.

941. Skull.

942. Skull.

943. Cranium. O. C. 3980.

Evidently that of a very old animal. The alveolar borders are diseased.

Hunterian.

944. Cranium, longitudinally and vertically bisected: 3. O.C. 3981.

Presented by Dr. Leach.

945. Cranium, J. C. C. 3983.

It has been longitudinally and vertically bisected.

British Museum. Purchased, 1809.

Genus MELURSUS.

Melursus, F. A. A. Meyer, Uebersieht der neuesten zoologischen Entdeekungen, &c., p. 155 (1793).

Prochilus, Illiger, Prodromus Syst. Mam. et Av. p. 109 (1811).

Dentition:—i. $\frac{2}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{3}$: total 40.

The first upper incisor appears to be represented only by a minute tooth in the milk-dentition. In all adult skulls it is absent.

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Melursus ursinus.

URSIDÆ.

Bradypus ursinus, Shaw, Naturalist's Miseellany, no. 19. pls. 58 & 59 (1791), Gen. Zool. i. pt. 1, p. 159 (1800).

Melursus lybius, Meyer, loc. cit. p. 156 (1793).

Ursus lubiatus, Do Blainville, Bull. de la Soc. Philomat. p. 74 (1817).

THE SLOTH BEAR.

Hab. India.

946. Skeleton.

The last two segments of the limbs are wanting.

The skull and left scapula show marks of recovery from serious injuries. The alveolar margins of the jaws are extensively diseased, and many of the teeth lost.

Vertebræ: C. 7, D. 15, L. 5, S. 6, C. incomplete.

Shot by the donor in the Rohilkand Terai, Northern India, 14 February 1876.

Presented by H.R.H. the Prince of Wales, K.G., 1876.

947. Skeleton.

The last two segments of the limbs are wanting. Vertebræ: C. 7, D. 15, L. 5, S. 5, C. incomplete. From the Rohilkand Terai.

Presented by H.R.H. the Prince of Wales, K.G., 1876.

948. Articulated skeleton of female. O. C. 4037.

Vertebræ: C. 7, D. 15, L. 5, S. 5, C. 11.

From an animal which had been kept alive in this country for many years.

Purchased, 1828.

949. Skull. O. C. 4038.

This specimen is figured in Cuvier's 'Ossemens Fossiles,' iv. pl. xxiii. fig. 6, and referred to at p. 334 of the same volume (ed. 1823).

Presented by Sir Everard Home.

Melursus ursinus.

950. Skull of male.

From Maunbhoom, Bengal, 1865.

Presented by R. C. Beavan, Esq., 1867.

951. Skull of male.

From Maunbhoom, Bengal, 1865.

Presented by R. C. Beavan, Esq., 1867.

952. Skull of male.

From Maunbhoom, Bengal, 1865.

Presented by R. C. Beavan, Esq., 1867.

953. Skull of female. O. C. 4040.

Traces of the alveolar sockets of the central upper incisors remain.

The teeth have been removed from the left side, and are displayed separately.

Purchased.

954. Skull of female.

Sockets of the central upper incisors are present.

955. Skull of female. O. C. 4039.

Brookes Collection. Purchased, 1828.

956. Cranium, J.

957. Cranium, J.

958. Skull of very young.

The milk-dentition is present, with the minute first upper incisor in place.

From the Rohilkand Terai.

Presented by H.R.H. the Prince of Wales, K.G., 1876.

EXTINCT CARNIVORA

OF UNCERTAIN POSITION.

Genus HYÆNODON.

De Laizer et de Parieu, Comptes Rendus de l'Aead. vii. p. 442 (1838).

Myzenodon brachyrhynchus.

De Blainville, Ostéographie, Gen. Canis p. 113, Subursus pl. 17.

959. Cast of skull.

The original from Rabastens (Tarn) is figured by De Blainville, loc. cit.

Presented by the Paris Museum of Natural History.

Hyanodon bulpinus.

Gervais, Journal de Zoologie, ii. p. 374 (1873).

960. Portion of the right ramus of the lower jaw.

From the phosphoritie deposits of Quercy, south of France.

Presented by M. H. Filhol, 1878.

961. Portion of the lower jaw of a young specimen of a larger species of *Hyænodon*, showing the milk-molars and crowns of the permanent premolars in their formative alveoli.

The completely diphyodont character of Hywnodon, and its consequent disagreement in this respect with the Marsupialia, in which order it has been placed by some zoologists, is demonstrated in this specimen.

From the same deposit as the last.

Presented by M. H. Filhol, 1878.

Genus ARCTOCYON.

" Palæocyon ou mieux Arctocyon," De Blainville, Ostéographie, ii. Gen. Subursus, p. 73.

Arctocyon primeebus.

Palæocyon primævus, De Blainville, op. cit. p. 121, pl. 13.

962. Cast of cranium.

The original, from the Inferior Eoeene of La Fère, Aisnée, France, is figured in De Blainville's 'Ostéographie.'

Presented by Professor Gervais, 1870.

963. Cast of interior of cranial cavity.

Presented by Professor Gervais, 1870.

Suborder PINNIPEDIA*.

Family OTARIIDÆ.

Genus OTARIA.

Péron, Voyage aux Terres Australes, ii. p. 37 footnote (1816). Dentition:—i. $\frac{3}{2}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1 \text{ or } 2}{1}$, = 34 or 36.

* The nomenclature of this group has recently been carefully revised by J. A. Allen ('History of North-American Pinnipeds,' Washington, 1880). As this work is likely to become a standard authority on the subject, the names used in this Catalogue have been brought, as much as possible, into harmony with it, except in following the excessive multiplication of generic divisions instituted by Gray and Gill.

Otaria jubata.

Phoca jubata, Schreber, Säugthiere, iii. p. 300, tab. 83 s (1776?); Erxleben, Syst. Reg. An. (quoting Schreber), p. 582 (1777).

THE SOUTHERN SEA-LION.

Hab. Coasts of Southern America.

Dentition: i. $\frac{3}{2}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{1}$, = 36.

964. Articulated skeleton of male.

Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 8. From the Falkland Islands.

Presented by F. Coleman, Esq., Secretary to the Falkland Islands Company, 1877.

965. Bones of the trunk of a young individual.

Vertebræ: C. 7, D. 15, L. 5, S. 4, C. incomplete. From the Falkland Islands.

Presented by the Zoological Society, 1869.

966. Skull, vertically and longitudinally bisected, of male. O. C. 3971.

The animal from which this specimen was taken, was killed in Public Sound, Falkland Islands, by Lieut. Robinson, R.N.

Presented by Admiral Sir Francis Beaufort, Hydrographer to the Admiralty, 1842.

967. Skull, with the hyoid arch, of male. O. C. 3970.

From the same locality.

Presented by Admiral Sir Francis Beaufort, 1842.

Otaria jubata.

968. Skull of female. O. C. 3968.

From the same locality.

Presented by Admiral Sir Francis Beaufort, 1842.

969. Skull of male.

From the Falkland Islands.

Presented by the Falkland Islands Company, 1867.

970. Skull of an old male.

Found at Dungeness Point, South-east Patagonia, Jan. 12th, 1867, by Dr. R. O. Cunningham, H.M.S. 'Nassau.'

Presented by the Lords of the Admiralty, 1868.

971. Skull of male.

From the Falkland Islands.

Presented by Dr. Horace N. Watts, Colonial Surgeon, Falkland Islands, 1874.

972. Cranium of an old male.

From Walker Creek, Falkland Islands.

Presented by Mr. James Campbell, 1880.

973. Cranium of an old female.

From the same locality.

This and the preceding specimen, both of aged animals, show very well the characteristic differences in the crania of the two sexes. While the brain-cavity is nearly of the same size and figure in both, the jaws, teeth, and all the processes for the attachment of muscles are greatly more developed in the male, producing an extremely different general appearance. These sexual differences in the crania are exactly parallel to those seen in the Gorilla.

Presented by Mr. James Campbell, 1880.

974. Cranium, from which most of the teeth have been lost. O. C. 3966.

This specimon was brought to England in 1769, by Commodore Byron, as is stated, from Tinian, one of the Ladrone Islands, and was for many years preserved in the British Museum. It is not improbable that there has been a mistake as to the locality assigned to it, or that it was brought to the island by some human agency or accident, as living Sea-Lions of this species have never been met with nearer to Tinian than the Galapagos Islands. There is no mention of it in Byron's published narrative. De Blainville has given a very incorrect description and figure of this specimen in the 'Journal de Physique,' tome xei. pp. 287 and 300 (1820), under the name of *Phoca byronia*, whence *Phoca byronii*, Desmarest, Mammalogie, p. 240 (1820).

British Museum. Purchased, 1809.

975. Skull of female. O. C. 3969.

The teeth have been removed from the right side of the upper and lower jaw, and are displayed separately.

From the Falkland Islands.

Hunterian.

976. Skull of young.

Stated by the donor to be about a year old. All the permanent teeth have been acquired. From the Falkland Islands.

Presented by Admiral Sir B. J. Sulivan, K.C.B., 1844.

977. Skull of a younger animal.

Estimated by the donor at about a fortnight old. The only milk-teeth remaining in place are the canines.

From the Falkland Islands.

Presented by Admiral Sir B. J. Sulivan, K.C.B., 1844.

Otaria jubata.

978. Skull of a very young animal.

Most of the milk-tecth were in place when received; but they were accidentally removed in cleaning the skull, and are preserved separately.

From the Falkland Islands.

Presented by F. Coleman, Esq., 1870.

Otaria stelleri.

Otaria stellerii, Lesson, Dict. Class. d'Hist. Nat. xiii. p. 420 (1828). Eumetopias stelleri (Lesson), Allen, North-American Pinnipeds, p. 232 (1880)*.

STELLER'S SEA-LION.

Hab. North Pacific.

979. Articulated skeleton of female.

Dentition: i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{1}$, =36. Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 14.

From California.

Received in exchange from the University Museum, Cambridge, 1871.

Otaria californiana.

Otaria californiana, Lesson, Dict. Class. d'Hist. Nat. xiii. p. 420 (1828).

Otaria gillespii, M'Bain, Proc. Edinb. Roy. Soc. i. p. 422 (1858). Zalophus californianus (Lesson), Allen, North-American Pinnipeds, p. 276 (1880)†.

THE CALIFORNIAN SEA-LION.

Hab. North Pacific.

[•] Genus Eumetopias, Gill, Proc. Essex Institute, v. 7, 11 (July 1866).

[†] Genus Zalophus, Gill, Proc. Essex Institute, v. 7, 11 (July 1866).

980. Articulated skeleton of male.

Dentition: i. $\frac{8}{2}$, c. $\frac{1}{4}$, p. $\frac{4}{4}$, m. $\frac{1}{1}$, =34. Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 10.

From an animal from California which died in the Southport Aquarium.

Presented by C. L. Jackson, Esq., 1880.

981. Mutilated skull of female.

From an animal from California which died in the Southport Aquarium.

Presented by C. L. Jackson, Esq., 1880

Otaria australis.

Phoca australis, Zimmermann, Geogr. Geschichte, iii. p. 276 (1783).

Phoca falklandica, Shaw, General Zoology, i. pt. 2. p. 256 (1800). Arctocephalas australis (Zimmermann), Allen, North-American Pinnipeds, p. 210 (1880)*.

SOUTH-AMERICAN FUR-SEAL.

Hab. South-American coasts.

982. Articulated skeleton of male.

Dentition: i. $\frac{3}{2}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{1}$, =36. Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 9.

From Lobos Island, mouth of Rio do la Plata.

Presented by A. Lafone Quevedo, Esq.†, 1875.

[•] Genus Arctocephalus ("Les Arctocéphales"), F. Cuvier, Mém. du Muséum, xi. p. 205 (1824).

[†] This and the next skeleton were obtained for the Museum by Mr. Quevedo at the request of Mr. F. Coleman, Secretary of the Falkland Islands Company.

Otaria australis.

983. Skeleton of female.

Dentition: i. $\frac{3}{2}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{1}$, =36.

Vertcbræ: C. 7, D. 15, L. 5, S. 4, C. incomplete.

From Lobos Island.

Presented by A. Lafone Quevedo, Esq., 1875.

984. Articulated skeleton of a young male.

Dentition: i. $\frac{3}{2}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{1}$, = 34.

Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 10.

From the Falkland Islands.

Presented by F Coleman, Esq., 1873.

Otaria lobata.

Arctocephalus lobatus, Gray, Spicileg. Zool. i. p. 1 (1828); Cat. Seals and Whales Brit. Mus. p. 50 (1866).

Zalophus lobatus (Gray), Allen's North-American Pinnipeds, p. 209 (1880).

AUSTRALIAN SEA-BEAR.

Hab. Australian Seas.

985. Mutilated cranium. O. C. 3964.

Dentition: i. $\frac{3}{2}$, c. $\frac{1}{2}$, p. $\frac{4}{2}$, m. $\frac{1}{2}$.

Found eighty miles inland in South Australia.

Presented by Dr. Hobson.

986. Upper and lower jaws, with the teeth, of this or an allied species, but of much smaller size than the last specimen. O. C. 3965.

Dentition: i. $\frac{3}{2}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{1}$, = 34.

The alveolar wall is removed on the right side to show the roots of the teeth.

Presented by Dr. Hobson.

Otaria pusilla.

? Phoca pusilla, Schreber, Säugthiere, iii. p. 314 (1778), and other authors; based on "Le Petit Phoque" of Buffon.

? Phoca antarctica, Thunberg, Mém. Acad. St. Pétersb. iii. for 1810, p. 321.

Arctocephalus delalandi, Gray, Proc. Zool. Soc. 1859, pp. 107, 357. Arctocephalus antarcticus (Thunberg), Allen, North-American Pinnipeds, p. 212 (1880).

Hab. Cape of Good Hope.

987. The right radius and ulna with the manus, and the right tibia and fibula with the pes.

From the Cape of Good Hope.

Presented by Professor Van Beneden, 1865.

988. The right ramus of the mandible of a very young specimen, showing the milk-dentition.

From the Cape of Good Hope.

Presented by Professor Van Beneden, 1869.

989. The cranium of an Otaria. O. C. 3977.

Very like the specimen described by W. Turner as O. schist-hyperoës (Journ. Anat. and Physiology, vol. iii. 1868, p. 113), which Allen refers to this species.

Dentition: i. 3, c. 1, p. 4, m. 2.

Hunterian.

Otaria ursina.

Phoca ursina, Linnæus, Syst. Nat. ed. 12, i. p. 55 (1766).

Callorhinus ursinus (Linn.), Allen, North-American Pinnipeds,
p. 313 (1880)*.

THE NORTHERN FUR-SEAL OR SEA-BEAR.

Hab. North Pacific.

* Genus Callorhinus, Gray, Proc. Zool. Soc. 1859, p. 357.
PART II. O

Otaria ursina.

Dentition:—i. $\frac{3}{2}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{2}{1}$, = 36.

990. Articulated skeleton of male.

There are two supernumerary teeth on each side of the upper jaw, of smaller size than the normal teeth—one interposed between the second and third premolars, the other between the premolars and molars.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 11.

From St. Paul's Island, Prybilov group, North Pacifie.

Presented by the Alaska Commercial Company, 1880.

991. Skeleton of female.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 11.

From the same locality.

Presented by the Alaska Commercial Company, 1880.

992. Skull, 3.

Owing to an old injury, most of the teeth have been lost from the left side of both upper and lower jaws.

Presented by the Smithsonian Institution, 1871.

Family TRICHECHIDÆ.

Genus TRICHECHUS.

Linnæus, Syst. Nat. ed. 12, i. p. 49 (1766)*.

The complete dentition appears to be i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{0}$, = 34, of which the following teeth only are commonly present in a

* In the 12th edition of the 'Systema Nature,' the Walrus stands at the head of the heterogeneous list of animals forming the genus *Trichechus*. Consequently this name has been almost universally accepted for it since 1766 by systematic zoologists. Recently, however, objections to its use (fully stated in Allen's 'North-American Pinnipeds,' p. 15), founded on references to literature of an earlier date, have led to the revival of the obsolete names

functional state in the adult:—i. $\frac{1}{0}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, =18. The upper canines are immensely developed. All the other teeth are much alike, simple, one-rooted, and with crowns, rounded at first, wearing to a flat or concave surface.

Trichechus rosmarus.

Trichechus rosmarus, Linnæus, Syst. Nat. ed. 12, i. p. 49 (1766). Odobænus rosmarus (Malmgren), Allen, North-American Pinnipeds, p. 23 (1880).

THE WALRUS.

Hab. Arctic Ocean.

Allen distinguishes the Atlantic from the Pacific Walrus specifically under the names of *O. rosmarus* and *O. obesus*. In the absence of knowledge of the locality of most of the following specimens, and of strongly marked differential characters, they are all included under the former name, in accordance with the hitherto prevailing opinion.

993. Articulated skeleton of male. O. C. 3860.

Dentition: i. $\frac{1}{0}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, =18.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 8 (incomplete).

From Spitzbergen.

Presented by General Sir Edward Sabine, K.C.B., 1823.

994. Mutilated cranium of very large size. J. O. C. 3864.

Dentition: i. $\frac{1}{0}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, with traces of the sockets of two additional molar teeth on both sides of the upper jaw.

of *Odobænus* by some, and *Rosmarus* by others, for the Walrus, and the transference of *Trichechus* to the Manatee, by which the confusion originally existing in the nomenclature of these animals, and which had been overcome by the almost universal consent of zoologists, has been introduced afresh, with no obvious advantage to the progress of science. Adhesion to Rule 2 of the British-Association Code would have averted this.

Trichechus rosmarus.

995. Skull of an old animal. 3. O. C. 3863.

A rudimentary ineisor (<u>i.2</u>) is retained on the right side. The sockets of two rudimentary posterior molar toeth are present in the left maxilla, and one in the right. The tusks have been removed.

Presented by the Lords of the Admiralty*.

996. Skull, with the skin of the head dried, vertically and longitudinally bisected. O. C. 3868.

The left ramus of the lower jaw has been injured during life, and the third premolar tooth consequently lost. In the right maxilla only is there a socket for a small fourth premolar.

Hunterian.

997. Skull of young male.

On the right side i.2 is moderately developed; and indications of the former presence of a corresponding tooth of very small size are seen on the left. A rudimentary tooth situated externally to the second upper left promolar, and between it and the canine, may be either a retained milk-tooth, or a reduplication of the premolar. In both maxillæ are small distinct sockets at some distance behind the premolars, and in the intervals are sears indicating the former existence of toeth.

From Novaia Zomlia.

Presented by J. Lamont, Esq., 1870.

998. Skull, Q. O. C. 3874.

The rudimentary second upper incisor is retained on the left side; and in the lower jaw there are seekets behind the developed premolars, that on the left side containing the rudiments of a tooth.

Presented by the Lords of the Admiralty*.

^{*} These specimens were collected by the Arctic Expeditions between the years 1820 and 1824.

999. Skull of young. O. C. 3876.

Each premaxilla shows the cicatrix of a small obliterated incisor-alveolus; and there is a shallow, partly bifid socket for a small posterior molar.

Hunterian.

1000. Skull of young. O. C. 3875.

Dentition: i. $\frac{1 \cdot 2}{0 \cdot 0}$, c. $\frac{1 \cdot 1}{1 \cdot 1}$, p. $\frac{3 \cdot 3}{3 \cdot 3}$, m. $\frac{0 \cdot 0}{1 \cdot 0}$.

Presented by the Lords of the Admiralty *.

1001. Mutilated skull without the tusks. O. C. 3871.

A socket exists behind the last premolar tooth on each side of the upper jaw.

Hunterian.

1002. Cranium in three transverse sections. J. O. C. 3867.

Hunterian.

1003. Cranium of large male. O. C. 3861.

Presented by the Lords of the Admiralty*.

1004. Cranium of large old male. O. C. 3862.

Presented by the Lords of the Admiralty*.

1005. Cranium. O. C. 3870.

Hunterian.

1006. Imperfect cranium, without teeth. O. C. 3866.

Hunterian.

1007. Cranium, ♀. O. C. 3877.

Presented by Sir John Richardson, M.D., 1819.

* These specimens were collected by the Arctic Expeditions between the years 1820 and 1824.

Trichechus rosmarus.

1008. Imperfect cranium of young. O. C. 3872 and 3882.

Only the left canine and one premolar are present; but there are sockets for two incisors and four of the molar series, tho hindermost being extremely minuto.

Hunterian.

1009. The upper and lower jaws. O. C. 3878.

There is a remnant of a socket behind the upper premolar teeth of both sides.

Hunterian.

- 1010. The upper and lower jaws, with the dried skin covering them. O. C. 3879.

 Hunterian.
- 1011. The upper and lower jaws with the dried skin covering them.
- **1012.** Upper jaw, ♀. O. C. 3880.

The tusks are peculiarly long and slender.

There is a very distinct socket for $\frac{i.2}{}$ on the right side.

Presented by Henry Cline, Esq.

1013. Upper jaw. O. C. 3881.

A minute molar is present behind each series of premolars. There is also a trace on the right side of the socket of a rudimentary incisor.

Hunterian.

1014. Upper jaw.

All the teeth have been lost except the canines.

In Museum before 1862.

1015. Lower jaw. O. C. 3861.

Hunterian.

1016. Lower jaw. O. C. 3865.

Hunterian.

1017. The maxillaries, premaxillaries, and sockets of the canine teeth of a large Walrus. O. C. 3883.

The outer wall of the socket of the left canine has been removed, showing the large open conical cavity for the persistent pulp, into which stalactite-like ossifications project from the apex of the pulp-cavity and the base of the socket.

Hunterian.

1018. A right tusk of remarkably large size.

It measures 820 mm. in greatest length in a straight line, and 230 mm. in girth.

Purchased, 1879.

1019. A tusk of large size. O. C. 3898.

British Museum. Purchased, 1809.

1020. A tusk.

1021. A tusk. O. C. 3885.

Hunterian.

1022. The right and left tusks. O. C. 3899.

From the western coast of North America.

Hunterian.

1023. The right and left tusks. O. C. 3889 and 3890.

British Museum. Purchased, 1809.

Trichechus rosmarus.

1024. A tusk. O. C. 3896.

British Museum. Purchased, 1809.

1025. A tusk. O. C. 3886.

Hunterian.

1026. A tusk. O. C. 3892.

British Museum. Purchased, 1809.

1027. A tusk. O. C. 3897.

British Museum. Purchased, 1809.

1028. A tusk, with a portion of the alveolar process attached.

O. C. 3893.

Hunterian.

1029. A tusk. O. C. 3888.

Purchased.

1030. A tusk. O. C. 3895.

Hunterian.

1031. A tusk. O. C. 3887.

Purchased.

1032. A tusk, longitudinally bisected. O. C. 3901.

Hunterian.

1033. A growing tusk, longitudinally bisected. O. C. 3900.

1034. Transverse section of a tusk.

Purchased, 1874.

1035. Transverse sections of a tusk, doprived of the calcareous salts by acid. O. C. 3903. Hunterian.

1036. A right upper premolar tooth. O. C. 3904.

Hunterian.

1037. Three teeth from the lower jaw. O. C. 3905.

Hunterian.

1038. The bones of the right manus.

From Novaia Zemlia.

Presented by J. Lamont, Esq., 1870.

1039. The bones of the right pes.

From Novaia Zemlia.

Presented by J. Lamont, Esq., 1870.

1040. A longitudinally bisected femur.

1041. A right fifth metatarsal bone.

Although the epiphysis is not united, it is of very largo size, greatly oxceeding the corresponding bone of the mounted skeleton.

1042. The os penis of a large Walrus. O.C. 3906.

The surface has been polished.

Trichechus rosmarus.

1043. Os penis. O. C. 3907.

From Greenland.

Presented by Lieut. Colquboun, 1823.

1044. Os penis.

From Novaia Zemlia.

Presented by J. Lamont, Esq., 1870.

1045. Os penis. O. C. 3908.

Hunterian.

1046. Os penis. O. C. 3909.

From Greenland.

Presented by Sir Everard Home.

1047. Os penis. O. C. 3910.

It shows a united fracture of the bone.

Presented by Mr. Portis.

1048. Os penis. O. C. 3912.

Hunterian.

1049. Os penis. O. C. 3913.

Hunterian.

1050. Os penis. O. C. 3914.

Hunterian.

1051. Os penis of a young Walrus. O. C. 3916. Hunterian.

1052. Os penis of young Walrus. O. C. 3917. Purchased.

1053. Os penis of young Walrus. O. C. 3918.

Hunterian.

1054. The pubic extremity of the os penis, longitudinally bisected to show its structure. O. C. 3919.

Purchased.

Trichechus, sp.?

1055. A portion of the anterior part of the skull of a Walrus.

From Martha's Vineyard, an island on the coast of Massachusetts, North America.

This specimen is figured in Lyell's 'Travels in North America' (1845), vol. i. p. 251, plate v.

Presented by Sir Charles Lyell, 1868.

Trichechus hurleyi.

Trichecodon huxleyi, Lankester, Quart. Journ. Geol. Soc. p. 226 (1865).

Trichechus huxleyi, Lankester, Trans. Linn. Soc. ser. ii. Zool. vol. ii. p. 213 (1882).

1056. Transverse section of tusk.

From the Red Crag, Suffolk.

Purchased, 1874.

1057. Cast of basal portion of tusk.

The original (from the Red Crag of Suffolk), figured in the 'Quarterly Journal of the Geological Society,' 1865, pl. xi. fig. 3, was formerly in the Whincopp collection, and is now in the York Museum.

Purchased, 1874.

1058. Cast of terminal portion of tusk.

Purchased, 1874.

Family PHOCIDÆ.

Subfamily Phocinæ.

Dentition:—i. $\frac{3}{2}$, c. $\frac{1}{7}$, p. $\frac{4}{4}$, m. $\frac{1}{7}$, = 34.

Genus HALICHŒRUS.

Nilsson, Faun. Skand. i. p. 377 (1820).

Halichærus grypus.

Phoca grypus, Fabricius, Skriv. af Nat. Selsk. i. pt. 2, p. 167, pl. xiii. fig. 4 (1791).

Halichærus griseus, Nilsson, Skand. Fauna, i. p. 377 (1820). Phoca gryphus, Fischer, Syn. Mamm. p. 239 (1829).

THE GREY SEAL.

Hab. North Atlantic.

1059. Skull and imperfect skeleton of an aged individual. O. C. 3943 to 3960.

Of this skull it is stated in O. C.:—"This appears to be the original of the figure by Mr. Clift, in Plate xxvii. of Home's paper in the 'Philosophical Transactions' for 1822. It is certainly of the same species, and belongs to an imperfect skeleton stated to have been presented to Mr. Huntor by a Mr. Oxendon, probably the gentleman who went two years in succession to the Orkney Isles for the purpose of shooting it. This animal had been known for thirty summers to come to the same rock, and lie basking in the sun. It had a grey beard."

Hunterian.

1060. Articulated skeleton of young.

Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 14.

Received in exchange, 1870.

1061. Skull of young.

Purchased, 1877.

Genus PHOCA.

Linnæus, Syst. Nat. ed. 12, i. p. 55 (1766).

Phoca vitulina.

Linnæus, op. cit. p. 56.

THE COMMON SEAL.

Hab. North Atlantic and North Pacific.

1062. Articulated skeleton.

Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 11.

Prepared from an animal caught in the river Welland, near Stamford, thirty miles from the sea.

Parker Collection. Purchased, 1858.

1063. Skeleton of female.

From an animal which died after parturition in the Zoological Society's Gardens, where it had lived only a few weeks.

Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 9 (imperfect).

Purchased, 1868.

1064. Skull.

From an animal killed in Loch Aline, Sound of Mull, Argyleshire, in 1870, and which measured eight and a half feet in length.

Presented by Dr. E. Hamilton, 1870.

1065. Articulated skeleton of young.

Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 12.

Purchased, 1870.

Phoca vitulina.

1066. Skeleton of very young.

All the permanent teeth have been acquired.

1067. Skull of young.

From an animal which died in the Zoological Gardens. It presents the individual peculiarities of possessing a supernumerary molar tooth on the left side of the upper jaw, behind and in the line of the normal molar series, and, on the same side of the lower jaw, a supernumerary tooth situated to the inner side of and parallel with the last normal tooth.

Purchasd, 1870.

1068. Disarticulated skull of young.

1069. Skull of the young of No. 1063.

Born and died in the Gardens of the Zoological Society, June 1868, having survived its birth exactly one week. The permanent teeth are just piereing the gums. The milk-teeth have all disappeared, with the exception of remnants of the upper canines and of the left upper first milk-molar.

Presented by the Zoological Society, 1868.

1070. Anterior portion of skull and lower jaw, with complete dentition, of young.

From an animal taken at Cromer in the autumn of 1866.

Presented by Edmund Story Maskelyne, Esq., 1866.

1071. Anterior portion of skull and lower jaw, with complete dentition, of young.

Phoca hispida*.

Phoca hispida, Schreber, Säugthiere, iii. tab. lxxxvi. (1776?).
P. fætida, Fabricius, Müller's Zool. Dan. Prod. p. viii (1776), not described, and withdrawn by author (Skriv. af Nat. Selsk. i. pt. 2, 1791, p. 74) in favour of P. hispida.

P. annellata, Nilsson, Skand. Faun. i. p. 362 (1820).

THE RINGED SEAL.

Hab. North Atlantic; Arctic Seas; North Pacific.

1072. Articulated skeleton of male

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 15. From the North Sca.

Presented by Captain David Gray, 1878.

1073. Skeleton of female.

Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 13.

The seventh cervical vertebra has articular facets, as if for a rudimentary rib, on the ends of both transverse processes. The first lumbar has also small free floating ribs, so that but for the analogy of other specimens it might almost be considered as belonging to the dorsal region. The second lumbar has a normal transverse process on the right side, and a free "pleurapophysis" on the left. The differences between this and the last specimen in the characters of the posterior sacral and anterior caudal vertebræ show the large amount of individual variation which may occur in one species, as well as the difficulties of fixing the limits to be assigned to these two vertebral regions.

Presented by Captain David Gray, 1878.

* The difficult question of the nomenclature of this species is fully discussed in Proc. Zool. Soc. 1871, p. 507, and subsequently by Allen (op. cit. p. 616). I find nothing advanced by the latter to induce me to change my former opinion, that the evidence inclines, however slightly, in favour of hispida. The strongest argument is, perhaps, its adoption by Fabricius in 1791, in preference to his own original name, a course rarely taken by an author without a sufficient reason, although the reason may not be, after such a lapse of time, apparent to us.

Phoca hispida.

1074. Skull.

From near Mezen, North Russia.

Purchased, 1873.

Phoca grænlandica.

Fabricius, in Müller's Zool. Dan. Prod. p. viii (1776).

THE HARP SEAL.

Hab. North Atlantic; Arctic Seas; North Pacific.

1075. Articulated skeleton. O. C. 3961.

Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 8 (incomplete).

Hunterian

1076. Skeleton (naturally articulated) of male.

Vertebræ: C. 7, D. 15, L. 5, S. 4, C. 15. Obtained by the donor at Disco, Greenland, in 1876.

Presented by Captain H. W. Feilden, 1877.

1077. Skull. O. C. 3962.

This is the specimen figured by Mr. Clift in Home's paper on the Skulls and Teeth of Scals in the Philosophical Transactions' for 1822, pl. xxviii., and in his 'Lectures on Comparative Anatomy,' vol. iv. tab. xix.

Hunterian.

1078. Skull.

From Novaia Zemlia.

Presented by J. Lamont, Esq., 1870.

1079. Skull.

Received in exchange from the Copenhagen Museum, 1867.

1080. Skull.

Received in exchange from the Copenhagen Museum, 1867.

1081. Skull.

Received in exchange from the Copenhagen Museum, 1867.

1082. Skull. O. C. 3963.

The right ramus of the lower jaw is wanting.

Hunterian.

1083. The left half of the skull of a feetal seal, probably of this species.

In the lower jaw the milk-molars are still in position, with the germs of the permanent teeth below them. In the upper jaw the milk-teeth have been lost, with the exception of the third incisor and the last milk-molar, which is associated with the permanent fourth premolar. The germs of all the permanent teeth are displayed.

Prepared from a specimen from the Stores, 1868.

1084. The teeth removed from the left side of a feetal seal, apparently of this species.

The animal measured 18 inches from nose to tail; and the dentition is rather more advanced than in the last specimen. No teeth appeared above the gums. The crowns of all the permanent teeth are formed; but of the milk-dentition, all that could be found were the partially absorbed canines, and three molars above and below, associated with the second, third, and fourth permanent premolars.

Prepared in 1868.

PART II.

Phoca barbata.

Phoca barbata, Fabricius, in Müller's Zool. Dan. Prod. p. viii (1776).
Erignathus barbatus (Fabricius), Allen, North-American Pinnipeds,
p. 654 (1880)*.

THE BEARDED SEAL.

Hab. North Atlantic; Arctic Seas; and North Pacific.

1085. Skull.

From the west coast of Greenland.

Purchased, 1870.

1086. Skull of female, from which most of the teeth have been lost during life.

It is characteristic of this species that the crowns of the teeth are lost at a comparatively early age, and that not unfrequently the roots also fall out, leaving the animal in the condition seen in the next specimen.

From Novaya Zemlya.

Presented by J. Lamont, Esq., 1870.

1087. Skull of an aged and completely edentulous animal.

From Greenland.

Received in exchange from the Copenhagen Museum, 1867.

Subfamily STENORHYNCHINÆ.

Dentition:—i. $\frac{2}{2}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{1}$, = 32.

Genus MONACHUS.

Monachus, Fleming, Philosophy of Zoology, ii. p. 187 (1822). Pelagius ("Pelage"), F. Cuvier, Mém. du Muséum, xi. p. 193 (1824).

* Genus Erignathus, Gill, Proc. Essex Inst. v. p. 9 (1866).

Monachus albiventer.

Phoca albiventer, Boddaert, Elenchus Animal. p. 170 (1785). Phoca monachus, Hermann, Beschäft. d. Berlin. Gesellsch. naturf. Freunde, iv. p. 501 (1779).

THE MONK SEAL.

Hab. Coasts of the Mediterranean and adjoining portion of Atlantic.

1088. Mutilated skull. O. C. 3942.

Hunterian.

1089. Skeleton of young female.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 15. From an animal which died in the Gardens of the Zoological Society, 18 May 1882.

Purchased, 1882.

Genus STENORHYNCHUS.

"Sténorhinque," F. Cuvier, Mém. du Muséum, xi. p. 190 (1824). Ogmorhinus, Peters, Monatsb. K. P. Akad. Wissensch. zu Berlin, p. 393, footnote* (1875).

Stenorhynchus leptonyx.

Phoca leptonyx, De Blainville, Journal de Physique, xci. p. 298 (1820).

THE LEOPARD SEAL.

Hab. South Atlantic and Pacific.

^{*} This name was given because Stenorhynchus was found to be preoccupied for a genus of Crustacea. The same remark will apply in this case as to Troglodytes (see p. 2). Ogmorhinus has, however, been adopted in Allen's 'North-American Pinnipeds,' and will perhaps prevail over Cuvier's name.

Stenorhynchus leptonyx.

1090. Articulated skeleton of nearly adult.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 14. From Tasmania.

Presented by W. L. Crowther, Esq., 1871.

1091. Skull. O. C. 3938.

This is the original of Mr. Clift's figure, published in Home's paper in the 'Philosophical Transactions' for 1822, pl. 29, and in his 'Lectures on Comparative Anatomy,' vol. iv. pl. 20.

From the Island of New Georgia.

Presented by William Keane, Esq.

1092. Skull of very large size.

The alveolar margins of the maxillary bones are diseased; and several of the premolar teeth have been lost.

From the Falkland Islands.

Presented by the Falkland Islands Company, 1867.

1093. Skull.

From an animal killed, while lying asleep, by a blow on the head from the bolos of a passing Guacho, on the sand beach of Berkeley Sound, East Falkland, in 1879.

Presented by H. Mansel, Esq., 1880.

1094. Skull.

From New Zealand.

Presented by W. D. Napier, Esq., 1858.

1095. Skull.

The form of the palate differs from that of the other skulls of this species in the collection in being crescentic posteriorly instead of V-shaped.

Presented by George Busk, Esq., 1866.

1096. Mutilated skull. O. C. 3939.

Presented by Thomas Chevalier, Esq., 1814.

1097. Right upper and lower jaws, with the outer alveolar wall removed, so as to show the roots of the teeth in situ. O. C. 3940.

Presented by Professor Owen.

1098. First and second premolar teeth of the left side of the lower jaw. O. C. 3941.

Presented by Professor Owen.

Stenorhynchus carcinophagus.

Phoca carcinophaga, Hombron and Jacquinot in Dumont d'Urville's Voy. au Pôle Sud, Atlas, Mam. pl. x. & x. A (1842).

Stenorhynchus serridens, Owen, Ann. & Mag. Nat. Hist. xii. p. 331 (Nov. 1843).

Lobodon carcinophaga, Gray, Zoology of 'Erebus' and 'Terror,' Mammalia, p. 5 (1844); Jacquinot and Pucheran, Dumont d'Urville's Voyage, iii. p. 27 (1853).

THE SAW-TOOTHED SEAL.

Hab. Antarctic Seas.

1099. Articulated skeleton. O. C. 3937,

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 12.

The skeleton was prepared from a specimen obtained in a high latitude in the Australian seas during the Antarctic Expedition commanded by Sir James Clark Ross.

> Presented by Robert McCormick, Esq., Surgeon to H.M.S. 'Erebus,' 1843.

Subfamily CYSTOPHORINÆ.

Dentition:—i. $\frac{2}{1}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{1}{1}$, =30.

Genus CYSTOPHORA.

Nilsson, Skand. Fauna, i. p. 382 (1820).

Cystophora cristata.

Phoca cristata, Erxleben, Syst. Reg. Animal. p. 590 (1777). Cystophora borealis, Nilsson, Skand. Fauna, i. p. 383 (1820).

THE BLADDER-NOSED SEAL.

Hab. North Atlantic.

1100. Articulated skeleton of male.

Prepared from an animal which died in the Zoological Gardens.

Vertobræ: C. 7, D. 15, L. 5, S. 3, C. 14.

Purchased, 1875.

1101. Skull of a male.

The large supranasal air-sac of the same individual is preserved in the Physiological Series, No. 1556 p.

From Greenland.

Purchased, 1870.

1102. Skull, J.

From Greenland.

Received in exchange from the Copenhagen Museum, 1867.

1103. Skull, ♀.

From Greenland.

Received in exchange from the Copenhagen Museum, 1867.

PHOCIDÆ. 215

1104. Cranium, J. O. C. 3935.

South Collection. Purchased, 1835.

1105. Incomplete skeleton of young female.

The head forms a preparation in the Physiological Scries (No. 1556c) showing the rudimentary condition of the air-sae in this sex and age.

Presented by the Zoological Society, 1870.

Genus MACRORHINUS.

Macrorhine, F. Cuvier, Mém. du Muséum, xi. p. 200 (1824). Mirounga, Gray, Griffith's Animal Kingdom, v. p. 179 (1827). Morunga, Gray, List Mammalia Brit. Mus. p. 103 (1843).

Macrorhinus leoninus.

Phoca leonina, Linnœus, Syst. Nat. ed. 12, i. p. 55 (1766). Phoca elephantina, Molina, Saggio sul. Stor. Nat. del Chili, p. 280 (1782).

rhoca proboscidea, Péron, Voy. aux Terr. Austr. ii. p. 34 (1817).

THE ELEPHANT SEAL.

Hab. Southern Ocean; Paeific coast of North America.

1106. Articulated skeleton of male.

It measures 4500 mm. from end of nose to end of tail; and 4890 mm. to end of posterior digits in straight line, as mounted. The right scapula and humerus, the fifth left rib, the sternum, and some of the bones of the manus are wanting.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 11. The first lumbar appears to have borne a rudimentary rib on the left side.

Length of cranium from fore end of premaxillaries to occipital condyles 561 mm. Extreme length (including occipital crests) 597 mm.

The opiphyses of the bodies of the vertebræ and the principal bones of the limbs are not yet united.

The os penis is in the separate collection in the Physiological Series.

Macrorhinus leoninus.

The skull is described and the dentition figured in the 'Proceedings of the Zoological Society,' 1881, pp. 145-162, where also will be found an account of the circumstances under which the animal was killed on the coast of East Falkland in 1879.

The skull was brought to England by Mr. Mansel, the body being left upon the spot where it was killed; but the bones were afterwards collected by Captain Packe and forwarded to the Museum.

Presented by Herbert Mansel, Esq., and Captain R. C. Packe, 1881.

1107. Articulated skeleton of a very young male.

From the fore part of the nose to end of tail it measures 1340 mm.; to end of posterior digits 1580 mm.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 9.

Received in exchange from the Museum of Saint Bartholomew's Hospital, 1867.

1108. Skull. O. C. 3921.

Length from fore end of premaxillaries to occipital condyles 463 mm.

Brought from Australia by Captain Langham.

Brookes Collection. Purchased, 1828.

1109. Skull. O. C. 3920.

Length from fore end of premaxillaries to occipital condyles, 438 mm.

Purchased, 1812.

1110. Imperfect cranium, transversely bisected across the tympanic cavities. O. C. 3922.

Presented by the Ven. Archdeacon Williams.

1111. The anterior portion of the upper and lower jaws with the teeth. O. C. 3923.

The outer wall of the alveoli of the canine and molar teeth on the right side have been removed to show their roots.

These formed part of the original specimen brought to England by Lord Anson from Juan Fernandez in 1744. See Anson's 'Voyage round the World,' p. 122, pl. 19, where the species is called "Sea Lyon," and upon the description and figure of which was founded the *Phoca leonina* of Linnæus. They were preserved for many years in the stuffed skin in the British Museum, from which institution they were transferred, with other osteological specimens, to the Collego of Surgeons in 1809.

Purchased 1809.

1112. Skull of young, ♀. O. C. 3934.

The sex is indicated, even at this early age, by the comparatively small size of the crowns of the canine teeth.

From the Crozet Islands.

Purchased.

1113. Right upper canine tooth, longitudinally bisected. O. C. 3924.

Hunterian.

1114. Twenty specimens of canine teeth.

Hunterian.

1115. Left upper canine of an adult Elephant Seal.

The crown is much abraded, the root fully formed, and the pulp-cavity closed.

From the Falkland Islands.

Presented by Captain R. C. Packe, 1881.

Macrorhinus leoninus.

1116. The corresponding tooth of a young Elephant Seal.

The root is imporfeetly formed and widely open. From the Falkland Islands.

Presented by Captain R. C. Packe, 1881.

1117. The upper and lower milk-teeth of the left side, with the ramus of the mandible of a fœtal female Elephant Seal.

The upper series eonsists of two ineisors, one eanine, and four molars, the first of which, rather later in dovelopment than the others, is probably the germ of the anterior permanent premolar (which appears to be never represented in the milk-dentition); the last three are the true milk-molars.

In the lower jaw are one ineisor, one eanine, and three molars, the formula of the milk-dentition being d.i. $\frac{2}{1}$, d.e. $\frac{1}{1}$, d.m. $\frac{3}{3}$, = 22. The animal from which they are taken is 11 inches (28 eentim.) in longth from nose to end of hind feot.

These teeth are described and figured in the 'Proceedings of the Zoological Society,' 1881, p. 154.

Prepared in 1868.

BOVIDÆ. 219

Order UNGULATA.

Suborder ARTIODACTYLA.

Section Pecora.

Family BOVIDÆ.*

Equivalent to the *Cavicornia*, or "Hollow-horned Ruminants," *i. e.* having the horns consisting of conical epidermic sheaths, encasing, and supported by, processes of the frontal bones.

The dentition of the whole family (with very few exceptions, which will be noted as they occur) is i. $\frac{0}{3}$, c. $\frac{0}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, $=\frac{6}{10}$: total 32. The lower canine is placed in close contact with, and resembles in form, the outer incisor. A rudimentary upper canine may occasionally be present; and the premolars may be reduced to $\frac{3}{2}$.

Genus BOS.

Linnæus, Syst. Nat. ed. 12, i. p. 98 (1766).

Bos taurus.

Linnæus, loc. cit.

THE COMMON OX.

Hab. Europe, and, as a domestic animal, the greater part of the habitable world.

1118. Articulated skeleton of an Italian Bull.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 19.

From Piedmont.

The animal from which it was prepared was presented to the Zoological Society (3 November 1862) by Victor Emmanuel, King of Italy, and lived in the Gardens of the Society about three years.

Purchased, 1866.

^{*} The generic divisions of this family are still in an unsatisfactory state, and require careful and critical revision. Many, even of those adopted in this Catalogue, are founded on trivial characters very difficult of definition.

Bos taurus.

1119. Skull and horns of a Cow from Chartley Park, Stafford, the seat of Lord Ferrers.

The animal was white, with black cars and tips of horns; the hair on the forehead long and slightly curled. It was one of a herd which, like the Chillingham cattle, are supposed to be descended from the original wild cattle of the country, and have been kept without intermixture from time immemorial.

Presented by John Macmeikam, Esq., 1863.

1120. Skull and horns of a Cow of the Hamilton breed of "White wild Cattle."

As it was taken from a head which had been stuffed, it is somewhat mutilated. The head was white, with black muzzle and lower lip, ears, and cyclashes.

Shot in Cadzow Forest, Lanarkshire, 26 December 1870.

For the history of this herd, see Storer's 'Wild Cattle of Great Britain.'

Presented by E. R. Alston, Esq., 1880.

1121. Cranium and horns of long-horned variety of the Common Ox. O. C. 3826.

It wants the nasal bones.

Hunterian.

- 1122. Cranium of long-horned variety of Common Ox. O. C. 3827. Hunterian.
- 1123. Cranium of short-horned or Guernsey Bull. O. C. 3827.

 Presented by the Very Rev. Dr. Buckland, 1830.
- 1124. Skull of a short-horned Cow.

1125. Skull of polled or hornless variety of Common Ox. O. C. 3829.

Presented by Henry Cline, Esq., 1824.

1126. Cranium of hornless variety of Common Ox. O. C. 3830.

Purchased.

1127. Skull of a young heifer of the hornless variety of Ox. O. C. 3831.

The milk-dentition is present with the first true molars.

Purchased.

The milk-teeth are in place.

Purchased.

1129. Skull of a new-born calf. O. C. 3838.

Purchased.

1130. Skull of a new-born calf, partially disarticulated.

Parker Collection. Purchased, 1858.

- 1131. Separated bones of the cranium of a calf.
- 1132. Skeleton of a feetal calf, about the middle of intrauterine life.

 Purchased, 1870.
- 1133. Skull of a feetal calf at about the same period of development as the last.

Bos taurus.

1134. Anterior portion of the cranium and lower jaw of a young Ox, with the milk-teeth and first and second permanent molars.

Purchased, 1875.

1135. Anterior portion of the cranium and lower jaw of a younger Ox, with the milk-teeth and first permanent molars.

Purchased, 1875.

1136. Mandible of a still younger Ox, with the milk-teeth only in place.

Purchased, 1875.

1137. Anterior portion of the mandible of a calf, showing the milk and permanent incisor teeth in situ.

Purchased, 1873.

1138. A series of eleven preparations showing the growth and wear of the inferior incisors of the Common Ox.

Purchased, 1870.

1139. An upper molar tooth in transverse section. O. C. 3841.

Hunterian.

1140. An upper molar tooth in longitudinal section. O. C. 3840.

Presented by Sir Everard Home, 1807.

1141. Pelvis of a cow. O. C. 3837.

Purchased.

1142. Bones of the manus.

Presented by the Zoological Society, 1865.

1143. Bones of the pes.

Presented by the Zoological Society, 1865.

1144. Horns of a Transylvanian Ox. O. C. 3833.

Hunterian.

1145. Horns of an Italian Ox. O. C. 3834.

Hunterian.

1146. A pair of large horns of an Ox. O. C. 3836.

Brought from America, about the year 1770, by Admiral Warren. Their length from tip to tip, following their greatest curve, is 10 feet 4 inches.

Presented by William Long, Esq., 1811.

1147. A pair of horns of the Galla, or Sanga variety of Ox. O. C. 3835.

From Abyssinia. They are described and figured at p. 258 of Salt's 'Voyage to Abyssinia' (1814).

Presented by Henry Salt, Esq.

1148. Skull of a variety of the Common Ox, called "Niata," which is propagated in the Pampas of South America. O. C. 3832.

"It is remarkable for the stunted development of the nasals, promaxillaries, and fore part of the lower jaw, which is unusually curved upwards to come into contact with the premaxillaries. The nasal bones are about one third the ordinary length, but retain almost their normal breadth. A triangular vacuity is left between them, the frontal, and the lacrymal, which latter bone articulates with the premaxillary, and thus excludes the maxillary from any junction with the nasal."—O. C.

Presented by Charles Darwin, Esq., 1840.

Bos taurus.

1149. Articulated skeleton of a male of the dwarf variety of the Zebu, or Indian Humped Ox (Bos taurus, var. indicus). O. C. 3842.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 18.

From an animal brought from Bengal, which died in the Menagerie at Exoter Change.

Purchased.

- 1150. Skeleton of a small Zebu, or Indian Humped Ox.
- 1151. A pair of small horns of an Indian variety of Ox. O. C. 3843.

 Hunterian.
- 1152. Horn of an Ox in longitudinal section.
- 1153. Cast of a mutilated cranium of an ancient Scandinavian variety of Ox, called *Bos frontosus* by the donor.

Presented by Professor Nilsson.

1154. Cranium, mutilated anteriorly, of a small ancient domesticated variety of the Ox, called by Prof. Owen Bos longifrons. O. C. F. 1419.

From the freshwater deposits of shell-marl beneath a bog at Longford, Ireland.

Presented by the Earl of Enniskillen.

1155. Cranium of the same variety of Ox.

Found at a considerable depth with human skeletons in the Black Bog, co. Meath, Ireland.

In Museum before 1861.

1156. Calvaria and horn-cores of Bos longifrons. O. C. F. 1420. From a bog in Ireland.

Hunterian.

1157. Part of the cranium of Bos longifrons.

Found sixteen feet below the surface in Tooley Street, Borough of Southwark.

Presented by Seymour Teulon, Esq., 1864.

1158. A right humerus, left iliac bone, and left metatarsal bone attributed to *Bos longifrons*. O. C. F. 1423, 1424, and 1425.

Found beneath a bog at Longford, Ireland.

Presented by the Earl of Enniskillen.

1159. The bones of the right fore and hind foot of an Ox, from a British "Long Barrow" at the end of the *Cursus*, near Stonehenge.

The skull found with them is said by the donor to have been that of a typical Bos longifrons.

Presented by Dr. J. Thurnam, 1867.

Bos primigenius.

(Cuvier), Bojanus, Nova Acta Acad. Nat. Cur. xiii. pt. 2, p. 422, pl. 24 (1827).

Hab. Europe (Pleistocene).

Probably not specifically distinct from the last.

1160. Upper part of cranium and horn-cores.

Locality unrecorded.

In Museum before 1861.

Bos primigenius.

1161. Greater part of the two horn-cores. O. C. F. 1410 and 1411.

The circumference of the core of each horn, when entire, measured at the base twenty-two inches. They were "dug out of the Till or maiden earth twenty-two feet below the surface at Ilford in Essex, in the year 1786, by Mr. John Gilbert."

Hunterian.

1162. Fragment of skull, with base of the core of the left horn of considerably smaller size. O. C. F. 1413.

"It was discovered in drift or diluvium, associated with No. 1035 (O. C. F.), the canine of a hippopotamus."

Hunterian.

1163. Portion of a skull, with the right horn-core of similar size to the last, perhaps from the same individual. O. C. F. 1414.

The curves of these horn-cores, as far as they are preserved, more resemble those of the modern Chartley Ox (No. 1119) than the typical *Bos primigenius* (No. 1160).

Hunterian.

1164. Fragment of the left ramus of the mandible with three teeth (dm. 3, m. 1, and m. 2) in situ.

From Crayford, Kent.

Presented by Charles Rutter, Esq., 1854.

1165. Right and left metacarpal bones. O. C. F. 1415 and 1416.

Locality unrecorded.

Hunterian.

Bos grunniens.

Linnæus, Syst. Nat. ed. 12, i. p. 99 (1766).

THE YAK.

Hab. Tibet.

1166. Cranium, with the right horn. 3.

Presented by Bryan H. Hodgson, Esq., 1845.

1167. The greater part of the vertebral column, pelvis, and scapula of a male.

From an animal which lived for many years in the Gardens of the Zoological Society.

Presented by the Society, 1869.

1168. Some bones of the fore and hind feet. O. C. 3851 to 3859.

Presented by General R. Strachey, R.E., 1851.

Bos gaurus.

Bos gaurus, Hamilton Smith in Grifflith's Animal Kingdom, iv. p. 399 (1827).

Bibos cavifrons, Hodgson, Journ. As. Soc. Bengal, vi. p. 747 (1837).

THE GOUR OF INDIAN BISON.

Hab. India.

1169. Skull and horns of male. O. C. 3821.

Purchased, 1840.

1170. Skull and horns of female.

Purchased, 1868.

Bos gaurus.

1171. Mutilated cranium and horns of male, in vertical transverse section.

Presented by Captain H. Toynbee, 1863.

1172. Frontlet and horns of young male.

Presented by Edward Blyth, Esq., 1865.

Genus BUBALUS.

Hamilton Smith in Griffith's Animal Kingdom, v. p. 371 (1827) (as a subgenus of Bos).

Bubalus depressicornis.

Anoa depressicornis, Hamilton Smith in Griffith's Animal Kingdom, iv. p. 293 (1827).

THE ANOA.

Hab. Celebes.

This species constitutes the genus Anoa of Hamilton Smith. Its skull closely resembles that of the Common Buffalo (Bubalus buffelus) even to the continuation of the vomer as far back as the posterior margin of the palate; but it wants the first lower premolar tooth, the dentition being i. $\frac{9}{3}$, c. $\frac{9}{1}$, p. $\frac{3}{2}$, m. $\frac{3}{3}$, =30.

1173. Skull and right horn of an immature animal, ♀. O. C. 3692.

The posterior milk-molars are retained, and all the true molars are in place.

Presented by Dr. B. C. Henderson, 1822.

1174. Skull and horns of a somewhat younger animal. O. C. 3693.

Presented by Dr. B. C. Henderson, 1822.

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1175. Frontlet and horns of male. C. C. 3695.

Presented by Dr. B. C. Henderson, 1822.

1176. Frontlet and horns of an older male. O. C. 3694.

Presented by Dr. B. C. Henderson, 1822.

Bubalus buffelus.

Bos bubalis, Linn. Syst. Nat. ed. 12, i. p. 99 (1766).

Bos buffelus, Blumenbach, Handbuch der Naturgeschichte, edit.
10, p. 121 (1821) (fide Fischer).

THE INDIAN BUFFALO.

Hab. Wild in India, and domesticated in south-east Asia, Egypt, and Southern Europe.

1177. Cranium and imperfect skeleton.

In Museum before 1861.

1178. Skull and horns. O. C. 3849.

The horns have been polished.

Presented by Dr. Gideon Mantell.

1179. Cranium and horns of the large wild variety called Arnee. O. C. 3848.

From India.

Presented by Dr. Buchan, 1810.

1180. Skull and horns of an Arnee Buffalo.

From an animal shot in the Bengal Sunderbunds.

Presented by Charles J. Bamber, Esq., 1876.

1181. Cranium and horns of an Arnee Buffalo.

Presented by T. A. Shaw, Esq., 1856.

Bubalus caffer.

Bos caffer, Sparrman, K. Svensk. Vetensk. Akad. Handl. 1779, p. 79.

THE CAPE BUFFALO.

Hab. South Africa.

1182. Skull and horns. O. C. 3845.

Hunterian.

1183. Frontlet and horns. O. C. 3846.

Hunterian.

1184. Frontlet and horns. O. C. 3847.

Hunterian.

1185. Frontlet and horns.

The horns meet in the middle line in front.

In Museum before 1861.

Bubalus pumilus.

Bos pumilus, Turton's ed. Linn. Syst. Nat. i. p. 121 (1806).

THE CENTRAL-AFRICAN BUFFALO.

Hab. Central and Western Equatorial Africa.

1186. Frontlet and horns. O. C. 3844.

Attributed in O. C. to Bos frontalis. It is one of the types of Blyth's Bos planiceros (see 'Proceedings of the Zoological Society' for 1863, p. 157, and Sir Victor Brooke, ibid. 1873, p. 482).

The skull of this species differs from that of B. caffer in the præmaxillæ not extending as far as the nasals.

Hunterian.

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Genus BISON.

Hamilton Smith in Griffith's Animal Kingdom, v. p. 373 (1827) (as a subgenus of Bos).

Bison americanus.

Bos bison, Linnæus, Syst. Nat. ed. 12, i. p. 99 (1766). Bos americanus, Gmelin, Syst. Nat. i. p. 204 (1788).

THE AMERICAN BISON.

Hab. North America.

1187. Skeleton of male.

Vertebræ: C. 7, D. 14, L. 5, S. 5, C. 15. From Kansas.

Purchased, 1876.

1188. Skeleton of nearly adult male.

Vertebræ: C. 7, D. 14, L. 5, S. 5, C. 13 (one or two wanting).

From an animal which died in the Gardens of the Zoological Society. The bones are ill-developed and show traces of disease.

Purchased, 1865.

1189. Cranium and horns of male.

Presented by the Smithsonian Institution, 1871.

1190. Mutilated cranium with horns of female.

From Wyoming.

Presented by the Smithsonian Institution, 1871.

1191. Mandible.

Presented by the Smithsonian Institution, 1871.

Bison bonasus.

Bos bonasus, Linnæus, Syst. Nat. ed. 12, i. p. 99 (1766).

THE EUROPEAN BISON OF AUROCHS.

Hab. Europe. Now restricted to Lithuania.

1192. Skull of male. O. C. 3818.

From Lithuania.

Presented by Professor Otto, 1838.

1193. Bones of the trunk of a young male. O. C. 3819.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 17.

From an animal which died in the Gardens of the Zoological Society, having been presented by the Emperor of Russia in 1847 (see 'Proceedings' of the Society, 1848, p. 16).

Presented by the Zoological Society.

1194. A pair of horns, said to be those of a young female Aurochs.
O. C. 3820.

Hunterian.

Bison priscus.

Urus priscus, Bojanus, Nov. Acta Acad. Nat. Cur. xiii. pt. 2, p. 427 (1827).

THE GREAT FOSSIL AUROCHS.

Hab. Europe. Pleistocene.

This is probably not specifically distinct from the last; but the horn-cores are generally much larger and less curved than in the modern Aurochs.

1195. Calvarium and horn-cores. O. C. F. 1254.

This specimen is figured in Owen's 'British Fossil Mammals and Birds' (1846) p. 491. It was dug out of a stratum of dark-coloured clay, below layers of brick-earth and gravel, thirty feet from the surface, at Woolwich.

BOVIDÆ.

Brought to Mr. Hunter by Mr. Johnson, Banker, Bond Stroet, in the year 1792.

Hunterian.

1196. Portion of skull, with both horn-cores. O. C. F. 1255. From the brick-carth at Ilford, Essex.

Presented by Wm. Thompson, Esq.

1197. Fragments of a cranium, with the greater part of both horn-cores. O. C. F. 1256.

From the brick-earth at Ilford.

Presented by William Thompson, Esq.

1198. Extremity of a horn-core. O. C. F. 1257.

"From Stonesfield, Oxfordshire."

Hunterian.

1199. Fragment of a cranium, with the bony core of the left horn of a young or female Aurochs. O. C. F. 1258.

Hunterian.

to Bison priscus, or to a smaller variety called by Prof. Owen Bison minor*. O. C. F. Nos. 1259 to 1324.

From the cavernous fissures at Oreston, Plymouth†.

Presented by Joseph Whidbey, Esq.

[•] British Fossil Mammals and Birds, p. 497 (1846).

[†] See J. Whidbey and W. Clift, "On some Fossil Bones discovered in Caverns in the Limestone Quarries at Oreston," Philosophical Transactions for 1823, p. 78.

Bison priscus.

The three following specimens are also from the same caverns.

- 1201. A mass of breecia, with a fragment of the shaft of the tibia of a small or young Aurochs. O. C. F. 1325.
- 1202. A mass of breccia, containing fragments of long bones and one of the proximal phalanges. O. C. F. 1326.
- 1203. The proximal half of the right metacarpal bone. O. C. F. 1327.

It shows the effects of long-continued ossific inflammation and ulceration on its anterior surface.

Described and figured in Clift's memoir referred to above.

Presented by Joseph Whidbey, Esq.

1204. A considerable number of the bones of the skeleton, probably of one individual.

Discovered in a Pleistocene freshwater deposit at Brickle-hampton Bank, near Cropthorn, Gloucestershire*. O. C. F. 1351 to 1393.

Presented by Hugh E. Strickland, Esq.

1205. Axis, third cervical vertebra, an anterior dorsal vertebra, anterior part of sacrum, and proximal half of left metacarpal of a large Bovinc animal. O. C. F. 1399 to 1403.

From the same locality.

Presented by Hugh E. Strickland, Esq.

^{*} See Murchison's 'Silurian System,' p. 555 (1839), for a description of these deposits.

1206. Bones and teeth of fossil bovine animals of uncertain species.

The bonos are chiefly of the feet. O. C. F. 1328 to 1344. From Kirkdale Cavo, Yorkshire.

Presented by John Gibson, Esq.

1207. Axis, an anterior dorsal vertebra, right radius, right metacarpal, and proximal half of the left tibia. O. C. F. 1394 to 1398.

From a Pleistocene deposit in Essex.

Presented by John Gibson, Esq., 1827.

1208. Distal end of left humerus.

From Grays, Essex.

Presented by R. Ball, Esq.

1209. Two fragments of the mandible, each with two molar teeth, and a second right lower premolar. O. C. F. 1346, 1347, and 1348.

Said to have been found with remains of the Mammoth in Pleistocene freshwater deposits or drift in Warwiekshire.

Hunterian.

1210. A penultimate and posterior left lower molar. O. C. F. 1349 and 1350.

From red brick-earth, found associated with the tip of the incisor tusk of a Hippopotamus (No. 1032, O. C. F.).

Hunterian.

1211. A dorsal vertebra. O. C. F. 1404.

Hunterian.

1212. Λ left scapula.

From the drift at Rawden.

Hunterian.

Genus OVIBOS.

De Blainville, Bull. de la Soc. Philomath. 1816, p. 76.

Ovibos moschatus.

Bos moschatus, Zimmermann, Geograph. Geschichte, ii. p. 86 (1780).

THE MUSK-OX.

1213. Skull and horns, J. O. C. 3813.

Hunterian.

1214. Skull and horns, ♂. O. C. 3815.

Hunterian.

1215. Cranium and horns, ♂. O. C. 3814.

Hunterian.

1216. Cranium and horns, J.

From the Barren Grounds between Bear Lake and the Coppermine River, about lat. 67° 30′ N., long. 117° W.

Presented by Dr. John Rae, 1875.

1217. Mutilated cranium and horns, J. O. C. 3816.

Presented by Admiral Sir Edward Parry.

1218. Mutilated cranium and horns, ♀. O. C. 3817.

Presented by Admiral Sir Edward Parry.

1219. Part of the skull and the horns, ♀.

In Museum before 1861.

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1220. A number of bones, being portions of two individuals, one quite adult and the other nearly so, without the skull. Some are mounted in the Separate Series.

Purchased at the sale of Dr. Baikie's Collection, 1865.

1221. Posterior part of the cranium of the fossil Musk-Ox described as *Ovibos pallasii* (De Kay). O. C. F. 1429.

From Siberia. Pleistocene.

Brookes Collection. Purchased, 1828.

Genus OVIS.

Linnæus, Syst. Nat. ed. 12, i. p. 97 (1766).

Ovis aries.

Linnæus, loc. cit.

THE DOMESTIC SHEEP.

Hab. Originally some portion of the Palæarctie Region. Now spread, by the agency of man, throughout the greater part of the habitable world.

1222. Articulated skeleton of a male, or Ram. O. C. 3751.

Vertebræ: C. 7, D. 13, L. 7, S. 4, C. 7 (incomplete).

Presented by the Earl of Clarendon, 1823.

1223. Skull and horns of a Ram. O. C. 3752.

Hunterian.

1224. Skull and horns of a Merino Ram. O. C. 3755.

Hunterian.

Ovis aries.

1225. Skull and horns of a Merino Ram. O. C. 3756.

Hunterian.

1226. Skull and horns of a Merino Ram. O.C. 3757.

Hunterian.

1227. Part of the cranium, with the horns, of a Merino Ram. O. C. 3758.

Illustrian.

1228. Skull of a Ram of the Norfolk breed. O. C. 3759.

Purchased.

1229. Skull of a female or Ewe of the Norfolk breed. O. C. 3760.

The sexual distinction is chiefly manifested by the small size of the horns.

Purchased.

1230. Skull of a wether, or castrated male, of the Norfolk breed. O. C. 3761.

The development of the horns has been not only arrested at the degree which it presents in the female, but the growth has been abnormal in its direction, the curve being such that the points would have entered the orbits had they not been sawed off during the lifetime of the animal.

Purchased.

1231. The skull and some of the bones of a Highland sheep, eight years old.

The atlas and axis have received a severe injury some time previous to the animal's death, and have united together in an abnormal position.

Presented by Professor Quekett, 1858.

The following eight skulls of domestic varieties of the Common Sheep are from animals exhibited at the Smithfield Club Show, December 1879, and therefore well authenticated.

Presented by J. II. Steel, Esq., 1880.

1232. Leicester Wether. Aged 20 months.

Second Prize. No. in Catalogue of Show 242. Bred by B. Painter, Burley-on-the-Hill, Oakham, Rutland.

The posterior milk-molars are on the point of being shed, and the posterior true molars just rising into place.

1233. Lincoln Wether. Aged 20 months 3 weeks.

Third Prize. No. 264. Bred by Charles Sell of Basing-bourne, Royston, Cambridgeshire, from the stock of Mrs. Wright.

The permanent dentition has been acquired; but the posterior milk-molars and true molars of the upper jaw are not fully in place.

1234. Southdown Wether. Aged 20 months.

First Prize, Silver Cup and Champion Plate. No. 293. Bred by H. Humphry of Ashington, Pulborough, Sussex.

Most of the milk-molars are still in place, and the third true molars are just rising above the alveoli.

1235. Shropshire Wether. Aged 20 months 1 week.

Third Prize. No. 322. Bred by Lord Chesham, of Latimers, Chesham.

Dentition as in No. 1233.

1236. Oxfordshire Wether. Aged 21 months.

Highly commended. No. 343. Bred by William Cooper of Houghton Regis, Dunstablo, from the stock of Mr. Treadwell. Dentition as in No. 1234.

Ovis aries.

1237. Cheviot Wether. Aged 3 years 7 months.

First Prize. No. 354. Bred by T. Elliot, Hindhope, Jedburgh, Roxburgh.

Complete adult dentition.

1238. Exmoor Wether. Aged 3 years 8 months.

First Prize and Silver Cup. No. 362. Bred by Mrs. Maria Langdon of Flitton Barton, North Molton, Devon. Complete adult dentition.

1239. Black-faced Mountain Wether. Aged 2 years 7 months.

First Prize. No. 368. Bred by William White, of Spott, Kerriemuir, Forfar.

Complete adult dentition.

1240. A preparation of the cranium and right horn-core of a Sheep, showing the extent to which the air-sinuses penetrate the latter. O. C. 3753.

Presented by Henry Cline, Esq., 1824.

1241. The corneous sheath of the horn of a Ram, in longitudinal section. O. C. 3754.

Hunterian.

1242. Pelvis, right scapula, humerus, ulna and radius, femur, tibia, fibula, and patella.

Mounted in the Separate Series.

1243. Bones of right manus and pes.Mounted in the Separate Series.

Purchased, 1865.

Development and Dentition.

1244. Skeleton of a new-born Lamb.

Purchased, 1870.

1245. Skull of a new-born Lamb.

Purchased.

1246. Skull of a Lamb, partially disarticulated.

Parker Collection. Purchased, 1858.

1247. Skull of a Lamb, with the milk-teeth fully developed and the first permanent molars just coming into place, mounted to display the bones separately.

Prepared in 1869.

1248. Skull of a Lamb.

The milk-teeth and the first permanent molars are in place.

Purchased, 1875.

1249. The upper and lower jaws of a Sheep a year and a half old.

All the milk-teeth are still in place, except the central incisors. The first and second true molars are also present.

Presented by J. C. Chaytor, Esq., 1870.

1250. Skull of a Sheep, with a similar condition of dentition, in longitudinal section.

Purchased.

1251. Skull of a slightly older Sheep.

The roots of the teeth are exposed on the right side.

Purchased, 1875.

PART II.

Ovis aries.

1252. The calcified portions of the teeth removed from the right side of both jaws of a feetal Lamb, and separately displayed.

Prepared in 1867.

1253. The teeth of the right side of a new-born Lamb, shown in the same manner.

Calcification has commenced in the first lower permanent molar.

Prepared in 1867.

1254. Two lower molars of a Sheep. O. C. 3768.

One of them is longitudinally divided; and a transverse section has been removed from the crown of the other. The cut surfaces of both have been polished.

Hunterian.

1255. A portion of the right maxilla, containing three molar teeth (dm. 2, dm. 3, and m. 1) of a Sheep. O. C. 3766.

The enamelled surfaces are coated by a substance having a metallic lustre. Originally labelled "Presented by Dr. Needham, Oct. 20th, 1673," and probably part of the Museum of the Royal Society in Gresham Street.

British Museum. Purchased, 1809.

1256. Three premolars, with the enamelled part of the crown presenting a similar appearance. O. C. 3767.

British Museum. Purchased, 1809.

Varieties.

1257. Cranium and horns of a four-horned Sheep. O. C. 3764.

Hunterian.

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1258. Cranium and horns of a four-horned Sheep.

1259. Mutilated cranium of a Sheep with five horns. O. C. 3765.

Hunterian.

1260. Frontlet and malformed horns of a Sheep. O. C. 3771.

The horns have grown parallel to each other, and are firmly united throughout their whole extent, producing the appearance of a single horn, the extremity of which has been sawed off, probably to relieve the animal from the inconvenience of its pressure upon the neck.

From the Himalaya Mountains.

Presented by Colonel Finch, 1830.

1261. The mutilated skull of a small variety of Sheep, with nearly straight, erect, and spirally twisted horn-cores. O. C. 3750.

Sent from Sumatra by Mr. William Bell.

Hunterian.

Ovis musimon.

Aegoceros musimon, Pallas, Zoographia Rosso-Asiatica, i. p. 230 (1811).

THE MOUFLON.

Hab. Sardinia and Corsica.

1262. Skull and horns.

The right ramus of the mandible is wanting. From Sardinia.

Presented by Sir James Hudson, G.C.B., 1868.

Ovis musimon.

1263. Vertebral column, sternum, and some other bones of male.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. (imperfect). From an animal which died in the Gardens of the Zoological Society, 25 March 1869.

Presented by the Zoological Society.

1264. Hyoid bones of male.

Presented by the Zoological Society, 1869.

Ovis vignei.

Blyth, Proc. Zool. Soc. 1840, p. 70.

VIGNE'S WILD SHEEP.

Hab. Himalaya Mountains.

1265. Cranium and horns. O. C. 3778.

From Tibet.

Presented by General R. Strachey, R.E., 1851.

Ovis cycloceros.

T. Hutton, Calcutta Journ. Nat. Hist. ii. 1842, p. 514.

THE PUNJAB WILD SHEEP.

Hab. Persia and Northern India.

1266. Skull and horns.

Presented by P. L. Sclater, Esq., 1868.

1267. A right horn and horn-core.

From the hill country to the east of Bushire, Persia.

Presented by W. H. Colvill, Esq., 1865.

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Ovis polii.

Blyth, Proc. Zool. Soc. 1840, p. 62.

MARCO POLO'S SHEEP.

Hab. Pamîr Range of Central Asia.

1268. Portion of skull, with horns of large size.

Obtained by Lieut. Wood in 1838 on his return from his journey to the sources of the Oxus, when detached from Sir Alexander Burne's Mission to Cabul. Described and figured by the donor in the 'Proceedings of the Zoological Society,' 1860, pp. 443 & 444.

Presented by P. L. Sclater, Esq., 1868.

1269. Portion of skull and horns of smaller size, apparently of this species.

Presented by George Busk, Esq., 1881.

Ovis sculptorum.

Blyth, Proc. Zool. Soc. 1840, p. 12.

1270. Left horn. O. C. 3773.

This is the specimen indicated by Blyth under the name of O. sculptorum (Proc. Zool. Soc. 1840, p. 12), and afterwards (ibid. p. 63) fully described and referred with doubt to O. polii. It is figured in 'Aun. & Mag. Nat. Hist.' vol. vii. 1841, plate v. figs. 3 and 4, under the name of O. sculptorum. Sir Vietor Brooke identifies it with O. karelini of Severtzoff (Trans. Imp. Soc. Naturalists of Moscow, vol. viii. 1873), in which ease the latter would become a synonym of O. sculptorum*.

Purchased.

[•] See Proc. Zool. Soc. 1875, p. 524, where the identification was made "with some hesitation." It has, however, since been confirmed by comparison with photographs of typical specimens of O. karelini.

Ovis hodgsoni.

Blyth, Proc. Zool. Soc. 1840, p. 65.

HODGSON'S WILD SHEEP.

Hab. Tibet and Northern India.

1271. Mutilated cranium and horns. O. C. 3772. From Afghanistan.

Presented by William Darby, Esq., 1851.

Ovis montana.

Cuvier, Règne Animal, i. p. 267 (1817).

THE ROCKY-MOUNTAIN SHEEP OF BIGHORN.

Hab. North America.

1272. Skull and horns, J. O. C. 3774.

Hunterian.

1273. Skull and horns, J.

Presented by Dr. John Rae, 1868.

1274. A pair of horns, J. O. C. 3775.

Presented by the Hudson's Bay Company.

1275. Skull of male, without horns.

From Fort Laramie, Wyoming.

Presented by the Smithsonian Institution, 1871.

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1276. Skull (wanting the nasal bones) and horns of female.

From Fort Tejon, California.

Presented by the Smithsonian Institution, 1871.

1277. Left horn of male.

Presented by the Smithsonian Institution, 1871.

Ovis nahoor.

Ovis nahoor, Hodgson, Proc. Zool. Soc. 1834, p. 107. O. burrhel, Blyth, Proc. Zool. Soc. 1840, pp. 13 & 67.

THE NAHOOR OF BURRHEL.

Hab. Nepal and Tibet.

1278. Articulated skeleton. O. C. 3779.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 10.

From Tibet.

Presented by General R. Strachey, R.E., 1851.

1279. Mutilated skull and horns.

Presented by Bryan II. Hodgson, Esq., 1845.

1280. Frontlet and horns. O.C. 3776.

Purchased.

1281. Horns and horn-cores. O. C. 3777. Purchased.

1282. Frontlet and horns, ♀. O. C. 3747.

From the Himalayas.

Presented by Colonel Finch, 1830.

Ovis tragelaphus.

Cuvier, Règne Animal, i. p. 268 (1817).

THE BARBARY WILD SHEEP OF AOUDAD.

Hab. North Africa.

1283. Skeleton, J. O. C. 3780 to 3807.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 14.

The right horn had been broken off during the animal's lifetime; and the base of the horn-core, which was covered by a callous dermal cicatrix, is widely open, showing the communication of its cavity with the frontal sinuses. A section of the cranium shows the complete septum which divides the extensive frontal sinuses of one side from those of the other.

Prepared from an animal (from the Atlas Mountains) which died in Mr. Cross's Menagerie.

Purchased, 1839.

1284. Frontlet and horns.

1285. Hyoid bones of male.

Purchased, 1874.

Genus CAPRA.

Linnæus, Syst. Nat. ed. 12, i. p. 94 (1766).

Capra ibex.

Linnæus, Syst. Nat. ed. 12, i. p. 95 (1766).

THE ALPINE IBEX.

Hab. Savoy and Piedmont.

1286. Cranium and horns. O. C. 3742.

Hunterian.

1287. Imperfect skeleton of male.

The skull is much mutilated. The right ramus of the mandible is wanting, as are the foot, vertebral column, and pelvis. From Piedmont.

Presented by Sir James Hudson, G.C.B., 1868.

1288. Skeleton of female.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 9.

The skull is much mutilated. The left ramus of the mandible, the atlas, and the phalanges are wanting.

From Piedmont.

Presented by Sir James Hudson, G.C.B., 1868.

1289. Skull (mutilated behind), vertebral column, and pelvis of male.

From Piodmont.

Presented by Sir James Hudson, G.C.B., 1866.

Capra arabica.

Capra nubiana, Fréd. Cuvier, Hist. Nat. des Mammifères (1825). Capra arabica, Rüppell, Neue Wirbelthiere von Abyssinien, p. 17 (1835)*.

Aegoceros beden, A. Wagner, Schreber fortgesetzt, von, p. 1303 (1836).

THE BEDEN OF ARABIAN IBEX.

IIab. Arabia and Egypt.

1290. Skull and horns.

Purchased at Cairo.

Presented by Professor Flower, 1874.

1291. A pair of horns. O. C. 3743.

British Museum. Purchased, 1809.

^{*} As the species does not occur in Nubia, this name (which was affixed to a specimen in the Vienna Museum, received from Mount Sinai in 1807) is preferable to that of F. Cuvier (ef. Rüppell, loc. cit.).

Capra pyrenaica.

Capra pyrenaica, Schinz, Neue Denkschriften d. allg. Schweiz. Gesellsch. ii. p. 9, tab. i., ii., & iii. (1838).

C. hispanica, Schimper, Compt. Rend. Acad. Sc. Paris, xxvi. p. 318 (1848).

1292. Skull, horns, and bones of right fore and hind feet of male.

Shot in the Sierra de Ronda, Andalusia, by Captain Anstruther, Rifle Brigade, 11 April, 1865.

Presented by George Busk, Esq., 1866.

1293. Skull of male.

From the Sierra de Gredos, Central Spain.

Presented by Don Mariano de Graells, Director of the Nat. Hist. Museum at Madrid, 1865.

1294. Skull, with one horn, of female.

From the Sierra de Gredos.

Presented by Don Mariano de Graells, 1865.

Capra jemlaica.

Capra jemlahica, Hamilton Smith in Griffith's Animal Kingdom, iv. p. 308 (1827).

THE THAR OF JHARAL.

Hab. The Himalaya Mountains.

1295. Frontlet and horns of male. O. C. 3744.

Purchased.

1296. Frontlet and horns of male. O. C. 3745.

Purchased.

1297. Frontlet and horns of young male. O. C. 3749.

Presented by Colonel Finch, 1830.

Capra hircus.

Linnæus, Syst. Nat. ed. 12, i. p. 94 (1766).

THE COMMON GOAT.

Hab. South-western Asia. Introduced by man into most parts of the habitable world.

A. Wild variety. Capra ægagrus (Gmelin, Syst. Nat. p. 193, 1788).

1298. Cranium and horns. O. C. 3746.

British Museum. Purchased, 1809.

The following series of skulls and horns (to No. 1306 inclusive) were collected by the donor in the hill country to the east of Bushire, Persia.

Presented by W. H. Colvill, Esq., H.M. Indian Army, 1865.

1299. Skull and horns of male, 4 years old*.

With complete adult dentition.

1300. Skull and horns of male, 2 years old.

With the milk-molars, and first and second true molars.

1301. Skull and horns of male, 2 years old.

With the same condition of dentition, rather less worn.

^{*} The ages given are those ascribed to the animals by the native hunters.

Capra hircus.

1302. Skull and horns of female, 4 years old.

With complete adult dentition.

1303. Skull and horns of female, 3 years old.

With complete adult dentition.

1304. Skull and horns of young.

Sex not stated. Probably female. With milk-molars and first and second true molars.

1305. A pair of horns with horn-cores of a male, 8 or 10 years old.

1306. A pair of horns of a male of the same age.

B. Domesticated varieties.

1307. The horns of one of a feral race of the Domestic Goat inhabiting the Old Head of Kinsale, County Cork, Ireland.

"A number of Goats, said to have presented the usual twisted horn of the domesticated variety, were turned loose on the Old Head at Kinsale about twelve or fifteen years ago; and gradually assuming the habits of *C. ægagrus*, the horns became at the same time like those of the latter. The specimens belonged to a male, and, although of large size, are not so massive as others from the same herd."—Donor's Letter.

Presented by Professor A. Leith Adams, M.B., 1874.

1308. Articulated skeleton of a Domestic Goat from Nepal. O. C. 3748.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 13.

Brookes Collection. Purchased, 1828.

1309. Articulated skeleton of a Domestic Goat. O. C. 3736.
Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 9 (incomplete).
South Collection. Purchased, 1835.

1310. Skeleton of a Goat, six weeks old.

The milk-teeth are in place.

Purchased, 1870.

1311. Horns of a Goat. O. C. 3739.

Hunterian.

1312. Skull of a female Cashmere-Shawl Goat.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1869.

1313. Skull of a young Cashmere-Shawl Goat.

The milk-teeth and first true molars are in place. From an animal bred in the Zoological Society's Gardens.

Purchasd, 1869.

1314. Frontlet and horns of an Angora Goat. O. C. 3740.

1315. Frontlet and horns of a four-horned variety of Goat.
O. C. 3741.

Brookes Collection. Purchased, 1828.

Genus KEMAS.

Ogilby, Proc. Zool. Soc. 1837, p. 81.

Kemas hylocrius.

Kemas hylocrius, Ogilby, loc. cit. Capra (Ibex) warryato, Gray, Ann. & Mag. N. H. x. p. 267 (1842).

THE NEILGHERRY IBEX.

Hab. Southern India.

1316. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. (incomplete).

Presented by Dr. John Shortt, Deputy Surgeon-General, Madras Army, 1877.

Genus NEMORHÆDUS.

Næmorhedus, Hamilton Smith, in Griffith's Animal Kingdom, v. p. 352 (1827), as a subgenus.

Nemorhædus goral.

Antilope goral, Hardwicke, Trans. Linn. Soc. xiv. p. 518 (read 1823, pub. 1825).

THE GORAL.

Hab. The Himalaya Mountains.

1317. Skull. O. C. 3735.

Presented by Colonel Sir George Everest, 1841.

1318. Skull of young, wanting the nasal bones. O. C. 3734.

The milk-molars and first and second true molars are in place.

Presented by Colonel Finch, 1830.

1319. Skull of female.

From Nepal.

Presented by Bryan H. Hodgson, Esq., 1845.

Nemorhædus bubalina.

Antilope bubalina, Hodgson, Proc. Zool. Soc. 1832, p. 12.

THE SEROW.

Hab. India.

1320. Skull.

From Nepal.

Presented by Bryan H. Hodgson, Esq., 1845.

1321. Mutilated skull.

From Nepal.

Presented by Bryan H. Hodgson, Esq., 1845.

Nemorhædus sumatrensis.

Antilope sumatrensis, Shaw, Gen. Zoology, ii. pt. 2, p. 354 (1801).

THE SUMATRAN ANTELOPE.

Hab. Sumatra.

1322. Mutilated skull. O. C. 3730.

All the true molars are in place; but the posterior milk-molars have not been shed.

Hunterian.

Nemorhædus sumatrensis.

1323. Skull. O. C. 3731.

The dentition is in the same stage as the last.

Hunterian.

1324. Upper part of the skull, with the horns. O. C. 3732.

Hunterian.

1325. Skull of female. O. C. 3733.

Hunterian.

Some, if not all, of the above were sent from Sumatra to Hunter by his former pupil Mr. William Bell.

Genus RUPICAPRA.

De Blainville, Bull. de la Soc. Philomatique, 1816, p. 75 (as a subgenus).

Rupicapra tragus.

Capra rupicapra, Linnæus, Syst. Nat. ed. 12, i. p. 95 (1766). Rupicapra tragus, Gray, List of Mammals Brit. Mus. p. 167 (1843).

THE CHAMOIS.

Hab. Europe.

1326. Skeleton of male.

The horn-cores have been sawn off the skull; otherwise the skeleton is perfect. Many of the bones are mounted in the Separate Series.

From Piedmont.

Presented by Sir James Hudson, G.C.B., 1868.

1327. Skull and horns.

Purchased, 1865.

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1328. Frontlet and horns. O. C. 3725.

Hunterian.

1329. A pair of horus. O. C. 3726.

British Museum. Purchased, 1809.

1330. A horn and horn-core of "The Caucasian Chamois, from Northern Tartary." O. C. 3729.

British Museum. Purchased, 1809.

Genus HAPLOCEROS.

Aplocerus, Hamilton Smith, in Griffith's Animal Kingdom, v. p. 354 (1827).

Haplocerus, Wagner, Supp. Schreber, iv. p. 462 (1844).

Haploceros montanus.

Ovis montana, Ord, in Guthrie's Geography, 2nd American edit., ii. pp. 293, 309, 1815 (fide Baird).

Antilope (Rupicapra) americana, De Blainville, Bull. de la Soc. Philomat. 1816, p. 80.

Antilope lanigera, Hamilton Smith, Trans. Linn. Soc. xiii. p. 38 (1822).

THE ROCKY-MOUNTAIN GOAT.

1331. Skull and horns.

From Fort Tongass, Alaska.

Presented by the Smithsonian Institution, 1871.

PART II.

Genus OREAS.

Desmarest, Mammalogie, p. 471 (1822), as a subg. of Antilope.

Oreas canna.

Antilope oryx, Pallas, Spicilegia Zool.i. p. 16 (1767), changed to Antilope oreas, ibid. xii. pp. 5 & 17 (1777).

Danalis (Boselaphus) oreas, Hamilton Smith in Griffith's Animal Kingdom, iv. p. 355, and v. p. 364 (1827).

Damalis (Boselaphus) canna, ibid. iv. p. 357, and v. p. 365 (1827).

THE ELAND.

Hab. South Africa.

1332. Skull and horns of female. O. C. 3702.

The base of the cranium is imperfect.

Purchased.

1333. Horns and portion of the cranium of male. O. C. 3700.

Hunterian.

1334. Horns of female. O. C. 3701.

Hunterian.

1335. Hyoid bones of male.

Purchased, 1871.

Genus STREPSICEROS.

Gray, List of Mammalia in British Museum, p. 155 (1843).

Strepsiceros kudu.

Antilope strepsiceros, Pallas, Spicilegia Zoologica, i. p. 17 (1767). Strepsiceros kudu, Gray, loc. cit. (1843).

Damalis (Strepsiceros) capensis, Andrew Smith, Illust. Zoology of S. Africa, no. 20 (1844).

THE KOODOO.

Hab. South Africa.

1336. Skull and horns. O. C. 3705.

The base of the cranium is imperfect.

Purchased.

1337. Cranium and horns. O. C. 3703.

Hunterian.

1338. Cranium and horns. O. C. 3704.

Hunterian.

1339. Portion of cranium and horns. O. C. 3707.

Hunterian.

1340. Portion of cranium and horns. O. C. 3708.

Purchased.

1341. Horns. O. C. 3706.

Hunterian.

1342. Horns. O. C. 3709.

Hunterian.

1343. Horns. O. C. 3711.

Hunterian.

1344. Horns. O. C. 3712.

Presented by Sir William Blizard, 1804.

Genus TRAGELAPHUS.

De Blainville, Bull. Soc. Philomat. 1816, p. 75.

Tragelaphus scriptus.

Antilope scripta, Pallas, Spicilegia Zool. i. p. 15 (1767).

THE HARNESSED ANTELOPE.

Hab. West Africa.

1345. Hyoid bones of male.

Purchased, 1870. s 2

Tragelaphus sylvaticus.

Antilope sylvatica, Sparrman, Kongl. Vetenskaps. Akad. Handling. Stockholm, 1780, p. 197.

THE BOSCH-BOK.

Hab. South Africa.

1346. Horns and portion of cranium. O. C. 3685.

Hunterian.

Genus BOSELAPHUS.

Boselaphus, De Blainville, Bull. Soc. Philomat. 1816, p. 75. Portax, Hamilton Smith, Griffith's An. King. v. p. 366 (1827).

Boselaphus tragocamelus.

Antilope tragocamelus, Pallas, Spicilegia Zool. i. p. 9 (1767); ibid. xii. p. 13 (1777), founded on Parson's description and figures in the 'Philosophical Transactions' for 1745, p. 465, tab. iii. fig. 9.

A. picta, Pallas, ibid. xii. p. 14 (1777).

Portax picta, Hamilton Smith, loc. cit. p. 367.

Portax tragocamelus, Gray, Cat. Ungulata Furcipeda Brit. Mus. p. 141 (1852).

Boselaphus pictus, Sclater, List of Animals in Zool. Gardens, p. 128 (1879).

THE NYLGHAU.

Hab, India,

1347. Skeleton of male.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. wanting.

In Museum before 1861. Probably Hunterian.

1348. Skeleton of male (imperfect).

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. wanting.

In Museum before 1861.

1349. Skeleton of female.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. wanting.

In Museum before 1861.

1350. Horns. O. C. 3724.

Hunterian.

Genus ORYX.

De Blainville, Bull. Soc. Philomat. 1816, p. 75.

Oryx leucoryx.

Antilope leucoryx, Pallas, Spicilegia Zool. xii. p. 17 (1777).

THE LEUCORYX.

Hab. North Africa.

1351. Mutilated cranium and horns. O. C. 3686.

Purchased.

1352. Part of the skin of the head with the horns. O. C. 3687.

Purchased.

1353. A pair of horns. O. C. 3688.

Hunterian.

1354. Horns (separate). O. C. 3689.

Hunterian.

Oryx beisa.

Antilope beisa, Rüppell, Neue Wirbelthiere von Abyssinien, p. 14, Taf. 5 (1835).

THE BEISA ANTELOPE.

Hab. North-east Africa.

1355. Horns. O. C. 3691.

From Abyssinia.

Presented by Henry Salt, Esq., 1811.

Genus HIPPOTRAGUS.

Egocerus, Desmarest, Mammalogie, p. 475 (1822).

Aiyocerus, Hamilton Smith, Griffith's An. King. v. p. 324 (1827). Hippotragus, Sundevall, Kongl. Vetenskaps Akad. Hand. for 1844, p. 196*.

Egocerus, Gray, Cat. Ungulata Furcipeda Brit. Mus. p. 102 (1852).

Hippotragus leucophæus.

Antilope leucophæa, Pallas, Spicilegia Zool. i. p. 6 (1767).

THE BLUE ANTELOPE.

Hab. South Africa.

1356. Horns, ♀.

In Museum before 1861.

Hippotragus equinus.

Antilope equina, Geoffroy, Nouv. Dict. d'Hist. Nat. ii. p. 204 (1816).

THE EQUINE ANTELOPE.

Hab. Africa.

^{*} This name was given by Sundevall to the present group in consequence of Ægoceros having been employed by Pallas (in 1811) for a genus containing the Goats and Sheep, and adopted in the same sense by Wagner and others.

1357. Articulated skeleton. O. C. 3696.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 12 (incomplete). From Senegal,

Purchased, 1830.

Hippotragus niger.

Aigocerus niger, Harris, Trans. Zool. Soc. ii. p. 213 (read 1838).

THE SABLE ANTELOPE.

Hab. South Africa.

1358. Portion of cranium with horns. O. C. 3697.

Presented by J. Adamson, D.D.

Genus GAZELLA.

De Blainville, Bull. Soc. Philomat. 1816, p. 75.

Gazella dorcas.

Capra dorcas, Linnæus, Syst. Nat. ed. 12, i. p. 96 (1766).

THE COMMON GAZELLE.

Hab. North Africa.

1359. Articulated skeleton. O. C. 3648,

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 14.

Brookes Collection. Purchased, 1828.

1360. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 11 (incomplete).

In Museum before 1861.

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Gazella dorcas.

1361. Skull and horns. O. C. 3649.

The milk-molars are still in place, with the three true molars.

Purchased.

Gazella bennetti.

Antilope bennettii, Sykes, Proc. Zool. Soc. 1831, p. 104.

THE INDIAN GAZELLE.

Hab. India.

1362. Skull and horns, J. O. C. 3665.

Presented by Colonel Sir George Everest, 1841.

1363. Skull, J.

In Museum before 1861.

1364. Skull, ?.

In Museum before 1861.

Gazella euchore.

Antilope euchore, J. R. Forster, MS.; Lichtenstein, Berlin. Gesell. naturforsch. Freunde Magazin, vi. p. 169 (1814).

THE SPRING-BOK.

Hab. South Africa.

1365. Imperfect skull with the horns. O. C. 3654.

There are but two premolars on each side of the lower jaw.

Purchased.

1366. Horns. O. C. 3657.

Presented by William Norris, Esq.

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1367. Horns. O. C. 3655.

Hunterian.

1368. Horns. O. C. 3656.

British Museum. Purchased, 1809.

Genus SAIGA.

Gray, List Mammalia Brit. Mus. p. 160 (1843); Ann. & Mag. Nat. Hist. xviii. p. 231 (1846).

Saiga tartarica.

Capra tatarica, Linnæus, Syst. Nat. ed. 12, i. p. 97 (1766). Antilope scythica, Pallas, Spicileg. Zool. i. p. 9 (1767). A. saiga, Pallas, ibid. xii. p. 5 and p. 14 (1777).

THE SAIGA ANTELOPE.

Hab. Eastern Europe and Central Asia.

1369. Articulated skeleton of adult male.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 10. From a wild animal from South Russia.

Purchased, 1867.

1370. Radius, ulna, tibia and fibula, and bones of the manus and pes.

Mounted in the Separate Series.

From a wild animal.

Received in exchange, 1868.

1371. Bones of the trunk and extremities.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. wanting.

From a young animal which died in confinement in this country.

Presented by Dr. J. Murie, 1867.

Saiga tartarica.

1372. Skull of female.

From Central Asia.

Purchased, 1873.

1373. One horn. O. C. 3659.

British Museum. Purchased, 1809.

Genus PROCAPRA.

Hodgson, Journ. Asiat. Soc. Bengal, xvi. p. 696 (1847).

Procapra gutturosa.

Antilope gutturosa, Pallas, Spicilegia Zool. xii. p. 14 (1777).

THE CHINESE ANTELOPE.

Hab. Eastern Asia.

1374. A pair of horns. O. C. 3661.

Hunterian.

1375. One horn. O. C. 3660.

Hunterian.

Genus ANTILOPE.

Pallas, Spicilegia Zool. i. p. 3 (1767).

Antilope cervicapra.

Capra cervicapra, Linnœus, Syst. Nat. ed. 12, i. p. 96 (1766).

THE INDIAN ANTELOPE.

Hab. India.

1376. Skeleton, not quite complete.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. wanting. There are only two premolars in the lower jaw.

In Museum before 1861.

1377. Skull and horns. O. C. 3664.

Presented by Colonel Sir George Everest, 1841.

1378. Cranium and horns. O. C. 3663.

Presented by Colonel Finch, 1830.

1379. Cranium and horn-cores. O. C. 3662.

Presented by Colonel Sir George Everest, 1841.

1380. Horns. O. C. 3666.

Hunterian.

1381. Horns. O. C. 3668.

Hunterian.

1382. One horn. O. C. 3667.

Hunterian.

1383. Horn and horn-core in longitudinal section, showing the solid structure of the latter. O. C. 3669.

Hunterian.

1384. Horn. O. C. 3670.

British Museum. Purchased, 1809.

1385. Horn in longitudinal section. O. C. 3671.

British Museum. Purchased, 1809.

Antilope cervicapra.

1386. Bones of the right anterior and posterior extremities. O. C. 3672 and 3673.

Hunterian.

Genus KOBUS.

Andrew Smith, Illust. Zoology of South Africa, no. 12 (1840).

Kobus ellipsiprymnus.

Antilope ellipsiprymna, Ogilby, Proc. Zool. Soc. 1833, p. 47.

THE WATER-BUCK.

Hab. South Africa.

1387. Skull and horns. O. C. 3698.

Purchased.

Genus NEOTRAGUS.

Hamilton Smith in Griffith's Animal Kingdom, iv. p. 269, v. p. 349 (1827).

Neotragus saltianus.

Antilope saltiana, De Blainville, Bull. Soc. Philomat. 1816, p. 79.

SALT'S ANTELOPE.

Hab. Abyssinia.

The third lower molar tooth of this species has but two lobes, instead of three, the number almost universal in the Pecora.

BOVIDÆ. 269

1388. Skull and horns.

From Abyssinia.

Presented by Sir Victor Brooke, 1875.

1389. Mutilated skull, with one horn.

Purchased, 1871.

1390. Portion of skull with the skin of the head, the horns, and the feet. O. C. 3684.

From Abyssinia. The type of the species. Figured by De Blainville in 'Journal de Physique,' August 1818, and Oken's 'Isis,' 1819, Taf. 12. figs. 5 and 9.

Presented by Henry Salt, Esq., 1811.

Genus CEPHALOPHUS.

Hamilton Smith in Griffith's Animal Kingdom, iv. p. 258, and v. p. 344 (1827).

Cephalophus maxwelli.

Antilope (Cephalophus) maxwellii, Ham. Smith, op. eit. iv. p. 267 (1827).

THE PHILANTOMBA ANTELOPE.

Hab. West Africa.

1391. Skull of young.

The milk-molars are retained, with the first and second true molars.

From the west coast of Africa.

Presented by Captain R. Burton, 1865.

Cephalophus maxwelli.

1392. Skull of young.

The milk-molars are present, with the first true molars. From the west coast of Africa.

Presented by Captain R. Burton, 1865.

Cephalophus mergens.

Antilope mergens, De Blainville, Nouv. Dict. d'Hist. Nat. ii. p. 193 (1816).

THE DUYKER-BOK.

Hab. South Africa.

1393. Skull and horns, J. O. C. 3679.

Purchased.

1394. Cranium and horns of young male.

The milk-molars are retained, though all the true molars are in place.

Presented by B. Travers, Esq.

1395. Cranium of female of this or an allied species. O. C. 3683.

Purchased.

Genus TETRACEROS.

Tetracerus, Leach, Trans. Linn. Soc. vol. xiv. p. 524 (1823).

Tetraceros quadricornis.

Antilope quadricornis, De Blainville, Bull. de la Soc. Philomat. 1816, p. 78.

Antilope chickara, Hardwicke, Trans. Linn. Soc. xiv. p. 520 (read 1823).

THE FOUR-HORNED ANTELOPE.

Hab. India.

1396. Articulated skeleton of male. O. C. 3715.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 8 (incomplete).

The animal from which this skeleton was prepared was brought alive to this country from Bengal. For an account of its measurements and external characters, with a very good figure, see "Remarks on the Antilope chickara," by Robert Hills, in the 'Transactions of the Linnean Society,' vol. xv. p. 501 (1827).

Presented by Sir Anthony Carlisle, 1827.

1397. Cranium. O. C. 3718.

The posterior horn-sheaths are wanting; the anterior differ from those of the skeleton, no. 1396, in being more acuminate and obliquely compressed on their inner side, which, in a transverse section, would give them something of a lozenge form.

From Moorshedabad, Bengal.

This is the specimen upon which Blainvillo founded the species (Bull. Soc. Philom. 1816, p. 78). It is also figured by him in the 'Journal de Physique,' August 1818, and in Oken's 'Isis,' 1819, pl. xii.

Purchased, 1806.

1398. Skull of old female.

From Maunbhoom, Bengal.

Presented by R. C. Beavan, Esq., 1867.

1399. Skull of young male, with complete milk-dentition.

From Maunbhoom.

Presented by R. C. Beavan, Esq., 1867.

1400. Calvaria and horns of young. O. C. 3719.

From Moradabad, Bengal.

Presented by Colonel Sir George Everest, 1841.

Tetraceros quadricornis.

1401. One of the posterior horns. O. C. 3720.

British Museum. Purchased, 1809.

Genus ÆPYCEROS.

Sundevall, Kongl. Vetensk. Akad. Hand. for 1845, p. 271.

Æpyceros melampus.

Antilope melampus, Lichtenstein, Berlin. Gesellsch. naturforsch. Freunde Magazin, vi. p. 167 (1814).

THE PALLAH.

Hab. South Africa.

1402. Cranium and horns of young male. O. C. 3650.

The milk-molars have been removed to show the germs of the premolars. The third true molar is just coming into place. From Kaffraria.

Hunterian.

1403. Portion of calvaria and horns of adult male. O. C. 3651. From Kaffraria.

Hunterian.

Genus ALCELAPHUS.

De Blainville, Bull. Soc. Philomat. 1816, p. 75.

Alcelaphus caama.

Antilope caama, Cuvier, Dict. des Sciences Nat. ii. p. 242 (1816).

THE HARTEBEEST.

Hab. South Africa.

1404. Skull and horns of young. O. C. 3674.

The third milk-molars are still retained, the ether teeth present being these of the permanent series.

Purchased.

1405. Imperfect cranium with horns.

In Museum before 1861.

1406. Horns. O. C. 3675.

From Caffraria.

Hunterian.

Alcelaphus pygargus.

Antilope pygarga, Pallas, Spicilegia Zool. i. p. 10 (1767).

THE BONTE-BOK.

Hab. South Africa.

1407. Calvaria and horns. O. C. 3652.

. Frem Caffraria.

Hunterian.

Alcelaphus lunatus.

Antilope lunata, Burchell, Travels in Southern Africa, ii. p. 334 (1824).

THE SASSAYBY.

Hab. South Africa.

1408. Skull of young. O. C. 3677.

The milk-melars are in place with the first true melars.

Purchased.

PART II.

Alcelaphus lunatus.

1409. Portion of cranium and horns, J. O. C. 3878.

Purchased.

Genus CONNOCHÆTES.

Connochaetes, Lichtenstein, Berlin. Gesellsch. naturforsch. Freunde Magazin, vi. pp. 152 and 165 (1814).

Catoblepas, Hamilton Smith in Griffith's Animal Kingdom, iv. p. 366 (1827).

Connochætes gnu.

Antilope gnou, Zimmermann, Geograph. Geschichte, ii. p. 102 (1780).

Antilope gnu, Gmelin, Syst. Nat. i. p. 189 (1788).

THE WHITE-TAILED GNU.

Hab. South Africa.

1410. Articulated skeleton. O. C. 3808.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 14 (incomplete).

Purchased.

1411. Skull and horns. O. C. 3809.

Hunterian.

1412. Cranium and horns. O. C. 3810.

Purchased.

1413. Cranium, without horns, of young. O. C. 3811.

The milk-molars are still in place, with the first and second true molars.

Purchased.

BOVIDÆ. 275

Connochætes taurina.

Antilope taurina, Burchell, Travels, ii. p. 277 (1824).

1414. Cranium and horns of young. O. C. 3812.

The milk-molars are still retained, with the first and partly developed second true molars.

Purchased.

Antelopes of uncertain Generic Position.

The two following species are placed by Hamilton Smith in his subgenus Raphicerus.

Antilope acuticornis.

De Blainville, Bull. de la Soc. Philomat. 1816, p. 79.

1415. Mutilated cranium. O. C. 3721.

This specimen, the type of the species, is figured by Blainville in the 'Journal de Physique' for August 1818, fig. 8, and in Oken's 'Isis' for 1819, Taf. 12. fig. 8. Also (front view) on a very small scale by Hamilton Smith in Griffith's 'Animal Kingdom,' iv. p. 198 (1827).

Speaking of this specimen, Hamilton Smith says (loc. cit. p. 252):—"The fragment belonged to a young animal, and was brought from India; and upon comparison with the Chickara [Tetraceros quadricornis] we have some doubt whether the acuticornis be not the same species, with the spurious horns and anterior part of the frontals wanting, but this, nevertheless, much smaller."

British Museum. Purchased, 1809.

1416. A single horn attributed to the same species. O. C. 3722.

British Museum. Purchased, 1809.

Antilope subulata.

Hamilton Smith, in Griffith's Animal Kingdom, iv. p. 253 (1827).

1417. Frontlet and horns. O. C. 3723.

The type of H. Smith's description and figure. Upon the latter (facing p. 198) it is called A. subulosa.

British Museum. Purchased, 1809.

Antilope cordieri.

De Christol, Ann. Sc. et Ind. Midi de la France, t. ii. p. 20 (1832), fide Gervais.

1418. Cast of portion of cranium and horn-cores.

The original is from the "sables marins pliocènes de Montpellier." It is figured in Gervais's 'Zoologic et Paléontologie générales,' pl. xx. (1869).

Presented by the Paris Museum of Natural History, per Prof. Gervais, 1871.

Family ANTILOCAPRIDÆ.

Dentition:—i. $\frac{0}{3}$, c. $\frac{0}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, $=\frac{6}{10}$: total 32.

Genus ANTILOCAPRA.

Antilocapra, Ord, Journal de Physique, lxxxvii. p. 149 (1818); Isis, 1819, p. 1106.

Dicranoceros, Hamilton Smith, Griffith's Anim. Kingd. v. p. 312 (1827).

Antilocapra americana.

Antilope americana, Ord, Guthrie's Geography (2nd Amer. edit.), ii. 1815, pp. 292, 308 (fide Baird).

Antilocapra americana, Ord, Journal de Physique, lxxxvii. p. 149 (1818).

Antilope furcifer, Hamilton Smith, Trans. Linn. Soc. xiii. p. 28 (read 1819, publ. 1822).

THE PRONG-HORNED ANTELOPE.

Hab. North America.

1419. Skull and horns. O. C. 3713.

Presented by Joseph Sabine, Esq.

1420. Skull and horns of male.

The old horns are about to be shed. From near Denver, Colorado.

Presented by George Busk, Esq., 1877.

1421. Skull of young male; wanting the horns and horn-cores.

All the true molars are in place; but the premolars have not been acquired.

Presented by the Smithsonian Institution, 1871.

1422. Skull of female.

From the Platte river.

Presented by the Smithsonian Institution, 1871.

Antilocapra americana.

1423. Mutilated skull of a young female.

The milk-molars are retained; and the posterior true molars are only appearing above the upper margin of the alveolus.

Presented by the Smithsonian Institution, 1871.

1424. Skull and horns of young male.

The milk-molars and the first true molars are in place.
Killed 1st November, 1872, near Fort Hays, Kansas, U.S.
America.

Presented by Sir Victor Brooke, 1876.

1425. Mutilated cranium with the horns of male.

Presented by the Smithsonian Institution, 1871.

1426. A horn.

Presented by the Smithsonian Institution, 1871.

1427. A horn.

Presented by the Smithsonian Institution, 1871.

1428. A pair of horns. O. C. 3714.

From the Rocky Mountains, near the River Jaune.

They have a small additional process near the point of bifurcation of each horn, which does not usually exist. These specimens are described and figured by Hamilton Smith, in the Trans. Linn. Soc. xiii. p. 31, pl. 3 (1822), under the name of Antilope palmata. They are also described by Do Blainville as Cervus hamatus in the 'Bulletin de la Société Philomatiquo' for 1816, p. 78.

Family SIVATHERIIDÆ.

Genus SIVATHERIUM.

Falconer and Cautley, Asiatic Researches, xix. p. 1 (1836).

Sibatherium giganteum.

Falconer and Cautley, loc. cit.

Hab. Plio-miocene of the Siwalik or sub-Himalayan hills.

1429. The greater part of the cranium, with the molar teeth.

From near Hoshiapur, between the rivers Sutloj and Beas.

Presented by W. Crozier, Esq., and Captain T. C. Blagrave, 1852.

1430. Portion of the left maxilla, with the two posterior premolars and the first molar.

From the same locality.

Presented by W. Crozier, Esq., and Captain T. C. Blagrave, 1852.

1431. A last right lower molar tooth. O. C. F. 1251.

Presented by the Rev. R. Everest.

1432. A mutilated cervical vertebra. O. C. F. 1252.

Presented by Walter Ewer, Esq.

Sibatherinm gigantenm.

1433. A right astragalus. O. C. F. 1253.

Presented by Walter Ewer, Esq.

1434. A right astragalus.

1435. A left astragalus.

Genus BRAMATHERIUM.

Falconer, Quart. Journ. Geol. Soc. i. p. 363 (1845).

Bramatherium perimense.

Falconer, loc. cit. p. 365.

1436. Cranium.

From the Tertiary strata of Perim Island, in the Gulf of Cambay.

This specimen is described by its discoverer, Mr. Bettington, in the 'Journal of the Royal Asiatic Society' for 1845, vol. viii. p. 340.

Presented by A. Bettington, Esq., 1846.

Family GIRAFFIDÆ.

Dentition :—i. $\frac{0}{3}$, c. $\frac{0}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, $=\frac{6}{10}$: total 32.

Genus GIRAFFA.

Giraffa, Zimmermann, Geograph. Geschichte, ii. p. 125 (1780); Storr, Prodromus, p. 41 (1780). Camelopardalis, Gmelin, Syst. Nat. i. p. 181 (1788).

Giraffa camelopardalis.

Cervus camelopardalis, Linn. Syst. Nat. ed. 12, i. p. 92 (1766). Giraffa camelopardalis, Zimmermann, loc. cit. (1780); Gray, Cat. Ungulata Brit. Mus. p. 181 (1852).

Camelopardalis giraffa, Gmelin, loc. cit. (1788)*, Cuvier, and others.

THE GIRAFFE OF CAMELOPARD.

Hab. Africa.

1437. Articulated skeleton of male.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 19.

Vertical height to top of head 3.960 metres, or 13 feet.

Prepared from an animal born in the Gardens of the Zoological Society, Regent's Park, 23 April, 1846, and died in January 1867.

Purchased, 1867.

1438. Skull and many of the bones of the skeleton of male. O. C. 3618 & 3621 to 3639.

These, together with the skin, which is stuffed and has been transferred to the British Museum, were brought to England by Lieut. William Paterson, who had been sent by Lady Strathmore on a botanical expedition into Caffraria and other parts of Africa, till then unexplored, and were by her presented to Mr. Hunter. (Vide Paterson's 'Narrative of Four Journeys into the Country of the Hottentots in 1777, 1778, 1779,' p. 126.)

[•] Gmelin quotes "Schreber, tab. cclv.," as his authority for this name. It would be difficult, if not impossible, now to ascertain the dato of the publication of this plate; but it was almost certainly not before 1780, when both Zimmermann and Storr adopted Giraffa camelopardalis from Brisson. The description in Schreber's work did not appear until long afterwards.

Giraffa camelopardalis.

1439. Longitudinally and vertically bisected skull, J. O.C. 3620.

The horns have been removed, probably with the skin.

Brookes Collection. Purchased, 1828.

1440. Skull of female. O. C. 3619.

Though all the permanent teeth are in place, the bony horn-cores retain their independence and well display their relations to the frontal and parietal bones.

Brookes Collection. Purchased, 1828.

1441. Lower jaw.

In Museum before 1861.

1442. The milk-teeth, with abraded crowns and absorbed roots, shed by the first Giraffes which lived in the Gardens of the Zoological Society.

The animals were brought from Nubia when between one and two years of age, in May 1836.

- a. Left first lower incisor, shed May 1838. O.C. 3640.
- b. Left second lower incisor, shed May 1838. O.C. 3641.
- c. Left upper first molar, shed October 1838. O. C. 3642.
- d. Left upper second molar, shed November 1838. O. C. 3643.
- e. Right upper second molar, shed December 1838. O. C. 3644.
- f. Left upper third molar, shed February 1840. O.C. 3645.
- g. Left lower first molar, shed October 1838. O. C. 3646.
- h. Right lower third molar, shed January 1840. O.C. 3647.

Presented by the Zoological Society.

Giraffa biturigum.

Camelopardalis biturigum, Duvernoy, Ann. Sc. Nat. ser. 3, i. p. 47 (1844).

1443. Casts of the two rami of the mandible. O. C. F. 1119.

The originals were discovered in a yellowish argillaceous stratum in digging a well in the town of Issoudun (Département de l'Indre). It is figured by the donor, loc. cit. pl. 2.

Presented by Professor Duvernoy.

Family CERVIDÆ.

Dentition:—i. $\frac{0}{3}$, c. $\frac{1 \text{ or } 0}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{6}{10}$ or $\frac{7}{10}$: total 32 or 34. The upper canine is usually present in the male sex, sometimes, as in *Moschus* and *Hydropotes*, attaining a very great size.

Subfamily Moschinæ.

Genus MOSCHUS.

Linnæus, Syst. Nat. ed. 12, i. p. 91 (1766).

Moschus moschiferus.

Linnæus, loc. cit. (1766).

THE MUSK-DEER.

Hab. Central Asia.

1444. Articulated skeleton of male. O. C. 3490.

Vertebræ: C. 7, D. 14, L. 5, S. 5, C. 6.

South Collection. Purchased, 1835.

Moschus moschiferus.

1445. Skeleton of female.

Not quite complete. Vertebræ: C. 7, D. 13, L. 6, S. 5, C. wanting.

Prepared from the animal (from Cashmero) presented to the Zoological Society by General Sir Richard Pollock, 31 March, 1869, which died 27 October, 1869, and formed the subject of a memoir on its anatomy published in the 'Proceedings' of the Society for 1875, p. 159.

Presented by the Zoological Society, 1869.

1446. Natural skeleton of the bones of the trunk, wanting the atlas.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 6.

This and the following specimen were labelled by the donor "M. saturatus" (vide Journ. Asiat. Soc. Bengal, viii. p. 203 1839).

From Nepal.

Presented by Bryan H. Hodgson, Esq., 1845.

1447. Natural skeleton of the bones of the trunk.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 7. From Nepal.

Presented by Bryan H. Hodgson, Esq., 1845.

1448. Skull of male. O. C. 3491.

Presented by Sir Joseph Banks.

1449. Skull of male. O. C. 3492.

The outer alveolar walls have been removed from the right side of both jaws to expose the roots of the teeth.

Presented by Colonel Finch, 1830.

1450. Skull of male.

Vertically and longitudinally bisected.

In Museum before 1861.

1451. Mutilated cranium of male, with the teeth complete.

Presented by Captain C. H. T. Marshall, 1870.

- 1452. Anterior portion of the upper and lower jaws of a male, with the long upper canines and the inferior incisors and incisor-like canines. O. C. 3493.

 Hunterian.
- 1453. Right hind foot, wanting the astragalus and calcaneum.

 In Museum before 1861.

Subfamily CERVINÆ*.

Genus DREMOTHERIUM.

Geoffroy, Revue Encyclopédique, lix. p. 82 (1833).

Dremotherium feignourii.

Geoffroy, loc. cit.

1454. Cast of cranium of female.

The original is from a Miocene deposit at St. Gérand le Puy (Allier), France.

Presented by the Paris Museum of Natural History, 1869.

^{*} For the nomenclature of the existing members of this group, see Sir Victor Brooke, "On the Classification of the *Cervidæ*, with a Synopsis of the Existing Species," Proc. Zool. Soc. 1878, p. 883.

Genus CERVULUS.

Cervulus, De Blainville, Bull. de la Soc. Philomat. 1816, p. 74. Stylocerus, Hamilton Smith in Griffith's Anim. Kingd. v. p. 319 (1827).

Prox, Ogilby, Proc. Zool. Soc. 1836, p. 135.

Cervulus muntjac.

Cervus muntjak, Zimmermann, Geograph. Geschichte, ii. p. 131 (1780).

Cervus muntjak and C. vaginalis, Boddaert, Eleneh. Anim. i. p. 136 (1785).

Cervus muntjac, Gmelin, Syst. Nat. i. p. 180 (1788).

THE COMMON MUNTJAK.

Hab. India, Burmah, Malay peninsula, Sumatra, Java, and Borneo.

1455. Incomplete skeleton of female.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. incomplete. Many of the bones are mounted in the Separate Series.

Presented by Sir Stamford Raffles.

1456. Incomplete skeleton of female.

From Sumatra.

In Museum before 1862.

1457. Skull and antlers of male. O. C. 3607.

From the Himalaya Mountains.

Presented by Colonel Finch, 1830.

1458. Skull of male. O. C. 3613.

The antlers are imperfectly developed. The cranium has been vertically and transversely divided.

From the Himalaya Mountains.

Presented by Colonel Finch, 1830.

1459. Skull of female. O. C. 3612.

Stated to have been shot at Natmuthal.

Purchased.

1460. Skull of female.

An upper canine is present on the left side only. There is no trace even of a socket on the right.

From Nepal.

Presented by Bryan H. Hodgson, Esq., 1845.

1461. Skull of young female. O. C. 3614.

The milk-molars and first true molars are in place. Small upper canines are present.

From the Himalaya Mountains.

Presented by Colonel Finch, 1830.

1462. Cranium of adult male. O. C. 3606. Hunterian.

1463. Mutilated cranium and atlas. O. C. 3610.

This specimen was described by De Blainville under the name of *Cervus subcornutus* (Bull. do la Soc. Philomat. 1816, p. 77).

Presented by Sir Everard Home, 1807.

Cervulus muntjac.

1464. Mutilated cranium and antlers. O. C. 3611.

A longitudinal section has been made through the left antler and its pedicle.

Hunterian.

1465. Calvaria and antlers of large size. O. C. 3608.

Probably from Sumatra.

Presented by Sir T. Stamford Raffles.

1466. Portion of calvaria and antlers.

In Museum before 1861.

1467. Portion of calvaria and antlers. O. C. 3609.

The antlers are small, and the brow-tyne rudimentary.

Purchased.

1468. Portion of calvaria and antlers.

In a similar condition of development.

In Museum before 1861.

1469. Mutilated cranium of young. O. C. 3615.

The two posterior milk-molars remain; and the last true molar has been but recently acquired. The pedicles are very long, and the antlers imperfectly developed.

Upon this specimen M. de Blainville founded his *Cervus moschatus* (Bull. de la Soc. Philomat. 1816, p. 77).

Sent from Sumatra by Mr. William Bell.

Genus CERVUS.

Linnæus, Syst. Nat. ed. 12, i. p. 92 (1766).

A. Rusine Group.

Cervus aristotelis.

Cuvier, Ossemens Fossiles, ed. 2, iv. p. 503 (1823).

THE SAMBUR DEER.

Hab. India, Burmah, Siam.

1470. Skull of adult female.

From Nepal.

Presented by Bryan H. Hodgson, Esq., 1845.

1471. Facial portion of skull and antlers of male.

In Museum before 1862.

1472. Left antler. O.C. 3592.

From the Himalaya Mountains.

Presented by Colonel Finch, 1830.

1473. Frontlet and antlers. O. C. 3589.

From the Coromandel Coast.

Cervus equinus.

Cuvier, Ossemens Fossiles, ed. 2, iv. p. 45 (1823).

THE EQUINE DEER.

Hab. Borneo and Sumatra.

1474. Cranium and antlers. O. C. 3588.

From Sumatra, whence it was probably transmitted to Mr. Hunter by his former assistant, Mr. William Bell.

Hunterian.

1475. Frontlet and antlers.

In Museum before 1862.

1476. Frontlet and antlers. O. C. 3591.

From Sumatra.

Presented by Sir T. Stamford Raffles.

1477. Frontlet and antlers. O. C. 3590.

From Sumatra.

Presented by Sir T. Stamford Raffles.

Cervus porcinus.

Zimmermann, Specimen Zool. Geogr. Quadr. p. 532 (1777).

THE HOG-DEER.

Hab. India.

1478. Skull and antlers.

In Museum before 1862.

1479. Cranium and antlers. O. C. 3593.

From the Himalaya Mountains.

Presented by Colonel Finch, 1830.

1480. Frontlet and antlers. O. C. 3594.

From the Himalaya Mountains.

Presented by Colonel Finch, 1830.

1481. Frontlet and antlers. O. C. 3595.

From the Terai, at the foot of the Kumaon mountains.

Purchased.

B. Rucervine Group.

Cervus eldi.

M'Clelland, Calcutta Journ. Nat. Hist. ii. p. 417 (1842).

THE PANOLIA DEER.

Hab. Burmah, Siam.

1482. Imperfect cranium and antlers.

In Museum before 1862.

C. Elaphurine Group.

Cervus davidianus.

Elaphurus davidianus, Alph. Milne-Edwards, Nouv. Arch. du Mus. ii. p. 27 (1866).

DAVID'S DEER.

Hab. Northern China.

Cervus davidianus.

1483. Articulated skeleton of male.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 14 (incomplete).

The antlers are not quite fully developed, as they were still eovered with the "velvet" at the time of the animal's death. It was obtained for the Zoological Society from the park of the Emperor of China's Summer Palaee, near Pekin, by Sir Rutherford Aleoek, K.C.B., H.M. Envoy to China, but died before it was shipped to England. The skin is in the British Museum.

Presented by the Zoological Society, 1868.

The following antlers (to No. 1486) were presented with the above skeleton:—

1484. A right and left shed antler, probably from the same animal.

1485. A right shed antler.

1486. A left shed antler.

1487. Incomplete skelcton of young.

From Pekin.

Presented by Robert Swinhoe, Esq., 1869.

1488. Bones of the cranium and some of the bones of the extremities of two very young animals.

From Pekin.

Presented by Robert Swinhoe, Esq., 1869.

D. Axine Group.

Cervus axis.

Erxleben, Syst. Reg. Anim. p. 312 (1777).

THE AXIS DEER.

Hab. India.

1489. Skull of female.

From Maunbhoom, Bengal.

Presented by R. C. Beavan, Esq., 1867.

1490. Skull of young female.

The milk-molars and first and second permanent molars are in place.

From Maunbhoom.

Presented by R. C. Beavan, Esq., 1867.

1491. Skull of female.

From Nepal.

Presented by Bryan H. Hodgson, Esq., 1845.

E. Elaphine Group.

Cervus elaphus.

Linnæus, Syst. Nat. ed. 12, i. p. 93 (1766).

THE RED DEER.

Hab. Europe; Western Asia; North Africa.

Cervus elaphus.

a. Recent specimens.

1492. Articulated skeleton of male.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 11.

Prepared from an animal killed at Glenquoich by Invergarry, 15 February 1866.

Presented by Edward Ellice, Esq., M.P., 1866.

1493. Skeleton of male.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 10.

The antlers are of comparatively small size.

Killed 13 January 1868, near Stornaway, Island of Lewis, Scotland.

Presented by Sir James Mattheson, M.P., 1868.

1494. Skeleton of female.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 8 (incomplete).

A pair of rudimentary canines were present in the maxillæ; but they were lost in preparing the skeleton.

From Inchbea, Garve, near Dingwall.

Presented by N. E. Vaughan, Esq., 1866.

1495. Skull of female.

From Scotland.

Purchased, 1865.

1496. Anterior portion of skull of female, prepared to show the teeth.

From Colebrooke Park, Fermanagh, Ireland.

Presented by Sir Victor Brooke, 1878.

1497. Hyoid bones of male.

From Scotland.

Presented by Edgar Flower, Esq., 1873.

1498. Frontlet and antlers of male. O. C. 3575. Hunterian.

1499. A right antler. O. C. 3576.

Hunterian.

1500. A right antler with well-developed crown.

In Museum before 1862.

1501. A right antler. O. C. 3577.

Hunterian.

1502. A left antler.

In Museum before 1862.

1503. Frontlet and antlers of stunted growth, said to have been associated with injury to one of the legs.

The left antier is quite rudimentary. The exact seat and nature of the injury to the limb has not been recorded; but an illustrative case will be found in the Pathological Series, No. 1730, of wound of the left tibio-tarsal joint followed by extensive inflammatory action with formation of new bone, associated with stunted growth of the right antier.

The present specimen is from a Stag shot by H.R.H. The Prince Consort, 8 September, 1856, near Balmoral.

Presented by Sir James Clark, M.D., 1856.

1504. A pair of antlers of a young Stag. O. C. 3579.

Cervus elaphus.

b. Subfossil specimens.

1505. Frontlet and antlers of large size.

In a subfossil condition. They were in the Museum before 1862, but without history.

1506. The greater part of a large right antler.

History unknown.

In Museum before 1862.

1507. A right antler. O. C. 3578.

Obtained from a bog in Ireland. It has not been shed, but broken off the skull.

Presented by the Earl of Enniskillen.

1508. Fragment of skull, with base of an antler. O. C. F. 1177. From the brick-carth of Essex.

Hunterian.

1509. Two fragments of antlers. O. C. F. 1178.

They appear to have been obtained from the subjacent gravel of some bog, and are incrusted with fragments of stone and brick cemented together by black mud. Locality unrecorded.

Hunterian.

1510. Portion of an antler and of a scapula. O. C. F. 1180 and 1181.

Both these specimens were obtained at Loughborough, Leicestershire, in the year 1786; their condition is indicated by a memorandum attached to them in the original Hunterian Catalogue, where they are called "two bones calcined." They have lost most of their animal matter.

1511. Three fragments of antlers in the same condition as the preceding. O. C. F. 1182, 1183, and 1184.

Locality unrecorded.

Hunterian.

1512. Shaft of a right femur. O. C. F. 1185.

Hunterian.

1513. Various bones. O. C. F. 1191 to 1203.

Discovered by Mr. Joseph Whidbey in one of the cavernous fissures of the limstone-quarries at Oroston, and noticed by Mr. Clift, in his memoir on the bones there discovered, in the 'Philosophical Transactions' for 1823, p. 86.

Presented by Joseph Whidbey, Esq.

1514. Various bones from the cave at Kirkdale, Yorkshire. O. C. F. 1204 to 1214.

Presented by John Gibson, Esq.

- 1515. Various bones found associated with remains of the Gigantic Deer (*Cervus hibernicus*) in the Pleistocene freshwater deposit beneath a bog in Ireland. O. C. F. 1215 to 1226.

 Illunterian
- 1516. A left metatarsal bone. O.C. F. 1227.

From beneath a turf-bog in the county of Tipperary.

Presented by the Earl of Enniskillen.

1517. One of the tines or branches of an antler. O. C. F. 1230.

From Canstadt, in Würtemberg.

Cervus elaphus.

1518. A lower molar. O. C. F. 1231.

From Bauman's Cave, in the Hartz Forest, Germany.

Hunterian.

1519. Portions of the calvaria and antlers from a cave near Palermo in Sicily. O. C. F. 1232, 1233, and 1234.

Presented by J. Robertson, Esq.

1520. Posterior part of cranium, with pedestal and base of an antler of a large species of *Cervus* of the round-antlered or Elaphine group. O. C. F. 1235 and 1236.

From the tertiary deposits of the sub-Himalaya range, India.

Presented by the Rev. E. Everest.

Cervus canadensis.

Erxleben, Syst. Reg. An. p. 305 (1777).

THE WAPITI.

Hab. North America.

1521. Skull and antlers. O. C. 3585.

Purchased.

1522. A pair of shed antlers. O. C. 3587.

Presented by the Zoological Society.

1523. A pair of antlers.

Presented by Sir William Lawrence, 1855.

1524. Skeleton (not quite complete) of young female.

The milk-molars are still in place. The lower permanent canines and last true molars have not appeared.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. incomplete.

In Museum before 1862.

F. Damine Group.

Cervus dama.

Cervus dama, Linnæus, Syst. Nat. ed. 12, i. p. 93 (1766). Dama vulgaris, Gray, List Mammals Brit. Mus. p. 181 (1843).

THE FALLOW DEER.

Hab. South-eastern Europe and South-western Asia.

1525. Articulated skeleton of male. O. C. 3536.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. wanting.

Hunterian.

1526. Skeleton of male. O. C. 3537.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 8 (incomplete).

South Collection. Purchased, 1835.

1527. Incomplete skeleton of female.

Many of the bones are mounted in the separate series.

In Museum before 1862.

1528. Skull and antlers of male. O. C. 3538. Hunterian.

1529. Skull of male. O. C. 3541.

The antlers have been sawn off close to the frontal bone.

Purchased.

Cervus dama.

1530. Skull of female.

Parker Collection. Purchased, 1858.

1531. Skull of female.

From Colebrooke Park, County Fermanagh, Ireland.

Presented by Sir Victor Brooke, 1876.

1532. Cranium and antlers. O. C. 3543.

The antlers are fully developed, but "in velvet"—that is, prior to the shedding of the vascular integument subservient to their growth.

Presented by Sir Philip Grey-Egerton.

1533. Cranium, with the recently shed antlers of the same Deer. O. C. 3540.

Presented by the Duke of Marlborough, 1851.

1534. Cranium of male. O. C. 3539.

The antlers have been sawn off above the base.

Hunterian.

1535. Cranium, longitudinally and vertically bisected. O. C. 3542.

Presented by Professor Owen.

1536. Upper and lower jaws, showing the molar teeth of the left side. O. C. 3554 and 3555.

1537. Teeth of male, separately displayed.

Prepared in 1869.

1538. Hyoid bones of female.

From Colebrooke, Ireland.

Presented by Sir Victor Brooke, 1875.

1539. Articulated skeletons of an anterior and posterior extremity. O. C. 3556 and 3557.

Hunterian.

1540. Frontlet and antlers. O. C. 3544.

The animal was killed before the hairy integument or "velvet" had been shed.

Hunterian.

1541. A pair of growing antlers with the "velvet" retained and dried upon them. O. C. 3545.

Presented by Sir Philip Grey-Egerton.

1542. A shed left antler. O. C. 3546.

The surface below the base, where the process of separation has taken place, is convex, showing it to have been taken from an entire or non-eastrated buck.

Presented by Sir Philip Grey-Egerton.

1543. The left shed antler of a younger animal, the base of which is also convex. O. C. 3547.

Cervus dama.

1544. The antlers of a buck ten years old, showing their diminished bulk and deterioration as offensive weapons in old age. O. C. 3553.

Presented by Sir Philip Grey-Egerton.

- 1545. A right antler fully developed.
- 1546. Right antler of a buck about four years old.
- 1547. Right antler of a buck about three years old.
- 1548. Right antler of a two-year-old Fallow Deer or "Sorel."
- 1549. Right antler of a one-year-old Fallow Deer or "Pricket."

 The five last specimens, showing the gradual development of the antlers with the increasing age of the animal, were in the Museum before 1862, without history.
- 1550. Antler of a young male Fallow Deer or "Pricket."
 O. C. 3548.

 Presented by Robert Hills, Esq.
- 1551. Antler of young. O. C. 3549. Hunterian.
- 1552. Antler of young. O. C. 3550. Hunterian.

1553. Antler of young. O. C. 3551.

Hunterian.

1554. Antler of young. O. C. 3552.

Hunterian.

1555. Cranium of a male castrated at birth.

The antlers of this and the next were possistent, stunted, and covered with a hairy skin, like the horns of a Giraffe, instead of the usual "velvet" of the growing antler.

Presented by Sir Philip Grey-Egerton.

1556. Portion of cranium and antlers of a male castrated at birth.

Presented by Sir Philip Grey-Egerton.

The following eleven specimens from Deer kept at Oulton Park, Cheshire, illustrate the effects of castration upon the growth of the antlers. The descriptions and appended observations are extracted from the Catalogue of 1853.

Presented by Sir Philip Grey-Egerton.

1557. The antlers of a Fallow Deer, from which half of each testicle had been removed soon after birth. O. C. 3558.

These were shed when the animal had passed its fourth year. The absorbing process has excavated the base of each antler above the level of the burr, leaving a rough flat surface. The antlers were annually formed and shed in this instance, but without acquiring their normal size, and with the difference in the degree and direction of the absorbent action exhibited by the base of the specimens as compared with No. 1542. It is observed by the Keeper at Oulton Park, that bucks semicastrated, as in the present instance, go into rut, but not, as entire bucks do, to that degree which produces emaciation.

Cervus dama.

1558. The antlers of a Fallow Deer, from which the testes, but not the spermatic cords, had been removed soon after it was born. O. C. 3559.

The antlers were formed and shed annually in this instance; they differed from those of the entire deer in being somewhat smaller and retained longer; when shed, the absorbed surface at the base of the antler was always earried internally above the level of the burr, and was flat or slightly concave. The present pair of antlers were shed when the "hevier," as such castrated bucks are termed, was five years old.

1559. The left antler of the same castrated Fallow Deer (*Cervus dama*), which was killed in its sixth year, October 25th, 1837. O. C. 3560.

The antlers had retained their velvet full two months longer than the entire bucks usually do in the same park (Oulton, Cheshire).

1560. The antlers of a Fallow Deer. O. C. 3561.

They were shed in October 1837, the buck having been castrated in the month of August in the same year, when the same antlers were clean or burnished, that is, had cast their vascular integument. The effect of castration upon these appendages was manifested by their speedy fall and by the activity of the absorbent process producing it, which has left a slightly concave surface to the base of each. Under ordinary circumstances the antlers would have been retained until the end of April in the following year.

1561. The shed antlers of a castrated Fallow Deer. O. C. 3562.

They are of diminutive size and abnormal form, and illustrate, by the excavation at their base, the active absorbent process through which they were cast off. 1562. A shed left antler of a eastrated Fallow Deer. O. C. 3563.

The absorbent process by which it was undormined has extended above the level of the burr, as far as the base of the browsnag.

1563. One of a pair of antlers that were put up by a castrated buck and retained. O. C. 3564.

Both were small and unbranched, and showed the influence of the persistent vascular periosteum and integument by the formation of several irregular tubercles of bone.

1564. A shed antler of stunted growth of a eastrated Fallow Deer. O. C. 3565.

The absorbent process has excavated the base of the antlor and detached it from above the level of the burr.

1565. The antlers of a eastrated Fallow Deer eight years old. O. C. 3566.

They were developed after eastration, and were retained two years before the animal was killed.

1566. The calvarium and antlers of a castrated Fallow Deer. O. C. 3567.

The antlers were retained long after the usual period of shedding, and had become much malformed by exostoses developed from the persistent periosteum.

1567. The eranium of a Fallow Deer from which the left testis had been removed, showing a corresponding arrest of development of the left antler. O. C. 3568.

The velvet was retained longer than usual on both antlers. The arteries have been injected, showing the branch of the external earotid which passes over the zygoma and behind the orbit for the supply of the periosteum and integument of the antlers. The calvarium has been removed to show the plexus, or "rete mirabile," formed by the internal earotid on each side of the "sella turciea."

Cervus dama.

1568. Part of the calvarium, with the antlers, of a mature Fallow Deer (*Cervus dama*), with the integument or velvet retained. O. C. 3569.

The memorandum with this specimen states that "they were not shed at the usual time, in consequence of the castration of the animal, from which period that process ceases."

Obs.—Neither the place nor date of the operation is mentioned. The latter part of the statement seems to have been made in accordance with the current belief in the effect of eastration from the time of Redi, who states, "Si cervus juvenis castretur, nondum emissis cornubus, cornua nunquam emittit: si castretur jam emissis eornubus, cornua nunquam mutat; sed quæ dum eastratur habet, eastratus semper retinet." (Experimenta Naturalia, 12mo, 1675, p. 162.)

That these propositions are not in accordance with nature, at least as regards the Fallow Deer (Cervus dama), is proved by the experiments instituted by Sir Philip do Malpas Grey Egerton, of which the specimens Nos. 1557 to 1567 are the results. No. 1560, for example, shows that the antlers which the buck had when it was eastrated, instead of being always retained, were shed six months sooner than usual, the effect of the operation having been to stimulate the absorbent action, which the base of the antlers shows to have gone on with unusual activity. Specimen No. 1558 also disproves the first part of Redi's statement, showing that when a young buck is castrated before it has developed any antlers, it nevertheless does develop them, although of abnormal size and shape, and that they are retained longer than usual, but in some instances are shed and renewed—always, however, when shed exhibiting the eharacteristic excavation at the base noticed in the specimens No. 1561. O. C. p. 592.

Presented by Sir Everard Home.

1569. Calvaria and antlers much malformed by exostoses.

This specimen, which was in the Museum before 1862, is figured in the article *Cervidæ*, in Knight's 'English Cyclopædia of Natural History,' vol. i. p. 844 (1854), as "the horns of a Fallow Deer that were not shed at the usual time in consequence of the eastration of the animal."

1570. Another specimen of deformed and diseased antlers.

Probably also due to the effects of castration.

In Museum before 1862

1571. Natural skeleton of a Fawn or young Fallow Deer.

The milk-tceth are in place. There are no traces of upper canines.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 8 (incomplete).

Purchased.

1572. Natural skeleton of a feetal Fallow Deer, about one month short of the full period of gestation.

Taken from a Doe killed in the end of November 1878. Vertebræ: C. 7, D. 13, L. 6, S. 4; C. 10.

Presented by W. B. Tegetmeier, Esq., 1878.

1573. Disarticulated skull of a Fawn, in which all the separate bones are mounted at a short distance from each other.

Parker Collection. Purchased, 1858.

G. Megaeerotine Group.

Cerbus hibernicus.

Cervus hibernus, Desmarest, Mammalogie, p. 446 (1822).

Cervus megaceros, Hart, Description of the Skeleton of the Fossil Deer of Ireland (1826).

Megaceros hibernicus, Owen, Report of British Association, 1843, p. 237.

THE MEGACEROS OF IRISH ELK.

Hab. Western Europe in the Pleistocene period.

The upper canine teeth do not appear to have been developed in this species.

Cerbus hibernicus.

1574. Articulated skeleton of male. O. C. F. 1120.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 4 (incomplete).

The span of the antlers, measured in a straight line between the extremo tips, is eight feet (2·490 m.); the length of a single antler, following the curvo, is seven feet three inches (2·210 m.).

The weight of the skull and antlers is 76 lb. avoirdupois (34.4 kilos.).

From a freshwater Pleistocene deposit of shell-marl beneath a bog near the town of Limerick.

Purchased, 1843.

1575. The cranium and perfect antlers of male. O. C. F. 1121.

The antlers measure in a straight line between the extreme tips eight feet four inches (2.670 m.); each antler, from the burr to the extreme tip, following the curvo, measures five feet nine inches (1.750 m.). The number of times or branches of the beam and palm (excluding the brown-tine) is seven, one arising from the hind margin about one third of the way from the base.

From the Pleistocene freshwater marl beneath a bog in the county of Limerick.

Purchased.

1576. Cranium and mutilated antlers. O. C. F. 1122.

Locality unrecorded.

Hunterian.

1577. Cranium and mutilated antlers. O. C. F. 1123.

Locality unrecorded.

Hunterian.

1578. Portion of cranium and beam of right antler.

Labelled "From Pleistocene Strata, Essex."

In Museum before 1862.

1579. Cranium and mutilated antlers of male in vertical longitudinal section. O. C. F. 1124.

From the Pleistocene freshwater marl, beneath a bog in the county Down, Ireland.

Purchased.

1580. Beam of an antler with part of the calvaria from which it grew, in longitudinal section. O. C. F. 1125.

It shows the compact cellular tissue of the pedestal or stem of the antler between the skull and the burr, and the looser cancellous tissue and cavity in the centre of the beam.

From the Pleistocene freshwater marl, beneath a bog in the county Down, Ireland.

Presented by the Earl of Enniskillen.

1581. A section of a smaller portion of the base of an antler, showing the separation between the beam and the pedicle, commencing in the centre of the antler.

In Museum before 1862.

1582. Cranium of a male which had recently shed its antlers.

Purchased, 1851.

1583. Cranium of female. O. C. F. 1127.

From the Pleistoeene freshwater marl beneath a bog in the county of Longford, Ireland.

Purchased, 1843.

1584. Mandible, wanting the incisor teeth. O. C. F. 1128.

From the same locality.

Presentea by the Earl of Enniskillen.

Cerbus hibernicus.

1585. Left ramus of mandible, showing the effects of inflammation and ulceration on its outer and under surfaces. O. C. F. 1129.

From the same locality.

Presented by the Earl of Enniskillen.

1586. Right ramus of mandible, with the outer wall of the sockets of the molar teeth removed to expose their roots. O. C. F. 1130.

Hunterian.

1587. Left ramus of mandible, with the course of the dental canal exposed. O.C.F.1131.

Hunterian.

1588. Left ramus of mandible.

In Museum before 1862.

1589. Stylo-hyal bone.

Presented by Professor A. Leith Adams, M.B., 1878.

1590. The seven cervical vertebræ. O. C. F. 1134 to 1140.

Locality unrecorded.

Hunterian.

1531. Six of the dorsal vertebræ. O. C. F. 1141 to 1146.

Locality unrecorded.

1592. Four lumbar vertebræ. O. C. F. 1147 to 1150. Locality unrecorded.

Hunterian.

1593. Sacrum. O. C. F. 1151.

Locality unrecorded.

Hunterian.

1594. Various bones of the limbs. O. C. F. 1152 to 1176 (excluding 1160).

Locality unrecorded.

Hunterian.

1595. A left cuneiform bone, one surface of which seems to have been in a state of ulceration. O. C. F. 1160.

From the gravel beneath a bog in Ireland.

Presented by the Earl of Enniskillen.

1596. A right metatarsus affected with exostosis.

From the shell-marl under a bog near Dungarvan, county Waterford. Remains of upwards of sixteen individuals of Megaceros were found with this specimen in 1875.

Presented by Professor A. Leith Adams, M.B., 1876.

1597. Various bones.

No history recorded.

In Museum before 1862.

Genus RANGIFER.

Hamilton Smith, in Griffith's Animal Kingdom, v. p. 304 (1827).

Rangifer tarandus.

Cervus tarandus, Linnæus, Syst. Nat. ed. 12, i. p. 93 (1766).

THE REINDEER.

Hab. Northern Europe, Asia, and America.

In this species, alone among the Cervidæ, both sexes are provided with antlers.

1598. Articulated skeleton of male. O. C. 3512.

Vertebræ: C. 7, D. 14, L. 5, S. 5, C. 11.

From the neighbourhood of the Vöringfoss, Hardanger district, Norway.

Presented by Sir Thomas Marion Wilson.

1599. Articulated skeleton of female. O. C. 3513.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 11.

From the same locality.

Presented by Sir Thomas Marion Wilson.

1600. Imperfect skeleton, wanting the skull.

Vertebræ: C. 7, D. 14, L. 5, S. 5, C. 2 (incomplete).

Presented by the Zoological Society, 1868.

1601. Imperfeet skelcton.

Vertebræ: C. 7, D. 14, L. 5, S. 5, C. 6 (incomplete). Many of the bones are mounted in the Separate Series.

In Museum before 1862.

1602. Skull and antlers of male. O. C. 3515.

From Lapland.

Presented by Mr. Leadbeater, 1821.

1603. Skull of male. O. C. 3522.

The antlers have been shed; and the short pedicles terminate in slightly convex surfaces.

Hunterian.

1604. Skull of male with the antlers removed. O. C. 3521.

Hunterian.

1605. Cranium and antlers. O. C. 3516.

From Lapland.

Presented by William Bullock, Esq., 1821.

1606. Frontlet and fully developed antlers of male. O. C. 3519. From Siberia.

Hunterian.

1607. Frontlet and antlers of male. O. C. 3518.

From Lapland.

Presented by William Bullock, Esq., 1821.

1608. A left shed antler. O. C. 3523.

Hunterian.

1609. Antler of an old male. O. C. 3520.

The palmated branches are broad in proportion to their length, which (except in the case of the brow-tine) is much curtailed. The terminal divisions or points number thirty-seven.

From Siberia.

Hunterian.

Rangifer tarandus.

1610. Right antler of male. O. C. 3524. From Lapland.

Presented by William Bullock, Esq.

1611. Frontlet and antlers of young male. O. C. 3531. From Lapland.

Presented by William Bullock, Esq., 1818.

1612. Frontlet and antlers of female. O. C. 3527. From Lapland.

Hunterian.

1613. Frontlet and antlers of female. O. C. 3528. From Lapland.

Presented by William Bullock, Esq., 1821.

1614. Frontlet and antlers of female. O. C. 3529.

Hunterian.

1615. Left antler of female. O. C. 3530.

Hunterian.

- 1616. Imperfect antler, showing two branches growing from the base, besides the brow-tine. O. C. 3532. Hunterian.
- 1617. Cranium and antlers of young male. O. C. 3517. From Greenland.

Hunterian.

1618. Facial portion of cranium and antlers of female. O. C. 3526.

From Greenland.

Hunterian.

1619. Frontlet and antlers of male. O. C. 3534.

The left brow-tine is palmated and much expanded vertically; the right is bifurcated.

From Newfoundland.

Presented by Edward E. Rushworth, Esq.

1620. Frontlet and immature pair of antlers, which had not shed their velvet. O. C. 3572.

These antlers were entered in the Catalogue of 1831 as those of "A young American Elk," and in the Catalogue of 1853 as belonging to "a Deer resembling in the general characters of the antlers the *Cervus virginianus*."

Leverian Collection. Purchased, 1806.

1621. Antler of young. O. C. 3573.

This was originally labelled "No. 171. This Horne grew in the frontlet of a *Doe* in New England in America, 1607." It was entered in the Catalogue of 1831 as "A single horn of an American Fallow-Deer," and in that of 1853 as "an antler which in the bifurcation of its beam and the proportions of its brow-snag approaches nearest to the type of the antler of the *Cervus virginianus*."

British Museum. Purchased, 1809.

1622. Base of an antler, with a long subcompressed brow-antler, broken at the extremity. O. C. F. 1237.

From Etampes, France. Figured in 'Parkinson's Organie Remains,' vol. iii. pl. xx. fig. 3, and noticed at p. 319.

Parkinson Collection. Purchased.

Genus ALCES.

Hamilton Smith in Griffith's Animal Kingdom, v. p. 303 (1827).

Alces machlis.

Cervus alces, Linnæus, Syst. Nat. ed. 12, i. p. 92 (1766). Alces machlis, Ogilby, Proc. Zool. Soc. 1836, p. 135.

THE ELK OF MOOSE.

Hab. Northern Europe, Asia, and America.

1623. Articulated skeleton of male. O. C. 3503.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 10 (not quite complete). Prepared from an animal originally from North America, which lived in the Knowsley Menagerie.

Presented by the Earl of Derby.

1624. Skeleton of young male. O. C. 3509.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. incomplete. Stated to be that of a "European Elk."

Brookes Collection. Purchased, 1828.

1625. Incomplete skeleton of female.

In Museum before 1862.

1626. Two crania of males, with the antlers interlocked. O. C. 3504.

The history of these, according to a memorandum left by Hunter, is as follows:—"They are from New Carolina; and the animals to which they belonged were two large males, which, in the season when sexual excitement is strong, becoming pugnacious, were engaged in fighting, and their horns, as usual,

employed as weapons of offence; these, by violent contact, became so firmly locked within each other, by means of their points or snags, that the animals were incapable of liberating themselves; and in this state they were discovered, starved to doath."

Hunterian.

1627. Skull and antlers of male.

From Sweden.

Purchased from Mr. L. Lloyd, 1852.

1628. Mutilated cranium and antlers. O. C. 3510.

Said to be of the "European Elk."

Hunterian.

1629. Mutilated skull of female.

In Museum before 1862.

1630. Facial portion of cranium. O. C. 3505.

From America.

Hunterian.

1631. Teeth of an adult male separately displayed.

From an animal shot in New Brunswick by the donor in the winter of 1862-63.

Presented by Colonel H. A. Smyth, R.A.

1632. A pair of antlers. O. C. 3506.

From America.

Hunterian.

Alces machlis.

1633. An antler. O. C. 3508.

From America.

Presented by Sir Everard Home, 1807.

1634. A pair of antlers, both of which present a remarkable deformity, being duplex in the palm. O. C. 3507.

From America.

Hunterian.

Genus CAPREOLUS.

Hamilton Smith in Griffith's Animal Kingdom, v. p. 313 (1827).

Capreolus caprea.

Cervus capreolus, Linnæus, Syst. Nat. ed. 12, i. p. 94 (1766). Capreolus capræa, Gray, List Spee. Mammalia Brit. Mus. p. 176 (1843).

THE ROE.

Hab. Europe and Western Asia.

1635. Articulated skeleton of male. O. C. 3598.

Vertebræ: C. 7, D. 13, L. 6, S. 6, C. incomplete.

Brookes Collection. Purchased, 1828.

1636. Skeleton of male about two years old.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 8.

Most of the bones are mounted in the Separate Series.

From Perthshire.

Presented by Mr. John M'Ara, 1867.

1637. Skull of female.

From Aberdeenshire.

Purchased, 1868.

1638. Skull of young male.

The milk-molars are in place, with the first permanent molar. The second is coming into place.

From Aberdeenshiro.

Purchased, 1868.

1639. Skull of an old female with two imperfectly formed antlers, which were covered with a hairy skin.

This specimen was formerly in the series of "Monsters and Malformed Parts" (see Catalogue of that Series, 1831, no. 16, p. 17).

It is figured by Mr. E. R. Alston in the 'Proceedings of the Zoological Society,' 1879, p. 297.

The animal was shot in 1810 at Petworth, Sussex, and was described by the donor as "a very old and uncommonly large female with two young ones in her."

Presented by the Earl of Egremont, 1810.

1640. Calvaria and antlers.

On the left anticr a bony excrescence has formed, apparently in consequence of an injury.

Purchased.

1641. Frontlet and antlers. O. C. 3600. Hunterian.

1642. Frontlet and antlers. O. C. 3601. Hunterian.

1643. Frontlet and antlers. O. C. 3602. Hunterian.

Capreolus caprea.

1644. Frontlet and somewhat malformed antlers. O. C. 3603.

British Museum. Purchased, 1809.

1645. Frontlet and antlers. O. C. F. 1241.

From the peat-field at Newbury, Berkshire.

Presented by Gerard Smith, Esq.

1646. Antlers of young. O. C. F. 1242.

From the same locality.

Presented by Gerard Smith, Esq.

1647. Left ramus of lower jaw.

Figured in Owen's 'British Fossil Mammals,' p. 486 (1846). From the subturbary marl, Newbury, Berkshire.

1648. A pair of abnormally developed antlers, most probably those of a young Roebuck. O. C. 3596.

This specimen was entered in the Catalogue of 1831 as the antlers of a "Dwarf Axis, Cervus pumilio. Habitat unknown, but probably from India."

Hunterian.

1649. A left antler, described in the Catalogue of 1831 (p. 136, no. 947) as that of a Tartarian Roe (*Cervus pygargus*, Pallas). O. C. 3605.

Hunterian.

Genus HYDROPOTES.

Swinhoe, Proc. Zool. Soc. 1870, p. 90.

Hydropotes inermis.

Swinhoe, loc. cit.

THE CHINESE WATER-DEER.

Hab. China.

The following specimens are all from the neighbourhood of Shanghai.

1650. Articulated skeleton of male.

Vertebræ: C. 7, D. 12, L. 6, S. 4, C. 10.

The canine tusks are closed at the roots, and very loosely implanted in shallow sockets.

Presented by Robert Swinhoe, Esq., 1873.

1651. Skull of male.

On each side of the upper jaw is a supernumerary tooth. That on the right side is situated immediately to the inner side of the first premolar, that on the left rather more posteriorly.

Presented by Robert Swinhoe, Esq., 1873.

1652. Skull of male.

Presented by Robert Swinhoe, Esq., 1873.

1653. Skull of male.

Presented by Dr. Edward Hamilton, 1880.

PART II.

Hydropotes inermis.

1654. Skull of male.

Presented by Dr. Edward Hamilton, 1880.

1655. Cranium of male.

Presented by Dr. Edward Hamilton, 1871.

1656. Skull of young female.

The milk-molars are in place, with the first, second, and almost fully developed third true molars.

One of the type specimens described by the donor in the 'Proceedings of the Zoological Society' for 1870, p. 89.

Presented by Robert Swinhoe, Esq., 1870.

1657. The canine tusks of an old animal.

They had been observed during life to be very movable in the jaw.

Presented by Robert Swinhoe, Esq., 1872.

Genus CARIACUS.

Gray, Proc. Zool. Soc. 1850, p. 237.

Cariacus virginianus.

Cervus virginianus, Boddaert, Elenchus Animal. i. p. 136 (1785).

THE VIRGINIAN DEER.

Hab. Eastern North America.

1658. Skull and antlers of male.

Purchased, 1881.

1659. Skull of young male.

Formerly labelled "Small Deer from South Carolina."

Probably Hunterian.

1660. Frontlet and antlers.

In Museum before 1862.

Cariacus leucurus.

Cervus leucurus, Douglas, Zoological Journal, iv. p. 330 (1829).

THE WHITE-TAILED DEER.

Hab. Western North America.

1661. Frontlet and antlers.

In Museum before 1862.

Cariacus mexicanus.

Cervus mexicanus, Lichtenstein, Darstell. d. Thiere, Taf. 18 (1827–1834).

Cervus nemoralis, Hamilton Smith in Griffith's An. King. iv. p. 137 (1827).

THE MEXICAN DEER.

Hab. Southern North America and Central America.

1662. Skeleton of female.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 13.

Many of the bones are mounted in the Separate Series.

From an animal which lived several years in the Gardens of the Zoological Society.

Presented by the Society, 1869.

Cariacus mexicanus.

1663. Skull and antlers of male of this or a closely allied species. O. C. 3574.

Said to be from Guiana.

Purchased.

Cariacus macrotis.

Cervus macrotis, Say, Long's Exped. Rocky Mount. ii. p. 88 (1823).

THE MULE DEER.

Hab. Western North America.

1664. Imperfect cranium and antlers. O. C. 3570.

Purchased.

1665. Frontlet and antlers. O. C. 3571.

Leverian Collection. Purchased, 1806.

Cariacus campestris.

Cervus campestris, F. Cuvier, Dict. Sc. Nat. vii. p. 484 (1817).

THE PAMPAS-DEER.

Hab. South America.

1666. A pair of antlers.

In Museum before 1862.

1667. Frontlet and antlers.

Barnard Davis Collection. Purchased, 1880.

Genus PUDUA.

Pudu, Gray, Proc. Zool. Soc. 1850, p. 242.Pudua, Brooke, ibid. 1878, p. 926.

Pudua humilis.

Cervus humilis, Bennett, Proc. Zool. Soc. 1831, p. 27.

THE PUDU DEER.

Hab. Chilian Andes.

1668. Articulated skeleton of young female.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 8.

The milk-molars are still in place, and the posterior true molars are not fully acquired.

Purchased, 1870.

Section Tragulina.

Family TRAGULIDÆ.

Dentition:—i. $\frac{9}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{7}{10}$: total 34.

The upper eanines in the male sex are long, curved, and have persistent roots.

Genus TRAGULUS.

Pallas (ex Brisson), Spicilegia Zoologica, xiii. p. 27 (1779).

The specific determination of the specimens of this genus cannot be absolutely relied upon, having been made from the osteological characters alone, with the aid of the memoir by A. Milne-Edwards, "Recherches anatomiques, zoologiques et paléontologiques sur la famille des Chevrotains" (Annales des Sciences Naturelles, sér. v. Zool. t. ii. p. 49 et seqq., 1864).

Tragulus javanicus.

Moschus javanicus, Gmelin, Syst. Nat. i. p. 174 (1788)*.

THE JAVAN CHEVROTAIN.

Hab. Java.

1669. Articulated skeleton, J. O. C. 3498.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 13.

Purchased.

1670. Articulated skeleton, J. O. C. 3495.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 13.

South Collection. Purchased, 1835.

1671. Articulated skeleton of young. O. C. 3499.

The milk-dentition is present with the first permanent molars.

Vertebræ: C. 7, D. 14, L. 6, S. & C. 9 (incomplete).

Hunterian.

1672. Skull of female.

In Museum before 1862.

1673. Skull of young, with the milk-teeth and first permanent molars.

In Museum before 1862.

1674. Left ramus of lower jaw, with the roots of the teeth of the molar series exposed from the inner side. O. C. 3501.

Presented by Professor Owen.

* Pallas, Spicilegia Zoologica, fasc. xii. p. 18, note (1777), and fasc. xiii. p. 28 (1778), is generally quoted for this name; but, although ho gives a careful description of the animal, he does not appear to have assigned a definite specific designation to it.

1675. Teeth of adult male, separately displayed.

Purchased, 1870.

1676. Lumbar vertebræ and pelvis of the same individual, with ossified lumbar fascia.

For an account of the frequent occurrence of this condition in old males of this genus, see Gray, Proc. Zool. Soc. 1869, p. 226.

Purchased, 1870.

Tragulus stanleyanus.

Moschus (Tragulus) stanleyanus, Gray, Proc. Zool. Soc. 1836, p. 65.

LORD STANLEY'S CHEVROTAIN.

Hab. Java.

1677. Skeleton of male.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 8 (incomplete). Many of the bones are mounted in the Separato Series.

Presented by Captain Gideon, 1864.

1678. Skeleton of young male.

The first and second permanent molars have been acquired; but the milk-molars are not yet shed.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. incomplete.

Presented by Captain Gideon, 1864.

Tragulus napu.

Moschus javanicus, Pallas, "Napu," Raffles, Trans. Linn. Soc. xiii. p. 261 (1820-22).

Moschus napu, Fréd. Cuvier, Hist. Nat. des Mammifères, Nov. 1822.

THE NAPU CHEVROTAIN.

Hab. Sumatra.

1679. Articulated skeleton, J. O. C. 3494.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 10 (incomplete).

Presented by Sir T. Stamford Raffles.

1680. Articulated skeleton, ♀. O. C. 3497.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 11.

Presented by Sir T. Stamford Raffles.

1681. Incomplete skeleton.

Presented by Sir T. Stamford Raffles.

1682. Incomplete skeleton of young.

Though the animal was full-grown, the milk-molars are still present, and the third permanent molars have not risen into place.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. wanting.

Presented by Sir T. Stamford Raffles.

Genus HYOMOSCHUS.

Hyemoschus, Gray, Ann. & Mag. Nat. Hist. xvi. p. 350 (1845).

Hyomoschus aquaticus.

Moschus aquaticus, Ogilby, Proe. Zool. Soc. 1840, p. 35.

THE AFRICAN CHEVROTAIN.

Hab. West Africa.

1683. Articulated skeleton of female.

Vertebræ: C. 7, D. 13, L. 6, S. 6, C. 13. From the Gold Coast.

Presented by Staff-Surgeon J. R. Thomas, 1868.

1684. Anterior portion of skull with the teeth and the bones of the extremities of young.

The milk-teeth and first permanent molars are in place.

Purchased, 1865.

Section Tylopoda.

Family CAMELIDÆ.

Genus CAMELUS.

Linnæus, Syst. Nat. ed. 12, i. p. 90 (1766).

Dentition of adult :—i. $\frac{1}{3}$, c. $\frac{1}{4}$, p. $\frac{3}{2}$, m. $\frac{3}{3}$, = $\frac{8}{9}$: total 34. In young animals the incisors are $\frac{3}{3}$.

Camelus bactrianus.

Linnæus, Syst. Nat. ed. 12, i. p. 90 (1766).

THE BACTRIAN OF TWO-HUMPED CAMEL.

Hab. Central Asia.

The following specimens are attributed to this species in the former Catalogue; but it is possible that some of them may belong to the next.

1685. Articulated skeleton. O. C. 3445.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 15 (incomplete). The teeth are much worn; and some have been lost during life.

Hunterian.

1686. Incomplete skeleton. O. C. 3447 and 3448.

The skull is longitudinally bisected.

Hunterian.

1687. Skull, wanting left ramus of lower jaw, and incomplete skeleton. O. C. 3449-3478.

Hunterian.

1688. Skull. O. C. 3446.

Hunterian.

1689. Cranium of young male. O. C. 3479.

The last true melar in the upper jaw has not fully risen into place, and the milk-canines have net been shed; the laniariform upper incisers (i.3) and premolars (p.1) are just emorging; the melariform premolars (p.3) and (p.1) are not quite in place. In the lower jaw the last milk-molar is not shed, although the last true molar has nearly risen into place; the milk-canines are still retained, and only the first pair of permanent incisors are fully developed.

Hunterian.

1690. Hyoid bones of female.

From an animal which died in the Gardons of the Zoological Society, 30 April 1873, having lived there upwards of eighteen years.

Presented by the Society, 1873.

Camelus dromedarius.

Linnæus, Syst. Nat. ed. 12, i. p. 90 (1766).

THE COMMON OF ONE-HUMPED CAMEL.

Hab. South Asia and North Africa.

1691. Skull.

From Cairo.

Presented by James Broadway, Esq., 1874.

1692. Cranium.

From Golosenah, Middle Egypt.

Presented by Mrs. H. Lainson, 1874.

1693. Cranium, vertically and longitudinally bisected.

The canines are of large sizo.

In Museum before 1862.

1694. Hyoid bones of female.

From an animal which died in the Gardens of the Zoological Society, 20 March 1871.

Presented by the Society, 1871.

Camelus dromedarius.

1695. Bones of the four feet, wanting the terminal phalanges.

Prepared in Egypt, and used to illustrate the donor's work on "The Camel."

Presented by Elijah Walton, Esq., 1867.

1696. Skull of young.

The animal was about eighteen months old, having been born in England. The milk-dentition is present, with the first permanent molars coming into place. There are two rudimentary incisors in the upper jaw, not represented in the permanent dentition.

Purchased, 1877.

1697. Disarticulated skull of a younger Camel. O. C. 3481.

The full milk-dentition has been present, as indicated by the sockets of the teeth, consisting of i. $\frac{3}{3}$, c. $\frac{1}{1}$, m. $\frac{3}{2}$. The lower canine has a crown more resembling the incisors in shape than the corresponding permanent canine.

Genus AUCHENIA.

Luma, Cuvier, "Tableau général," appended to 'Leçons d'Anatomie Comparée,' ed. 1 (1800)*.

Auchenia, Illiger, Prodromus, p. 103 (1811).

Dentition of adult:—i. $\frac{1}{3}$, c. $\frac{1}{1}$, p. $\frac{2}{2}$, m. $\frac{3}{3}$, = $\frac{7}{9}$: total 32. The lower premolars are frequently reduced to one.

^{*} This generic name has the priority; but it was abandoned by Cuvier himself in the first (1817) and all the subsequent editions of the 'Règne Animal,' in favour of *Auchenia*, which has now been generally adopted.

Auchenia glama.

Camelus glama, Linnœus, Syst. Nat. ed. 12, i. p. 91 (1766). Lama peruana, Tiedemann, Zoologie, p. 421 (1808).

THE LLAMA.

Hab. Peru. Domesticated.

1698. Articulated skeleton. O. C. 3482.

Vertebræ: C. 7, D. 12, L. 7, S. 5, C. 13 (incomplete).

Brookes Collection. Purchased, 1828.

1699. Skull.

In Museum before 1862.

1700. Cranium.

In Museum before 1862.

1701. Axis, third and fourth cervical vertebræ. O. C. 3483-3485.

Presented by the Zoological Society.

1702. Hyoid bones.

These are remarkable for the absence of the basihyals and coalescence of the thyrohyals.

Presented by the Zoological Society, 1870.

1703. Bones of right manus and pes.

Purchased, 1873.

Auchenia pacos.

Camelus pacos, Linnæus, Syst. Nat. ed. 12, i. p. 91 (1766).

THE ALPACA.

Hab. Peru and Bolivia. Domesticated.

1704. Articulated skeleton. O. C. 3488.

Vertebræ: C. 7, D. 12, L. 7, S. 5, C. 11 (incomplete).

Brookes Collection. Purchased, 1828.

1705. Natural skeleton of young.

Two milk-molars and the first true molars are present on each side of each jaw. Behind the third incisor of the lower jaw is a minute canine. There are no teeth present in the premaxillæ or anterior part of the maxillæ.

Vertebræ: C. 7, D. 12, L. 7, S. 5, C. 13.

Parker Collection. Purchased, 1858.

Auchenia vicugna.

Camelus vicugna, Molina, Saggio sulla Storia Naturale del Chili, p. 313 (1782).

THE VICUGNA.

Hab. Ecuador, Peru, and Bolivia.

1706. Articulated skeleton. O. C. 3489.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 14.

Purchased.

1707. Skull of very young.

The left ramus of the lower jaw is wanting. The only teeth present are two milk-molars above and below, and the lower milk-ineisors; but there are sockets for the rudimentary upper incisors.

From South America.

Purchased, 1871.

EXTINCT ARTIODACTYLA

NOT BELONGING TO EITHER OF THE SECTIONS INTO WHICH THE GROUP IS AT PRESENT DIFFERENTIATED.

These have all the typical Mammalian dental formula, viz. :— i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, $=\frac{11}{11}$: total 44.

Family XIPHODONTIDÆ.

Genus XIPHODON.

Cuvier, Ossemens Fossiles, 2nd odit. iii. p. 62 (1822).

Fiphodon platyceps.

Flower, Proc. Zool. Soc. 1876, p. 3.

1708. Cranium without teeth.

Locality unknown, but supposed to be from the bone-bed beneath the Suffolk Crag. The type specimen described and figured in the 'Proceedings of the Zoological Society,' 1876, pl. i.

Presented by the Hon. Auberon Herbert, 1873.

Genus CÆNOTHERIUM.

Cainotherium, Bravard, Monogr. du genre Cainotherium, 1835.

Canotherium commune.

Bravard, loc. cit.

Hab. Europe. Lower Miocene Period.

1709. Anterior portion of cranium and right ramus of mandible.

Ceenotherium commune.

1710. Left ramus of mandible.

1711. Nearly complete cranium of young, with the milk-molars retained.

These specimens of Conotherium are from the Miocene of France.

Presented by Professor Alphonse Milne-Edwards, 1872.

Family ANOPLOTHERIIDÆ.

Genus ANOPLOTHERIUM.

Cuvier, Ann. du Muséum, iii. p. 370 (1804).

Anoplotherium commune.

Cuvier, loc. cit. p. 469.

Hab. Europe. Upper Eocene Period.

1712. A portion of the alveolar series of the left ramus of the lower jaw, with the inner surfaces of the crowns of five of the molar teeth exposed to view. O. C. F. 1084.

The specimen is imbedded in a block of gypsum, and is most probably from the eccene quarries at Montmartre, Paris.

Hunterian.

1713. A portion of the left ramus of the lower jaw, with the penultimate and part of the antepenultimate and last molars in situ. O. C. F. 1085.

It is imbedded in a block of Montmartre gypsum.

- 1714. A left upper molar and right lower molar.

 Probably from Montmartre.
- 1715. Crown of a right lower molar.

 Probably from Montmartre.
- 1716. Three upper molars and a canine.

From the lignites of Débruge, near Apt, Vaucluse.

In Museum before 1862.

1717. Cast of skull in profile relief, with the series of teeth complete in both the upper and lower jaws. O. C. F. 1086.

The originals of this and the three following casts are from the Eocene deposits of gypsum at Montmartre.

Presented by Professor de Blainville.

1718. Casts of the bones of the right fore foot. O. C. F. 1087–1103.

Presented by Baron Cuvier.

1719. Cast of the radius.

Presented by Baron Cuvier.

- 1720. Casts of the bones of the left hind foot. O. C. F. 1105–1117.

 Presented by Baron Cuvier.
- 1721. The head and a considerable portion of the shaft of the femur. O. C. F. 1104.

This specimen is partly imbedded in a block of Montmartre gypsum.

Presented by William Clift, Esq.

PART II.

Genus TAPIRULUS.

Gervais, Comptes Rendus Acad. Se. xxx. p. 604 (1850).

Capirulus hyracinus.

Gervais, loc. cit.

Hab. France. Upper Eocene.

1722. Cast of ramus of mandible.

The original is from the phosphoritie deposits of Querey.

Presented by Professor Gervais, 1878.

Family ANTHRACOTHERIIDÆ.

Genus ANTHRACOTHERIUM.

Cuvier, Ossemens Fossiles, 2nd edit. iii. p. 396 (1822).

Anthracotherium magnum.

"Grande espèce d'Anthracotherium," Cuvier, loc. cit. p. 398. Hab. Europe. Lower Miocene.

1723. Cast of the fragment of the right ramus of the lower jaw, with the penultimate and last molar teeth. O. C. F. 1076.

The original was discovered in the lignite beds at Cadibona in Italy, and is described and figured in the 'Ossemens Fossiles,' ed. 1822, iii. p. 398, pl. lxxx. fig. 2.

Presented by Baron Cuvier.

1724. Cast of the upper jaw, with the complete dentition except the anterior pair of incisors.

The original, which was found in France, is in the British Museum.

Purchased, 1873.

Genus HYOPOTAMUS.

Owen, Quart. Journ. Geological Soc. London, iv. p. 103 (1848).

Hvopotamus bobinus.

Owen, loc. cit.

Hab. Europe, Lower Miocene.

Some of the following specimens may belong to the smaller species H. vectianus, described by Owen at the same time as H. bovinus; but, owing to the difficulty of distinguishing isolated teeth, they have not been separated. They are all from Hempstead, in the Isle of Wight.

1725. Two upper molars, and two fragments of the lower jaw with molar teeth.

Presented by the Hon. Auberon Herbert, 1879.

1726. Cast of perfect crown of a left upper molar.

Presented by Sir Victor Brooke, 1873.

1727. Crown of an unworn upper molar, broken through the anterior lobe.

Purchased, 1873.

1728. Various teeth.

Purchased, 1875.

7, 2

Myopotamus bobinus.

1729. Portion of upper jaw with molar teeth.

Presented by Lady Everest, 1882.

Hyopotamus americanus.

Leidy, Proc. Acad. Nat. Sc. Philadelphia, 1869, p. 65.

Hab. North America. Miocene.

1730. Cast of two unworn upper molars.

Presented by Professor Leidy, 1876.

Genus MERYCOPOTAMUS.

Falconer, MS., 1844, see Palæontol. Memoirs, i. p. 138 (1868); Fauna Antiqua Sivalensis, pl. 62 (1847-9).

Merycopotamus dissimilis.

Hippopotamus dissimilis, Falconer and Cautley, Asiatic Researches, xix. p. 51 (1836).

Hab. Asia. Plio-Miocene.

1731. Two upper molars of the right side.

From the Subhimalayan range.

Presented by the Rev. Robert Everest.

1732. Last lower right molar.

From the same locality.

Presented by the Rev. Robert Everest.

1733. Portion of right ramus of mandible with two posterior molars.

From the Siwalik hills, India.

Received in exchange from the Indian Museum, 1881.

Family CHŒROPOTAMIDÆ.

Genus ELOTHERIUM.

Elotherium, Pomel, Bibl. univ. de Genève, Archives, t. v. p. 307 (1847, fide Gervais, Zool. et Pal. Franç. p. 194, 1859).
Entelodon, Aymard, Mém. Soc. Agric., Sc., Arts et Belles-lettres de Puy, xii. p. 240 (1848, fide Gervais).

Clotherium magnum.

Entelodon magnum, Aymard, loc. cit.

Hab. France. Upper and Lower Miocene.

1734. Casts of the upper molar teeth, of the rami of the lower jaw, and of a canine tooth.

The originals are from Puy, Haute Loire.

Presented by the Paris Museum of Natural History, per Professor Gervais, 1873.

Genus CHŒROPOTAMUS.

Charopotame, Cuvier, Ossemens Fossiles, 2nd edit. iii. p. 260 . (1822).

Chocropotamus gypsorum.

C. gypsorum, Desmarest, Mammalogie, p. 545 (1822).

C. cuvieri, Owen, Geol. Transactions, 2nd ser. vi. p. 41 (read 1838, published 1841).

Hab. Europe. Upper Eocene.

Choeropotamus gypsorum.

1735. Cast of a mutilated cranium, showing the upper series of molar teeth. O. C. F. 1080.

The original was discovered in the gypsum-quarrics at Montmartre, and is described in the 'Ossemens Fossiles,' ed. 1822, iii p. 262, pl. lxviii.

Presented by the Museum of Natural History, Paris.

1736. Cast of right ramus of lower jaw. O. C. F. 1081.

The original is from the Eocene freshwater deposits at Binstead, Isle of Wight. It is described and figured by Owen in the 'Transactions of the Geological Society,' 2nd ser. vi. pl. iv. (1841), and 'British Fossil Mammals and Birds,' p. 413 (1846).

Presented by the Rev. C. Darwin Fox.

Genus CEBOCHŒRUS.

Gervais, Zoologie et Paléontologic Françaiscs, 1º édit. ii. explic. no. 35.

Cebocheerus minor, Gervais*.

1737. Casts of portion of upper and lower jaws, with molar teeth.

The originals are from the phosphoritic deposits of Quercy.

Presented by the Museum of Natural History, Paris, 1878.

* The specimen was received with this name attached; but I have not been able to discover where it has been published.

Section Suina.

Family DICOTYLIDÆ.

Genus DICOTYLES.

Cuvier, Règne Animal, i. p. 237 (1817). Dentition:—i. $\frac{2}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{9}{1}$: total 38.

Dicotyles labiatus.

Cuvier, Règne Animal, i. p. 238 (1817).

THE WHITE-LIPPED PECCARY.

Hab. Central and South America.

1738. Skull.

This and the two following specimens are from wild animals killed in the Province of Rio Grande do Sul, Brazil.

Purchased, 1883.

1739. Skull of young.

Although it has almost attained its full size, the milk-molars and upper and lateral lower milk-incisors are in place, and the posterior true molars are still concealed within the alveoli.

Purchased, 1883.

1740. Skull of young female.

The milk-teeth are in place, with the first permanent molars.

Purchased, 1883.

Dicotyles tajacu.

Sus tajacu, Linnæus, Syst. Nat. ed. 12, i. p. 103 (1766). Dicotyles torquatus, Cuvier, Règne Animal, i. p. 237 (1817).

THE COLLARED PECCARY.

Hab. Southern part of North America, Central and the whole of South America.

1741. Articulated skeleton. O. C. 3380.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 7.

Hunterian.

1742. Articulated skeleton.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 7.

In Museum before 1862.

1743. Imperfect skeleton. O. C. 3384-3403.

Hunterian.

1744. Imperfect skeleton of adult female.

Vertebræ: C. 7, D. 14, L. 5, S. 5, C. wanting.

Prepared from an animal which died in the Gardens of the Zoological Society. Many of the bones are mounted in the Separate Series.

Presented by the Zoological Society, 1873.

1745. Skull.

From the Province of Rio Grande do Sul, Brazil.

Purchased, 1883.

1746. Skull. Parker Collection. Purchased, 1858.

1747. Skull. Parker Collection. Purchased, 1858.

1748. Skull, longitudinally and vertically bisected. O. C. 3381-3383.

Hunterian.

1749. Skull of young.

The milk-teeth are in place, with the first permanent molars. The premaxillary bones have been injured, and the upper incisors lost.

Purchased, 1870.

Family SUIDÆ.

Genus SUS.

Linnæus, Syst. Nat. ed. 12, i. p. 102 (1766). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, = $\frac{11}{11}$: total 44.

Sus cristatus.

A. Wagner, Münch. gelehrt. Anzeiger, ix. p. 535 (1839).
THE INDIAN WILD SWINE.

Hab. India.

1750. Articulated skeleton. O. C. 3248.

A supernumerary premolar is present in the left maxilla. Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 23 (one or two wanting).

Presented by Dr. B. C. Henderson, 1822.

1751. Skull. O. C. 3249. Presented by W. Storey, Esq.

Sus cristatus.

1752. Skull. O. C. 3251.

Presented by Colonel Sir G. Everest.

1753. Skull. O. C. 3250.

Presented by Dr. N. Wallich, 1812.

1754. Skull.

In Museum before 1862.

1755. Skull.

In Museum before 1862.

1756. Skull.

The prenasal ossicle has been preserved.

In Museum before 1862.

1757. Skull.

The third molars have been only recently acquired. From Nepal.

Presented by Bryan H. Hodgson, Esq., 1845.

1758. Four skulls of very young animals.

From Nepal.

Presented by Bryan H. Hodgson, Esq.

1759. Skull of young. O. C. 3254.

The third molars have not been acquired. Said to be from India, and therefore probably of this species.

Hunterian.

SUIDÆ. 347

Sus barbatus.

S. Müller, Van der Hoeven's Tijdschrift, v. p. 149 (1839). Hab. Borneo.

1760. Skull, apparently belonging to a female of this species.

The teeth are considerably worn. The posterior lower molars are displaced, their anterior ends being rotated inwards.

In Museum before 1862.

Sus papuensis.

Lesson & Garnot, Voyage de La Coquille, i. p. 171 (1826).

THE PAPUAN PIG.

Hab. New Guinea.

The following specimens are from Huon Gulf, Eastern New Guinea.

Presented by Dr. Peter Comrie, II.M.S. 'Basilisk,' 1876.

1761. Cranium.

1762. Cranium.

The last molars have only rocently been acquired.

1763. Mandible.

The first premolar is absent on the left side.

1764. Mandible of young.

Sus scrofa.

Linnæus, Syst. Nat. ed. 12, i. p. 102 (1766).

THE EUROPEAN WILD SWINE.

Hab. Europe and North Africa.

1765. Articulated skeleton of male, or Wild Boar.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 21. From Königs Wusterhausen, near Berlin.

Presented by H.I.H. The Crown Prince of Germany, 1868.

1766. Skull.

From the North of Italy.

Presented by Sir James Hudson, G.C.B., 1868.

1767. Skull.

From the North of Italy.

Presented by Sir James Hudson, G.C.B., 1868.

The four following specimens are said to be from Germany.

1768. Skull, longitudinally and vertically bisected. O. C. 3263 and 3264.

The roots of the molar teeth are exposed on the right side.

Presented by Sir Everard Home, 1807.

1769. Skull of young, longitudinally and vertically bisected. O. C. 3258 and 3259.

Of the teeth of the adult dentition, the second premolars and the third molars have not been acquired.

Presented by Sir Everard Home, 1807.

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1770. Bisected skull of young. O. C. 3256 and 3257.

The teeth of the milk-dentition and the first true molars are in place.

Presented by Sir Everard Home, 1807.

1771. Bisected cranium. O. C. 3260.

The last molar has not been acquired. The milk-teeth have been shed, except the second incisor, which is situated externally to the erown of its successor.

Presented by Sir Everard Home, 1807.

1772. Anterior part of upper jaw, including the incisors, canines, and premolar teeth. O. C. 3255.

The partial disposition of the enamel in longitudinal bands on the upper canines of the Boar is well illustrated in this specimen.

Hunterian.

Domesticated Varieties of Swine.

1773. Skeleton of a feral Boar from New Zealand.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 24.

From one of the herds of Swine which, originating in domestic animals introduced by the European colonists, have lived for many generations in a wild state.

In the concavity of the outline of the upper part of the cranium it much more resembles the following specimens than it does the German Wild Boar.

From Canterbury Province.

Presented by Dr. Julius von Haast, 1871.

1774. Articulated skeleton of a Boar. O. C. 3252.

Vertebræ: C. 7, D. 14, L. 7, S. 4, C. 15 (incomplete).

Brookes Collection. Purchased, 1828.

Sus scrofa. (Domesticated Varieties.)

1775. Skeleton of a Hog, or castrated Boar. O. C. 3266.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. wanting.

South Collection. Purchased, 1835.

1776. Skull and imperfect skeleton.

A small socket behind that of i. 2 indicates the former presence of a supernumerary tooth in each premaxilla.

Hunterian.

1777. Imperfect skeleton, without skull. O. C. 3276 to 3291.

Hunterian.

1778. Skull and imperfect skeleton.

Vertebræ: C. 7, D. 14, L. 6, S. 5, C. wanting. Many of the bones are mounted in the Separate Series.

In Museum before 1862.

1779. Skeleton of a young Pig.

Vertebræ: C. 7, D. 15, L. 6, S. 4, C. wanting.

All the permanent teeth have been acquired, except the third molars, the crowns of which are just appearing above the alveoli.

Purchased.

1780. Skull, &. O. C. 3271.

Purchased.

1781. Skull.

The ossified prenasal ossicle is preserved.

Purchased.

1782. Skull. O. C. 3267.

Hunterian.

1783. Skull, ♀. O. C. 3272.

Purchased.

1784. Skull, ♀. O. C. 3273.

The first lower premolar is absent en both sides.

Hunterian.

1785. Skull of young.

The milk-dentitien and first true melars are in place. The alveelar walls have been removed to show the germs of the permanent teeth.

In Museum before 1862.

1786. Skeleton of a Pig, eight months old.

The milk-teeth and first permanent melars are in place. Vertebræ: C. 7, D. 14, L. 6, S. 4, C. wanting.

wanting.

Purchased, 1877.

1787. Skull of a Pig, about six weeks old.

The milk-teeth enly are in place.

Parker Collection. Purchased, 1858.

1788. Skull of a Pig of about the same age.

The bones are separated and meunted at shert distances apart.

Prepared in 1877.

1789. "The skull of a young Pig, with the bones separated, artificially connected together, and numbered on coloured

Sus scrofa. (Domesticated Varieties.)

labels according to the 'Table of Synonyms,' so as to illustrate the segmental or vertebral constitution of the skull." O. C. 3328.

This specimen, prepared to illustrate Professor Owen's theory of the skull, is described in great detail in the Old Catalogue.

Purchased.

1790. Skeleton of a Pig, five weeks old.

The posterior milk-molars are just appearing. Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 19.

Purchased, 1870.

1791. Skull of a Pig, somewhat younger than the last.

Parker Collection. Purchased, 1858.

1792. Mounted skeleton of a new-born Pig.

The lateral incisors and the eanines of the milk-series are fully developed. The anterior incisors and first molars are appearing.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 8 (incomplete).

Purchased, 1875.

1793. Skeleton of a new-born Pig.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 20.

Purchased, 1870.

1794. Skeleton of a fœtal Pig.

Purchased, 1870.

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1795. Skull of a fœtal Pig.

Parker Collection, Purchased, 1858.

1796. The complete set of permanent teeth of a domestic Pig, separately displayed.

1797. Various teeth of domestic Pigs. O. C. 3300 to 3327.

Hunterian.

1798. The fore part of the lower jaw, with the incisors, canines, and premolars, of a Boar. O. C. 3265.

It shows the effects of the unchecked growth of the lower canines through some defect in the upper ones. Tho points of both the lower canines, following their normal curve, have reentered the mouth, piercing the integument and the substance of the jaw itself, the apex of the right tusk projecting forwards on the inner side of the base of the same tusk, whilst the apex of the left tusk presses against the more advanced extremity of the right tusk, where it is buried in the substance of the bone. This specimen is figured by Cheselden in his 'Osteographia,' frontispiece to Chapter vii. (1733.)

Hunterian.

The following specimens (to No. 1803 inclusive) are from young Pigs that have been fed with madder in the course of Hunter's experiments upon the growth of bone (see Catalogue of the Physiological Series, Edit. 1852, vol. i. nos. 190 to 201). As the colour with which portions of the bones were tinted has now almost entirely faded, they are only preserved for their historic interest.

1799. Imperfect skull, wanting the nasal bones. O.C. 3269.

Hunterian.

PART II. 2 A

Sus scrofa. (Domesticated Varieties.)

1800. Skull, wanting the nasal and occipital bones. O. C. 3270.

Hunterian.

1801. Mandible. O. C. 3293 and 3294.

Hunterian.

1802. Left ramus of mandible, the tibiæ, and some ribs. O. C. 3295

Hunterian.

1803. Teeth. O. C. 3299.

Hunterian.

Sus hysudricus.

Falconer and Cautley, Fauna Antiqua Sivalensis, pl. 70 (1847-49).

1804. Portion of the palate with four teeth of the right molar series, and also of the right ramus of the mandible with the molar teeth.

From the Siwalik hills of India.

Received in exchange from the Indian Museum, 1881.

Sus giganteus.

Falconer and Cautley, Fauna Antiqua Sivalensis, pl. 69 (1847-49).

1805. An upper molar, and a portion of the left ramus of the mandible with the molar teeth.

From the Siwalik hills of India.

Received in exchange from the Indian Museum, 1881.

SUIDÆ. 355

Genus POTAMOCHŒRUS.

Choiropotamus, Gray, Ann. & Mag. Nat. Hist. 2nd ser. x. p. 281 (1852), withdrawn by author in favour of

Potamochærus, Gray, Ann. & Mag. Nat. Hist. 2nd ser. xv. p. 66 (1855).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, $=\frac{10}{10}$: total 40.

Potamochærus africanus.

Sus africanus, Schreber, Säugthiere, tab. 327; Thunberg, Mém. de l'Acad. de St. Pétersbourg, iii. p. 320 (1811).
Sus larvatus, Fréd. Cuvier, Mém. du Muséum, viii. p. 447 (1822).

THE SOUTH-AFRICAN RIVER-HOG.

Hab. South Africa.

1806. Skull of male. O. C. 3329.

The alveolus shows that the first premolar, usually absent in this genus, must have been present in the left maxilla. The right lower second premolar is not developed.

Purchased.

1807. Skull of female. O. C. 3330.

The right upper first premolar has been developed in this example.

Purchased.

1808. The four canine teeth of male.

From the Cape of Good Hope.

Presented by Dr. W. T. Black, 1866.

Potamochærus porcus.

Sus porcus, Linnæus, Syst. Nat. ed. 12, i. p. 103 (1766).

Sus penicillatus, Sehinz, Monog. d. Säugethiere, Pachydermata, p. 12 (1848).

Choiropotamus pictus, Gray, Ann. & Mag. Nat. Hist. 2nd ser. x. p. 281 (1852).

THE RED RIVER-HOG.

Hab. West Africa.

1809. Skull.

From Fantee, West Africa.

Purchased, 1879.

Genus BABIRUSSA.

"Les Babiroussas," Fréd. Cuvier, Dents des Mammifères, p. 212 (1825).

Babirussa, Lesson, Man. de Mammalogie, p. 337 (1827).

Porcus, Wagler, Syst. Amphibien, p. 17 (1830).

Dentition :—i. $\frac{2}{3}$, c. $\frac{1}{1}$, p. $\frac{2}{2}$, m. $\frac{3}{3}$, = $\frac{8}{9}$: total 34

Babirussa alfurus.

Lesson, loc. cit. p. 338.

THE BABIRUSSA.

Hab. Malay Archipelago.

1810. Articulated skeleton of female.

There are no traces of upper canines; and the lower canines are quite rudimentary compared with those of the male.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 13 (incomplete).

In Museum before 1862.

The great development of the canine teeth of all the following specimens shows that they belong to the male sex.

1811. Skull. O. C. 3331.

Hunterian.

1812. Skull. O. C. 3332.

The dried integument has been left upon the fore part of the face, to show the mode in which it is pierced by the long ascending recurved upper canines, which, from their peculiar direction, never enter the mouth.

Hunterian.

1813. Skull. O. C. 3333.

Hunterian.

1814. Skull. O. C. 3334.

Presented by Colonel Sir George Everest.

1815. Skull. O. C. 3335.

Presented by John Gaitskill, Esq., 1828.

1816. Skull. O. C. 3336.

Presented by Dr. Nathaniel Wallich, 1812.

1817. Skull. O. C. 3337.

Hunterian.

1818. Skull, longitudinally and vertically bisected, and with the dried skin attached, showing the mode in which it is pierced by the upper canines. O. C. 3338.

Hunterian.

Babirussa alfurus.

1819. Skull. O. C. 3339.

The upper canines are small but much curved, and have caused an indentation of the skull at the fronto-nasal suture by the pressure of their points.

Presented by Dr. Babington, 1816.

1820. Skull. O. C. 3340.

The right upper canine tooth is much larger, and has a wider curvature than the left.

Hunterian.

1821. Skull. O. C. 3341.

The upper canines are curved backwards to such an extent as to have come into contact with the anterior part of the frontal bones, the surface of which is consequently depressed.

Presented by Daniel Moore, Esq., 1818.

1822. Skull. O. C. 3342.

Hunterian.

1823. Skull. O. C. 3343.

Hunterian.

1824. Skull, mutilated.

Presented by Thomas Keate, Esq.

1825. Skull, with the occipital region mutilated. O. C. 3347.

The dried integument remains on the anterior part. The canines are greatly developed; those of the upper jaw cross each other above the head.

Hunterian.

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1826. Skull, mutilated. O. C. 3348.

Presented by Sir Everard Home, 1807.

1827. Skull, wanting the canine teeth. O. C. 3349.

Hunterian.

1828. Cranium.

The left canine has been lost; the right is of great size, and with comparatively little curve. An additional premolar (p.2) is present on each side.

In Museum before 1862.

1829. Cranium, longitudinally and vertically bisected. O. C. 3346. Presented by William Long, Esq., 1813.

1830. Cranium, transversely and vertically bisected. O.C.3345.

Hunterian.

1831. Skull, with the bones separated from one another.

Presented by T. Howard Stewart, Esq., 1860.

1832. Mandible.

The crowns of the molar teeth are much worn.

Presented by Dr. Babington, 1816.

1833. Mandible.

The last molars have been only just acquired.

1834. A left upper canine of small size.

Babirussa alfurus.

1835. Three lower canines, the surfaces of two of which have been polished. O.C. 3352.

Hunterian.

Family PHACOCHERIDÆ.

Genus PHACOCHŒRUS.

"Phacochære," Fréd. Cuvier, Bull. de la Société Philomat. 1810, p. 139.

Phacocharus, Cuvier, Règne Animal, i. p. 236 (1817).

Dentition:—i. $\frac{1}{2 \text{ or } 3}$, c. $\frac{1}{1}$, p. $\frac{3}{2}$, m. $\frac{3}{3}$, = $\frac{8}{8}$ or $\frac{8}{9}$: total 32 or 34. As age advances, all the teeth, except the canines and the posterior molars, have a tendency to disappear. These changes and other peculiarities of the dentition of the genus, which are illustrated in the following specimens, are fully described and figured by Prof. Owen in the 'Philosophical Transactions' for 1850, part ii. p. 481, plates xxxiii. and xxxiv.

Phacochœrus africanus.

Sus africanus, Gmelin, Syst. Nat. i. p. 220 (1788). Phacochærus æliani, Rüppell, Atlas zu der Reise im nördlichen Africa (1826).

ÆLIAN'S WART-HOG.

Hab. Africa generally.

1836. Skull. O. C. 3353.

The teeth of the molar series present in the upper jaw are p. 3 (socket only), p. 4, m. 1 (worn to a mere fragment), m. 2, and m. 3; in the lower jaw p. 4 (socket only), m. 2, and m. 3.

Brookes Collection. Purchased, 1828.

1837. Skull. O. C. 3354.

The molariform teeth present in the upper jaw are p. 3, p. 4, m. 2, and m. 3; in the lower jaw p. 4, m. 2, and m. 3.

Hunterian.

1838. Mutilated skull. O. C. 3355.

Only the large third molars are present; but the sockets of m. 2 are still visible, and in the upper jaw that of p. 4. The large compound third molar (O. C. 3368) has been removed from the right side of the mandible, and a horizontal section taken from the upper part of the crown to show its structure. This skull and the tooth are figured in the 'Philosophical Transactions' for 1799, tab. xviii. and xix.

Hunterian.

1839. Skull.

In the upper jaw m. 2 and m. 3 are much worn. The socket of p. 4 is present; but no trace of the other premolars or of m. 1 can be seen. In the mandible m. 3 is present, and the sockets of p. 4 and m. 2.

In Museum before 1862.

1840. Skull with the dried integument adhering, longitudinally and vertically bisected. O. C. 3360.

A remnant of m. 1 remains on the left side of both upper and lower jaws; and there are traces of its socket on the right.

Presented by Sir Everard Home, 1807.

1841. Skull.

In the upper jaw p. 3, p. 4, m. 2, and m. 3 are present, m. 1 having entirely disappeared. In the lower jaw p. 4, m. 2, and m. 3; m. 2 is very much worn. The lower lateral incisors have been shed and their alveoli closed up.

Barnard Davis Collection. Purchased, 1880.

Phacochœrus africanus.

1842. Anterior portion of cranium. O. C. 3356.

Hunterian.

1843. Anterior portion of cranium. O. C. 3357.

Hunterian.

1844. Anterior portion of cranium, with the canines and posterior molars. O. C. 3358.

The incisors have been lost, and their sockets nearly obliterated. Traces only of the sockets of m. 2 remain; those of p. 4 are more distinct.

Presented by Professor Owen.

1845. Anterior extremity of cranium with upper canines. O.C. 3359.

British Museum. Purchased, 1809.

1846. Anterior extremity of cranium with the canine teeth.

In Museum before 1862.

1847. A large pair of tusks or upper canine teeth. O. C. 3365.

The left tusk measures along its outer curvature 53 cm.

British Museum. Purchased, 1809.

1848. Eight right upper canine teeth. O. C. 3366.

British Museum. Purchased, 1809.

1849. Four left upper canine teeth. O. C. 3367.

British Museum. Purchased, 1809.

1850. Articulated skeleton of young. O. C. 3361.

The skull of this specimen, with dentition rather more perfect than at present, is figured by Professor Owen in the 'Philosophical Transactions' for 1850, plate xxxiii. The permanent incisors and canines are coming into place. In the upper jaw there are three milk-molars. Above the roots of the last two the germs of p. 3 and p. 4 are to be seen. m. 1 is fully in place with very long roots; m. 2 is just appearing; and of m. 3, which attains such an immense development in the adult animal, but a small germ has been formed. In the lower jaw there are but two milk-molars, with the germ of a premolar beneath each. The true molars correspond in development to those of the maxilla.

Vertebræ: C. 7, D. 13, L. 5, S. 2, C. 23.

Purchased.

1851. Skull of a very young animal.

The milk-teeth are coming into place. From Abyssinia.

Purchased, 1872.

Phacochærus æthiopicus.

Aper æthiopicus, Pallas, Spicilegia Zoologica, ii. p. 2 (1767). Sus æthiopicus, Linnæus, Syst. Nat. ed. 12, iii. p. 223 (1768). Phacochærus pallasii, Van der Hoeven, Acad. Cæs. Leop. Nova Aeta, xix. 1, p. 171 (1839).

PALLAS'S WART-HOG.

Hab. South-eastern Africa.

In the adults of this species the upper incisors are absent, and those of the mandible worn down to the roots.

1852. Skull. O. C. 3363.

The nasal septum is completely ossified, and united with the prenasal ossicle. All the teeth of the molar series have been shed, except the great complex m. 3, and romnants of p. 4 on the right side of both upper and lower jaws.

Hunterian.

Phacochærus æthiopicus.

1853. Skull, longitudinally and vertically bisected. O. C. 3362.

The dried skin remains attached to the bone. The right ramus of the mandible has been prepared to show the roots of the teeth *in situ*. Of the molar series, p. 4, m. 2, and m. 3 remain on each side of each jaw.

Hunterian.

1854. Dried integument of head, with the extremities of the upper and lower jaws adhering. O. C. 3364.

From the Cape of Good Hope.

Presented by Henry Salt, Esq., 1811.

1855. Left upper canine. O. C. 3369.

British Museum. Purchased, 1809.

1856. Premolar and molar teeth separately displayed. O. C. 3371-3379.

British Museum. Purchased, 1809.

Family HIPPOPOTAMIDÆ.

Genus HIPPOPOTAMUS.

Linnæus, Syst. Nat. ed. 12, i. p. 101 (1766).

Section A. CHEROPSIS.

Leidy, Journ. Aead. Nat. Sc. Philad. 2nd Ser. vol. ii. p. 213 (1853). Dentition:—i. $\frac{2}{1}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, = $\frac{10}{9}$: total 38.

Hippopotamus liberiensis.

Hippopotamus minor, Morton, Proc. Acad. Nat. Sciences Philad. 1844, p. 14. Withdrawn, as preoccupied, in favour of

H. liberiensis, Morton, Journ. Acad. Nat. Sc. Philad. 2nd ser. vol. i. p. 232 (1849).

Chæropsis liberiensis, Leidy, Journ. Acad. Nat. Sc. Philad. 2nd scr. vol. ii. p. 213 (1853).

THE LIBERIAN HIPPOPOTAMUS.

Hab. West Africa.

1857. Cast of skull.

Received in exchange, 1875.

Section B. HIPPOPOTAMUS proper.

Tetraprotodon, Falconer and Cautley, Asiatic Researches, xix. p. 51 (1836).

Dentition:—i. $\frac{2}{2}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, $=\frac{10}{10}$: total 40.

Hippopotamus amphibius.

Linnæus, Syst. Nat. edit. 12, i. p. 101 (1766).

THE HIPPOPOTAMUS.

Hab. Africa.

1858. Articulated skeleton, Q. O. C. 3404.

Vertebræ: C. 7, D. 15, L. 4, S. 6, C. 11 (incomplete).

Brookes Collection. Purchased, 1828.

Hippopotamus amphibius.

1859. Skeleton of young.

The epiphyses are not yet united to the shafts of the long bones. The milk-molars are in place, with the first permanent molars.

Vertebræ: C. 7, D. 15, L. 4, S. 6, C. incomplete.

The vertebra which is here, in conformity with the last specimen, reckoned as the fifteenth dorsal is intermediate in characters, having on the right side the transverse process characteristic of the lumbar series, and on the left a free rib.

In Museum before 1862.

1860. Imperfect skeleton, with mutilated skull, of adult.

The orbital processes of the frontal and malar bones almost meet on the left side.

Many of the bones are mounted in the Separate Series.

In Museum before 1862.

1861. Skull of old male. O. C. 3405.

The grinding-teeth in the upper jaw have been reduced to the last two premolars and the three molars, from the first and second of which the cusps have been worn down to the common dentinal base. In the mandible the sockets of the three posterior premolars remain; the molars are worn as in the upper jaw.

Hunterian.

1862. Skull of male. O. C. 3406.

Hunterian.

1863. Skull of male.

In the mandible there are only two true molars developed in the left ramus, the first being absent. The orbital processes of the frontal and malar bones unito to complete the margin of the orbit behind. The orbital bulke, expansions of the lacrymal bones, are well developed and entire.

The specimen was taken from an animal shot on the 23rd Oct. 1867, in the Lower Shiré river by E. D. Young, Esq., Commander of the Livingstone Search Expedition.

Presented by Sir Roderick I. Murchison, K.C.B., 1868.

1864. Skull.

The fourth left upper premelar is irregular in position, being situated nearer the mesial line than the other teeth of the series. The orbital processes of the frental and malar benes almost unite to close in the orbit behind. The orbital bullæ (complete on the right side, broken on the left) are of smaller size than in the preceding specimen.

From an animal shot in the Zambesi by J. C. Miller, Esq., M.R.C.S.E., Surgeon to the 'Piencer,' of the Livingstone Search Expedition.

Presented by H. Spencer Smith, Esq., 1872.

1865. Skull. O. C. 3407.

The last molars have come into place, but are unworn. The last milk-molar is retained on the left side, but has been shed or removed on the right side to show the summit of the mere simple premolar, p. 4, which was about to emerge. There is no trace of p. 1.

Presented by Richard Welbank, Esq.

1866. Skull, longitudinally and vertically bisected. O. C. 3408.

The sockets of p. 1 are obliterated. The last molars have only recently been acquired. The lower fourth premolars have attained their full height; but the corresponding teeth in the upper jaw are not so advanced.

Hunterian.

1867. Skull. O. C. 3409.

Neither p. 4 ner m. 3 have attained their full size.

Hunterian.

1868. Skull. O. C. 3410.

The third true molars are just appearing above their alveeli. The posterior milk-melars have not yet been shed.

Hunterian.

Hippopotamus amphibius.

1869. Skull of young. O. C. 3412.

The milk-molars are still in place, with the first and second true molars appearing above their formative eavity. The external alveolar margins have been removed, to show the portions of the teeth conecaled by them.

Hunterian.

1870. Skull of young.

The dried integument remains on the skull. p.1 is well developed.

1871. Cranium of young. O. C. 3411.

The posterior molars (m. 3) have not been acquired. The sockets of p. 1 are present.

Hunterian.

1872. Mounted natural skeleton of young male two days old.

The milk-teeth are coming into place, the canines being the most advanced.

Vertebræ: C. 7, D. 15, L. 4, S. 8, C. 13.

Prepared from an animal which was born 21 Feb. and died 23 Feb. 1871 in the Zoological Society's Gardens, Regent's Park.

Purchased, 1871.

1873. Separate bones of skull of new-born or very young animal. O. C. 3413.

The milk-teeth are only appearing above the alveolar margin. The germs of the permanent incisors, canines, and first molars have begun to ealeify.

Presented by Professor Owen.

1874. Skull of fœtus. O. C. 3414.

The germs of the milk-teeth have been formed, those of the canines being most advanced.

Presented by W. Clift, Esq., 1826.

1875. Mandible.

In Museum before 1862

1876. Anterior portion of mandible of large size, with canine and incisor teeth. O. C. 3419. Hunterian.

1877. Left humerus.

Hunterian.

1878. Longitudinally bisected right femur.

Hunterian.

1879. Tarsal bones and some of the metatarsals of the left foot.

Hunterian.

1880. Three right upper incisor teeth. O. C. 3417.

Hunterian.

1881. Right upper incisor. O. C. 3416.

British Museum. Purchased, 1809.

1882. Three left upper incisors. O. C. 3418 and 3438.

Hunterian.

1883. Five lower incisors. O. C. 3423, 3424, and 3428.

Hunterian.

PART II.

Hippopotamus amphibius.

1884. Two lower incisors. O. C. 3421 and 3422.

Presented by Sir Joseph Banks, P.R.S.

1885. A lower incisor. O. C. 3429.

British Museum. Purchased, 1809.

1886. A large lower incisor. O. C. 3425.

It bore the following inscription:—"Hippopotamus' front tooth, weighs 2 lbs. 6 oz. 4 drams avoirdupois, presented to John Hunter, Esquire, by his pupil Martin van Butchell of Mount Street, Grosvenor Square, London, 23rd April, 1793."

Hunterian.

1887. Two lower incisors. O. C. 3426 and 3427.

From a very young animal. Apparently owing to some morbid condition, the cap of enamel has split open, showing the apex of the dentine within.

Presented by Mr. Greville, 1800.

1888. Right upper canine.

1889. Right upper canine. O. C. 3430.

British Museum. Purchased, 1809.

1890. Right lower canine. O. C. 3432.

British Museum. Purchased, 1809.

1891. Right and left lower canines. O. C. 3431.

Hunterian.

1892. Lower canine tooth. O. C. 3438.

Hunterian.

1893. Two right lower canine teeth of large size. O. C. 3440 and 3441.

Hunterian.

1894. Right lower canine. O. C. 3437.

Parkinson's Collection. Purchased.

1895. Right lower canine.

In Museum before 1862.

1896. Left lower canine. O. C. 3436.

British Museum. Purchased, 1809.

1897. Two specimens of left lower canines. O. C. 3434, 3335.

Hunterian.

1898. Left lower canine. O. C. 3439.

Hunterian.

1899. Left lower canine of large size. O. C. 3442.

Hunterian.

1900. Right lower canine which, probably in consequence of a defect in the opposing tooth, has grown to a great length, forming an almost complete circle.

In Museum before 1862.

1901. Left lower canine having a spiral curvature. O. C. 3433.

Hunterian.

1902. Right lower canine, irregularly nodulated in consequence of disease of the pulp.

In Museum before 1862.

2 B 2

Hippopotamus amphibius.

1903. Right half of a longitudinally bisected left lower canine which has been fractured and reunited during life.

Figured and described in Owen's 'Odontography,' p. 569 and pl. exlii.

From Zanzibar.

Presented by J. G. Malcolmson, Esq.

1904. Six specimens of premolar teeth.

1905. Seven specimens of molar teeth. O. C. 3444.

Hunterian.

1906. Two molars in polished section. O. C. 3443.

The longitudinal vertical sections marked a and b are halves of a right posterior upper molar; c is a transverse section of a penultimate left lower molar.

Presented by Sir Everard Home, 1807.

1907. Portions of the left upper and lower jaw prepared by the removal of part of the alveolar wall to show the three molar teeth *in situ*.

In Museum before 1862

Hippopotamus major.

"Grande Hippopotame fossile," Cuvier, Annal. du Muséum, v. p. 106 (1804).

Hippopotamus major, Owen, Report of British Association, 1843, p. 223.

1908. Right median incisor of large size. O. C. F. 1041.

It has lost much of its animal matter and is considerably decomposed. When entire it must have measured 45 cm. long.

It is described in Parkinson's 'Organic Remains,' iii. p. 375 (1811).

Obtained from the Pleistocene Till, Walton, Essex.

Parkinson's Collection. Purchased.

1909. Two portions of a left lower canine. O. C. F. 1042 and 1043.

From the Pleistocene Till at Walton, Essex.

Parkinson's Collection. Purchased.

1910. Fragment of left lower canine of young. O. C. F. 1044.

This and the previous specimen have been described by Parkinson, loc. cit.

Parkinson's Collection. Purchased.

1911. A third right upper premolar. O. C. F. 1045.

This specimen was dug up in a field at Burfield, Leigh, five miles west of Worcester.

Presented by Sir Everard Home

1912. Portion of a first left lower molar. O. C. F. 1046.

From the Hyæna-cave at Kirkdale, Yorkshire.

Presented by John Gibson, Esq.

1913. Crown of the posterior left lower molar. O. C. F. 1039.

From the freshwater deposits overlying the fluvio-marine Crag at Cromer, Norfolk.

Presented by Miss H. Gurney.

Hippopotamus major.

1914. Apex of an inferior incisor. O. C. F. 1032.

Found associated with the molars of a large Ox or Bison. Locality unrecorded.

Hunterian.

1915. Extremity of a right upper canine imbedded in a mass of breccia. O. C. F. 1033.

Locality unrecorded.

Hunterian.

1916. External portion of a longitudinally split right inferior canine. O. C. F. 1034.

Locality unrecorded.

Hunterian.

1917. Internal portion of apparently the same tooth. O. C. F. 1035.

Hunterian,

1918. Crown of upper molar, much worn. O. C. F. 1036.

Locality unrecorded.

Hunterian.

1919. Anterior part of a lower molar. O. C. F. 1037.

Locality unrecorded.

Hunterian.

Mippopotamus pentlandi.

Hippopotamus pentlandi, H. v. Meyer, Paläologica, zur Geschichte der Erde &c., 1832, p. 533.

H. medius, Owen, Cat. Foss. Mamm. & Birds in R. Coll. Surg. Museum, p. 240 (1845).

The following specimens (to No. 1931 inclusive) were found by the donor, J. Morrison, Esq., near Carini, Palermo, under circumstances fully described at p. 239 of the 'Catalogue of Fossil Mammalia and Aves' (1845).

1920. Greater portion of cranium. O. C. F. 1047.

The anterior portion is broken off, and the whole of the teeth except the last two molars are absent; the zygomata are broken; otherwise the cranium is perfect.

- 1921. Portion of the left ramus of mandible, with the penultimate and ultimate molars. O. C. F. 1048.
- 1922. Two upper molars, with a portion of bone, cemented to a mass of breccia. O. C. F. 1049.
- 1923. Right lower penultimate molar. O. C. F. 1052.
- 1924. Left lower penultimate molar. O. C. F. 1051.
- 1925. A left lower molar. O. C. F. 1050.
- 1926. Fourth cervical vertebra. O. C. F. 1053.
- 1927. Fourth and fifth metacarpal bones of the right fore foot. O. C. F. 1054 and 1055.

Mippopotamus pentlandi.

1928. Left acetabulum. O. C. F. 1056.

1929. Distal end of left femur. O. C. F. 1057.

1930. Right astragalus. O. C. F. 1058.

1931. Left os calcis. O. C. F. 1059.

The following specimens (to No. 1938 inclusive) are from the Tertiary deposits of Candia, and were presented by Captain Graves, R.N., H.M.S. 'Beacon.'

1932. Crown of left upper posterior premolar. O. C. F. 1061.

1933. Left upper posterior premolar.

1934. Crown of right upper first molar. O. C. F. 1063.

1935. Left upper first molar. O.C. F. 1064.

1936. Left lower posterior molar. O. C. F. 1065.

1937. Left lower posterior molar. O. C. F. 1066.

1938. Crown of the right lower posterior molar. O. C. F. 1067.

1939. Crown of molar. O. C. F. 1060.

Hunterian,

Genus HEXAPROTODON.

Falconer and Cautley, Asiatic Researches, xix. pt. i. p. 51 (1836). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, = $\frac{11}{11}$: total 44.

Meraprotodon sibalensis.

Falconer and Cautley, Asiatic Researches, vol. xix. pt. i. p. 40 (1836). Figured in the 'Fauna Antiqua Sivalensis,' pls. 59, 60.

1940. Posterior part of skull, with three molar teeth on each side, and on the right side the first premolar also. O. C. F. 1068.

From the Tertiary formations of the Sewalik hills in the Sub-Himalayan district of India.

Presented by the Rev. Robert Everest.

1941. Symphysial portion of mandible with the incisor teeth. O. C. F. 1069.

The erowns of the teeth have been broken near their sockets. From the Tertiary deposits of the Sewalik hills.

Presented by the Rev. Robert Everest.

1942. Symphysial portion of mandible, with the incisor teeth, which have been broken off close to their sockets.

Presented by W. Crozier, Esq., and Captain T. C. Blagrave, 1852

1943. Symphysial portion of mandible.

Presented by W. Crozier, Esq., and Captain T. C. Blagrave, 1852. Heraprotodon sibalensis.

1944. Portion of the left ramus of mandible with the three posterior molar teeth. O. C. F. 1070.

From the Sewalik hills.

Presented by the Rev. R. Everest.

1945. Portion of the crown of a left upper incisor. The tooth is abraded at its extremity. O. C. F. 1074.

From the Sewalik hills.

Purchased.

1946. The abraded extremities of the right upper and lower canine teeth united together. O. C. F. 1075.

From the Sewalik hills.

Presented by Thomas Bacon, Esq.

1947. An upper molar almost complete. O. C. F. 1072.

From the Sewalik hills.

Purchased.

1948. Crown of an upper molar. O. C. F. 1073.

From the Sewalik hills.

Purchased.

1949. A penultimate molar.

From the Sewalik hills.

Received in exchange from the Indian Museum, 1881.

1950. An ultimate molar.

From the Sewalik hills.

Received in exchange from the Indian Museum, 1881.

Suborder PERISSODACTYLA.

Family LOPHIODONTIDÆ.

Genus LOPHIODON.

Cuvier, Ossemens Fossiles, ed. 2, ii. p. 176 (1822). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{4}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{10}{10}$: total 40.

Lophiodon tapiroides.

Pakeotherium tapiroides, Cuvier, Ossemens Fossiles, 1st edit. (1812).

Louhiodon tapiroides, Cuvier, ibid. 2nd edit. ii. (1822).

1951. Cast of the anterior portion of the right ramus of mandible. O. C. F. 822.

The original was discovered in a freshwater calcareous Tertiary formation near Buehsweiler (Département du Bas-Rhin), and is described and figured by Cuvier in his 'Ossem. Fossiles' (1822), tom. ii. pt. 1, p. 200, pl. 7. fig. 1.

Presented by Baron Cuvier.

1952. A cast of a portion of maxilla with the ultimate and penultimate molars of the right side. O. C. F. 823.

From the same place as the last specimen; also described and figured by Cuvier, *loc. cit.* p. 206, pl. vii. fig. 3.

Presented by Baron Cuvier.

1953. Cast of the unworn crown of an upper molar, apparently of this species. O. C. 824.

The original is figured in the 'Ossemens Fossiles,' ii. pt. 1, pl. i. fig. 3.

Presented by Baron Cuvier.

380 UNGULATA

Genus HYRACOTHERIUM.

Owen, Trans. Geological Society, 2nd ser. vi. p. 203 (1839 - 1841).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, =44.

Hyracotherium Teporinum.

Owen, loc. cit.

Hab. Europe. Lower Eocene Period.

1954. Imperfect cranium. O. C. F. 1082.

The type specimen, found in the London Clay at Studd Hill, near Herne Bay, Kent, and described and figured by Owen as above, and also in the 'British Fossil Mammals and Birds' (1846), at pp. 419 and 422.

Presented by William Richardson, Esq.

1955. Cast of a more perfect skull of a closely allied, if not identical, species.

The original, found with other bones of the same individual in a septarian nodule of the "Roman Cement Bed" of the London Clay near Harwich, was described and figured by Owen under the name of *Pliolophus vulpiceps* in the 'Quarterly Journal of the Geological Society,' vol. xiv. p. 54 (1857).

Purchased, 1873.

Family TAPIRIDÆ.

Genus TAPIRUS.

Tapirus, Brisson, Règne Animal, p. 118 (1756).
 Tapir, Zimmermann, Geogr. Geschichte, ii. p. 153 (1780).
 Tapir, Gmelin, Syst. Nat. i. p. 216 (1788).
 Tapirus, Cuvier, Tab. Elément. de l'Hist. Nat. p. 152 (1798).*
 Dentition:—i. ³/₃, c. ¹/₄, p. ⁴/₃, m. ³/₃, = ¹/₀: total 42.

Capirus priscus.

Kaup, Ossements fossiles de Darmstadt, ii. p. 1 (1833)

1956. Cast of portion of right ramus of mandible with six molar teeth. O. C. F. 828.

The original, which is in the Darmstadt Museum, was discovered in the Miocene strata of Eppelsheim. It is figured by Kaup, *loc. cit.* tab. vi.

Presented by Dr. Kaup.

^{*} Brisson (1756) made the genus Tapirus for the Tapir, and Hydrochærus for the Capybars. In the tenth edition of the 'Systema Naturæ' of Linnæus (1758), the American Tapir is placed in the genus Hippopotamus as H. terrestris; in the twelfth (1766) it was entirely omitted. The first post-Linnean systematic author who mentions the Tapir is Erxleben (1777), by whom it was erroneously included with the Capybara in the genus Hydrochærus, under the name of H. tapir. Zimmermann (Geog. Geschichte, ii. p. 154, 1780) has the genus Tapir, with one species, T. anta. To which of those now known this is to be referred cannot be determined—perhaps T. dowi or T. bairdii, as it is founded chiefly on a Central-American form. The genus Tapir occurs next in Gmelin (Syst. Nat. i. p. 216, 1788), the one species recognized being T. americanus. The form Tapirus was revived by Cuvier and has been adopted by nearly all subsequent authors.

Tapirus arbernensis.

Devèze et Bouillet, Essai sur la Mont. de Boulade, 1827 (fide Gervais).

1957. Cast of part of the skull with the upper molar series of teeth.

From Auvergne.

1958. Cast of mandible.

From Auvergne.

1959. Cast of radius and ulna.

From Auvergne.

1960. Cast of part of the ramus of mandible with the molar teeth.

The original, from the Pliocene marine sands in the neighbourhood of Montpellier, is figured in Gervais's 'Zoologie et Paléontologie Françaises' (1859), pl. v. figs. 5 & 5', and mentioned at p. 104.

The specimens of Tapir from this locality are described by Marcel do Serres under the name of T. minor.

The above four casts were presented by the Paris Museum, through Prof. Gervais, 1869.

Tapirus indicus.

Tapirus indicus, Cuvier, Nouveau Dictionnaire d'Hist. Nat. xxxii p. 458 (1819); Desmarest, Mammalogie, p. 411 (1822).

T. malayanus, Raffles, Trans. Linn. Soc. xiii. p. 270 (read Dec. 5, 1820; publ. 1822).

THE MALAY TAPIR.

Hab. Malay peninsula; Sumatra; Borneo.

1961. Articulated skeleton of male. O. C. 2866.

The posterior molars are not in place, although all the epiphyses, even those of the bodies of the vertebræ, are consolidated.

Vertebræ: C. 7, D. 18, L. 5, S. 6, C. 4 (imperfeet).

From Sumatra.

Presented by Sir T. Stamford Raffles, P.Z.S., 1820.

1962. Skull.

All the molar teeth are in place.

In Museum before 1862.

1963. Skull and imperfect skeleton of a smaller (probably female) animal. O. C. 2867–2878.

The posterior molars are not fully in place, although the epiphyses of the skeleton are united.

Presented by Sir T. Stamford Raffles, P.Z.S., 1820.

Tapirus americanus.

Hydrochærus tapir, Erxleben, Syst. Reg. Animal. p. 191 (1777).
? Tapir anta, Zimmermann, Geog. Geschiehte, ii. p. 154 (1780).
? Tapirus americanus, Gmelin, Syst. Nat. i. p. 216 (1788).
Tapirus americanus, Cuvier, Règne Animal, i. p. 242 (1817).
Tapirus terrestris (ex Hippopotamus terrestris, Linnæus, Syst. Nat. ed. 10) of some modern authors.

THE AMERICAN TAPIR.

Hab. South America.

1964. Skull. O. C. 2879.

The posterior molars are not yet in place.

Hunterian.

1965. Skull. O. C. 2880.

The posterior molars have just risen into place, but are still unworn, and their roots are not fully developed.

Purchased.

1966. Skeleton of young. O. C. 2881-2932.

The first true molar only is in place in both jaws, with all the premolars except the last.

Vertebræ: C. 7, D. 19, L. 4.

Evidently from an animal which has died in captivity, as the brain has been removed.

Purchased.

1967. Skeleton of a somewhat younger animal.

The first true molars are in place with the milk-molars. Vertebræ: C. 7, D. 18, L. 5, S. 6, C. 9 (about three wanting). TAPIRIDÆ. 385

1968. Left tympanic bone of female.

From an animal which diod in the Zoological Gardens in 1870. This bone is so small and loosely connected with the rest of the skull, that it is nearly always lost in macerated specimens.

1969. Hyoid bones of nearly adult female.

Purchased, 1870.

Tapirus bairdi.

Elasmognathus bairdii, Gill, Proc. Acad. Nat. Sc. Philad. 1865, p. 183.

BAIRD'S TAPIR.

Hab. Central America.

1970. Skull and incomplete skeleton.

The ossification of the strong nasal septum (mesothmoid), characteristic of the adult condition of this species, is complete. From an animal killed in Panama, 1866,

Purchased, 1866.

1971. Skull of young.

The last molars are not yet in place, and the nasal soptum is incompletely ossified.

From Oaxaca, Mexico.

Presented by P. L. Sclater, Esq., 1873.

1972. Skull, wanting the nasal bones, of young.

The first true molars only are in place, and the last milk-molars are retained. The nasal septum is very little ossified.

From Oaxaca, Mexico.

Presented by P. L. Sclater, Esq., 1873.

PART II.

Tapirus bairdi.

1973. Articulated skeleton of very young animal.

Vertebræ: C. 7, D. 18, L. 5, S. & C. 19.

The elongated transverse processes of the anterior lumbar vertebræ are seen to be autogenous elements like the thoracie ribs, and are not yet united with the vertebræ.

Purchased, 1872.

1974. Hyoid bones of young.

Purchased, 1871.

Family PALÆOTHERIIDÆ.

Genus PALÆOTHERIUM.

Cuvier, Annales du Muséum, iii. p. 289 (1804).

Palaotherium magnum.

Cuvier, loc. cit. p. 367.

Hab. Europe. Upper Eoeene Period.

1975. Greater portion of the right ramus of mandible, imbedded in a block of gypsum, with the outer surface exposed to view. O. C. F. 829.

Locality unrecorded, but probably from Montmartre.

Hunterian.

1976. A right lower molar.

From Perréal, near Apt (Vaucluse).

In Museum before 1862.

1977. A left radius, probably of this species.

From Binstead Quarry, near Ryde, Isle of Wight.

Presented by Gen. Sir Henry James, R.E.

1978. Cast of a right astragalus. O. C. F. 845.

Presented by Baron Cuvier.

1979. Cast of a right calcaneum. O. C. F. 846.

Presented by Baron Cuvier.

Balaotherium crassum.

Cuvier, Annales du Muséum, vi. p. 348 (1805), described in t. iii. but not named; Ossemens Fossiles, iii. p. 68 (1822).

Hab. Europe. Upper Eocene Period.

1980. Cast of cranium. O. C. F. 830.

The original was obtained from the gypsum of Montmartre, and was figured by Cuvier in the 'Ossemens Fossiles,' iii. pls. liii. and liv., described at p. 33 (ed. 1822).

- 1981. Cast of the mandible belonging to the above specimen; also figured loc. cit. O. C. F. 831.
- 1982. Cast of the left radius.

The above were presented to the Museum by Baron Cuvier. 2 c 2 Palceotherium crassum.

1983. Cast of the radius and bones of the right fore foot. O. C. F. 833.

Presented by the Museum of Nat. Hist. of Paris.

1984. Cast of left hind foot. O. C. F. 834-844.

Presented by Baron Cuvier.

Balteotherium medium.

Cuvier, Annales du Muséum, iii. p. 289 (1804). Hab. Europe. Upper Eocene Period.

1985. Cast of skull.

The original in the Paris Museum was found at Montmartre, and is figured in De Blainville's 'Ostéographie,' vol. iv. pl. i.

Presented by the Museum of Nat. Hist. Paris, per Prof. Gervais, 1873.

1986. Portion of left maxilla with four premolars and first molar.

From Binstead Quarry, near Ryde, Isle of Wight.

Presented by Gen. Sir Henry James, R.E.

1987. Two upper molars.

Labelled "Binstead Quarry, Sept. 1834."

Presented by Gen. Sir Henry James, R.E.

1988. First and second premolars of right maxilla.

From Binstead.

Presented by Gen. Sir Henry James, R.E.

1989. Right upper molar.

In Museum before 1862.

1990. Part of left ramus of mandible, with the four posterior molar teeth.

In Museum before 1862.

1991. Part of the right ramus of the same mandible with four molar teeth.

In Museum before 1862.

1992. Two lower molars.

Labelled "Binstead Quarry, Sept. 1834."

In Museum before 1862.

1993. A lower molar found with the last specimen.

In Museum before 1862.

1994. Left articular condyle and part of the lower edge of mandible.

Probably British.

In Museum before 1862.

1995. Cast of the right tibia.

Figured by Cuvier, 'Ossem. Fossil.' (ed. 1822), iii. pl. liii. fig. 2, and referred to in the text at page 155.

Presented by Baron Cuvier.

Palæotherium minus.

Cuvier, Annales du Muséum, iii. p. 471 (1804).

Hab. Europe. Upper Eocene Period.

1996. Portion of left maxilla with four molars.

In Museum before 1862.

1997. Two upper posterior molars of the left side.

From Perréal, near Apt, Vaucluse.

1998. Portion of ramus of mandible with the three molar teeth.

Probably from the same locality.

Palaotherium annectens.

Paloplotherium annectens, Owen, Proc. Geol. Soc. iv. p. 28 (1847).

Hab. Europe. Middle Eocene Period.

1999. The complete mandible of a young animal.

The milk molars are in place; and the first two permanent molars have been acquired. The germs of the premolars and the last molar have been exposed on the left side.

This is the type specimen described and figured by Prof. Owen in the Quart. Journ. Geol. Soc. iv. p. 20, pl. iii. figs. 3 & 4 (1848). From Hordwell Cliff, Hampshire.

Presented by Alex. Pitts Falconer, Esq., 1847.

2000. Portion of mandible, including symphysis and incisor teeth and the greater part of the right ramus with the molar teeth.

In Museum before 1862.

2001. Left horizontal ramus of mandible, nearly complete, with the molar teeth.

Figured in the 'Quarterly Journal of the Geological Society,' iv. pl. iv. fig. 1.

In Museum before 1862.

2002. Left horizontal ramus of mandible, with the molar teeth.

In Museum before 1862.

2003. Various teeth.

The above are all probably from Hordwell.

In Museum before 1862.

Genus ANCHITHERIUM.

H. von Meyer, Neues Jahrb. für Mineralogie, &c. 1844, p. 298.

Anchitherium aurelianense.

"Pulæothérium des environs d'Orléans," Cuvier, Ossemens Fossiles, 2nd edit. iii. p. 254 (1822).

Palæotherium aurelianense and P. hippoides, De Blainville, Ostéographie, iv. p. 43, pl. vii.

Hab. Europe. Miocene Period.

Anchitherium aurelianense.

2004. Cast of portion of skull of young, showing all the molar teeth of both the milk and permanent dentition.

The milk-molars and first and second permanent molars are in place, with the germs of the premolars and third molars in their alveolar cavities.

The original, found at Sansans (Gers), is in the Paris Museum.

Presented by the Paris Museum, per Prof. Gervais, 1872.

Anchitherium bairdi.

Palæotherium bairdii, Leidy, Proc. Ac. Nat. Sc. Philadelphia, 1850, p. 122.

Anchitherium bairdii, Leidy, Ane. Fauna Nebraska, p. 67, Smithsonian Contrib. vi. (1853).

Hab. North America. Miocene Period.

2005. Portion of cranium, showing the grinding surfaces of the molar teeth.

Found by the donor near the John Day River, Oregon, in 1872.

Presented by Lord Walsingham, 1879.

Genus HIPPARION.

Hipparion, De Christol, Ann. des Seiences et de l'Industrie du Midi de la France, i. p. 180 (Feb. 1832)*.

Hippotherium, Kaup, Neues Jahrbuch für Mineralogie, &c., 1833, p. 327.

Mipparion gracile.

Equus (Hippotherium) gracilis, Kaup, Neues Jahrbuch für Mineralogie, &c., 1833, p. 327.

Hippotherium gracile, Kaup, Nova Acta Acad. Cæs. Leop. xvii. pt. i. p. 174 (1833, publ. 1835).

Hab. Europe. Upper Mioeene Period.

* I have not been able to verify this reference; but it is given by Gaudry, Gervais, and others. The name *Hipparion* is commonly used for this genus by French, and *Hippotherium* by German, authors.

2008. Portion of right maxilla, with five upper molar teeth in situ.

From Mont Léberon, Vauclusc. Upper Miocene.

Presented by Professor A. Gaudry, 1872.

2007. Portion of mandible with three lower molars in situ.

From the same place.

Presented by Professor A. Gaudry, 1872.

2008. Cast of a right manus.

The original, from Pikermi, near Athens, is in the Paris Museum.

Received in exchange, 1883.

2009. Cast of a right pes.

From the same locality.

Received in exchange, 1883.

Of uncertain Species.

2010. Transverse polished section of an upper molar.

From the Red Crag near Felixstow, Suffolk.

Purchased, 1875.

2011. Right and left upper molar from about the middle of the series.

From the Sewalik hills of India.

Received in exchange from the Calcutta Museum, 1881.

Family EQUIDÆ.

Genus EQUUS.

Linnæus, Syst. Nat. ed. 12, i. p. 100 (1766).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, $=\frac{10}{10}$: total 40.

A rudimentary anterior premolar (completing the typical heterodont dentition) is often present, especially in the upper jaw. The canines are absent or very little developed in the female sex.

Equus curbidens.

Owen, Catalogue Fossil Mammalia, Mus. Roy. Coll. Surg. p. 236 (1845).

2012. A left upper middle molar. O. C. F. 1030.

Discovered by the donor, associated with the remains of Mylodon, Megatherium, and other extinct animals, in the Tertiary deposits of Punta Alta, Bahia Blanca, South America.

Presented by Charles Darwin, Esq.

2013. A left upper middle molar. O. C. F. 1031.

Discovered in the red argillaceous earth of the pampas at Bajada de Santa Fé, in the province of Entre Rios, South America. It agrees closely in colour and condition with the remains of the *Mastodon* and *Toxodon* from the same locality*.

These specimens are briefly described, but not named as distinct from *Equus caballus*, in the 'Zoology of the Voyage of the Beagle,' part i. Fossil Mammalia, by Prof. Owen, p. 108 (1840). The second is figured on plate xxxii. figs. 13 & 14, of the same

^{*} Mr. Darwin has more particularly described the circumstances of the embedment of this tooth in his 'Journal of Researches during the Voyage of the Beagle,' p. 149.

work. They are of much interest as the first-discovered evidence of the former existence of the Equidæ in the New World, where their remains have since been found in such abundance and under such various modifications.

Presented by Charles Darwin, Esq.

Equus sibalensis.

Falconer and Cautley, Fauna Antiqua Sivalensis, pl. lxxxi.

2014. A portion of the upper jaw, with the three milk-molars on each side, and the first true molar appearing above its formative eavity. O. C. F. 1029.

From the Tertiary deposits of the Sewalik hills of India.

Presented by Thomas Bacon, Esq.

2015. A right upper molar tooth.

From the Sewalik hills, India.

Received in exchange from the Indian Museum, Calcutta, 1881.

Equus caballus.

Linnæus, Syst. Nat. ed. 12, i. p. 100 (1766).

THE HORSE.

Hab. As a domestic animal the greater part of the habitable world.

Equus caballus.

2016. Articulated skeleton of a thorough-bred English Racehorse. Male.

"Orlando," by "Touchstone" out of "Vulture," foaled in 1841, winner of the Derby in 1843; was sold in 1860 by General Peel for 3100 guineas to Mr. Greville, by whom he was bequeathed to the Queen; died at the Royal paddocks, Bushey Park, 23rd Dec. 1868.

The teeth are very much worn.

Vertebræ: C. 7, D. 18, L. 5, S. 6, C. 15 (incomplete).

Presented by Her Majesty Queen Victoria, 1868.

2017. Articulated skeleton, J. O. C. 3133.

The presence up to the time of death of the left upper rudimentary first premolar is indicated by the alveolar socket, the tooth itself having been lost.

Vertebræ: C. 7, D. 19, L. 5, S. 5, C. 11 (incomplete).

Hunterian.

2018. Skeleton, nearly complete, J. O. C. 3176-3204.

Sockets of p. 1 are present on both sides.

Vertebræ: C. 7, D. 19, L. 6, S. 5, C. incomplete.

Hunterian.

2019. Partially articulated sheleton of a Shetland Pony. O.C. 3134.

Vertebræ: C. 7, D. 18, L. 6, S. 6, C. wanting.

South Collection. Purchased, 1835.

2020. Skull, J. O. C. 3135.

Hunterian.

2021. Skull, J. O. C. 3136.

Hunterian.

2022. Skull, with the hyoid bones, 3.

A Now-Forest Pony upwards of thirty yoars of age. Tho teeth are very irregularly worn.

Presented by Dr. W. S. Church, 1864.

2023. Skull of female. O. C. 3137.

This sex is characterized by the rudimentary state of the eanines, of which the right upper one has been shed and its socket obliterated.

Hunterian.

2024. Skull of female. O. C. 3138.

The upper canines have been shed; but those of the lower jaw are larger than in the preceding specimen.

Presented by Henry Cline, Esq., 1824.

2025. Skull, vertically and longitudinally bisected. O. C. 3139.

The right ramus of the mandible is wanting.

Hunterian.

2026. Cranium, vertically and longitudinally bisected. O. C. 3175.

The rudimentary first upper premolar (p, 1) is present on the left side.

Hunterian.

2027. Posterior portion of the right side of a vertically bisected eranium. O. C. 3140.

Hunterian.

Equus caballus.

2028. Skull of old Horse, J.

The outer walls of the alveoli of both upper and lower teeth have been removed on the right side, to show, in contrast with the next specimen, the reduction of the length of the crowns by wear at their surface, and the coincident advance of the position of the base of the teeth towards the alveolar border.

In Museum before 1862.

2029. Skull of a younger but full-grown Horse, Q.

The outer alveolar walls have been removed in the same manner, to show the length of the crowns before they have been materially shortened by wear. As a rare individual peculiarity (seen also in No. 2062) there is a large supernumerary molar situated behind and in regular sequence with the third molar in both rami of the mandible. In consequence of having no corresponding tooth in the upper jaw to oppose it, the surface of its crown is unworn, and projects beyond the level of the other molars. An upper rudimentary first premolar is present on the right side.

In Museum before 1862.

2030. Left half of the facial portion of a longitudinally bisected skull. O. C. 3148.

The permanent dentition is complete. The outer alveolar wall has been removed to show the teeth in situ.

Hunterian.

2031. Anterior portion of skull.

The small anterior premolar (p. 1) is unusually well developed, and separated by a considerable interval from p. 2.

Purchased, 1875.

2032. Skull of a young Horse. O. C. 3144.

The first permanent incisor is in place in both upper and lower jaws; the second is on the point of emerging; the third has not displaced its deciduous predecessor. The crowns of the permanent canines are just visible. The two anterior functional premolars (p. 2 and p. 3) are in place, with the first and second true molars. The greatly reduced crown of the posterior milkmolar still remains on the summit of its successor. The small anterior rudimentary premolar (p. 1) is present on the right side, but has been lost on the opposite side, though its socket is present. The outer alveolar wall has been removed on the right side of the upper jaw, where the crown of the last true molar is exposed in its formative socket.

This condition of dentition is characteristic of a Horse about three and a half years old.

Purchased.

2033. Right half of a longitudinally and vertically bisected skull, young. O. C. 3145.

The dentition is in precisely the same state of development as that of the previous specimen.

Presented by Henry Cline, Esq.

2034. Skull of a younger Horse. O. C. 3143.

The dentition indicates an age between eighteen months and two years. All the milk-teeth are retained. The first permanent molar has been acquired; and the second is appearing. The outer alveolar wall of the right maxilla has been removed to show the formative sockets of the teeth and the roots of those in position. The rudimentary first premolar (p. 1) has been present in both sides of the upper jaw, though lost on the loft; and a small socket on the right side of the lower jaw indicates the rare circumstance of the former presence of this tooth in the mandible.

Purchased.

Equus caballus.

2035. Skull of a Horse, somewhat under twelve months old. O. C. 3146.

The milk-teeth are all in place, and the erown of the first permanent molar just appearing. The first premolar (p, 1) is seen on both sides of the upper jaw in its formative socket, not having yet fully risen above the alveolar border. The late appearance of this tooth and its frequent persistence throughout life indicate that it should be classed rather with the permanent than with the milk set of teeth.

Purchased.

2036. The longitudinally and vertically bisected facial portion of a skull of a young Mare. O. C. 3142

About the same age as the previous specimen. The rudimentary premolar has been present in both upper and lower jaws. The left ramus of the mandible is wanting.

Hunterian.

2037. Anterior portion of the upper and lower jaws, showing the milk-incisors. O. C. 3149.

The summits of the middle permanent upper incisors are shown by removal of portion of the covering bone.

Presented by Bransby B. Cooper, Esq.

The following specimens, showing the effects of wear upon the permanent incisor teeth, are arranged according to their presumed ages. It will be observed that they show considerable irregularities in the mode of attrition, which must cause great difficulties in the way of any exact determination of the age of a Horse by this means, after the permanent incisors are fully in place.

2038. Fore part of lower jaw. O. C. 3154.

The earlies and lateral ineisors are unworn. The central ineisors are worn so far that the eavity is obliterated, the middle part of the abraded surface or "table" being formed by the cementum which fills the bottom of the inflection of enamel, eharacteristic of the Horse's incisor.

Presented by Bransby B. Cooper, Esq.

2039. Fore part of lower jaw. O. C. 3153.

The surfaces of all the incisors are abraded, but with a large cavity left in each case.

Purchased.

2040. Fore part of upper jaw. O. C. 3150.

The cavity in the crown of each ineisor remains, but is very small in the central teeth, which were first developed and in use. The points of the eanines are worn.

Presented by Bransby B. Cooper, Esq.

2041. Fore part of upper jaw. O. C. 3151.

In a somewhat similar stage of wear; but the cavity of the left lateral ineisor is obliterated.

Presented by Bransby B. Cooper, Esq.

2042. Fore part of upper jaw. O. C. 3152.

The central incisors are worn to the bottom of the cavity, a surface of cementum surrounded by enamel being exposed. In the second, and still more in the third, incisors some portion of the eavity remains.

Presented by Bransby B. Cooper, Esq.

2043. Fore part of upper and lower jaws. O. C. 3173.

All the upper incisors are worn to the bottom of the cavity, leaving a small ring of enamel enclosing cementum, and raised PART II.

Equus caballus.

above the level of the dentine. In the lower toeth the abrasion has proceeded quite to the depth of the enamel-inflection, and the surface of the tooth is evenly eupped.

Purchased.

2044. Fore part of lower jaw. O. C. 3155.

The canines are little worn. The ineisors show, as is normally the case, three different stages of wear, the enamel-fold being almost obliterated in the first, less so in the second, and retaining a portion of the original cavity in the third. In each ease the remnant of the closed pulp-cavity is seen in the middle of the worn surface, in front of the enamel-fold. This condition is held to be characteristic of a Horse at seven years old or thoreabouts.

Presented by Bransby B. Cooper, Esq.

2045. Fore part of lower jaw.

The eanines are much abraded, and the incisors worn to near the bottom of the enamel-inflection, which is, however, still to be seen, having a flattened form, and situated close to the posterior margin of the tooth, with the closed pulp-cavity in front of it.

In Museum before 1862.

2046. Fore part of the lower jaw of an old Horse. O. C. 3156.

The eanines are less worn, but the ineisors more so, all traces of the enamel-fold being lost. The round mark in the centre of each worn surface indicates the position of the closed pulp-cavity.

Presented by Bransby B. Cooper, Esq.

2047. Anterior portions of both upper and lower jaws of an old Horse, in which the teeth project abnormally forwards. O. C. 3157.

The ineisors are irregularly worn, those of the upper jaw

very obliquely, while those of the lowor jaw are truncated. In the latter the enamel-fold is entirely obliterated, though the base of it remains in the upper teeth.

Presented by Bransby B. Cooper, Esq.

2048. The teeth, separately displayed, of the right side of the upper and lower jaws. O. C. 3158 and 3159.

The rudimentary first premolars are not present; and tho lower canine has been lost.

Hunterian.

2049. An upper premolar with the remnant of the crown of the milk-molar which it was about to displace. O. C. 3160.

Hunterian.

2050. An upper molar. O. C. 3174.

In the first edition of the 'Osteological Catalogue' (1831) it is stated that this specimen had the following description in John Hunter's handwriting attached to it:—"A Horso's tooth of the under jaw; had ground out the tooth above; the wound mortified, and the Horse died" (p. 125, no. 870).

Hunterian.

- 2051. Portions of two longitudinally bisected incisors. O. C. 3162. Presented by Sir Everard Home.
- 2052. Germ of upper central milk-incisor just before cutting the gum.

Prepared to show the infolding of the enamol layer of the crown.

Prepared in 1871.

2053. Left lower canine. O. C. 3163.

Hunterian.

Equus caballus.

2054. Left upper premolar (p. 3). O. C. 3164.

A transverse section has been made through the crown and the surface polished, showing the arrangement of the three constituent elements of the tooth—enamel, dentine, and cement.

Hunterian.

- 2055. Right upper first molar (m. 1) similarly prepared. O. C. 3165. Hunterian.
- 2056. Left upper first molar (m. 1) longitudinally bisected. O. C. 3166.

The depth of the complex internal enamel-folds are well seen in this specimen.

Hunterian.

2057. Transverse section of the crown of the first functional upper premolar (p. 2). O. C. 3167.

Presented by Sir Everard Home.

2058. Portion of transverse section of the corresponding tooth of the lower jaw. O. C. 3168.

Presented by Sir Everard Home.

- 2059. Transverse section of a middle upper molar. O. C. 3169.

 Presented by Sir Everard Home.
- 2060. Half of a longitudinally bisected lower molar tooth. O. C. 3170.

An oblique section has been removed from the crown and the cut surface polished.

Hunterian.

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2061. Skull, in which the molar teeth of the left side, in consequence of imperfect apposition arising from slight distortion of the left ramus of the mandible, have worn each other obliquely to almost trenchant edges, and are unusually protruded from their sockets. O. C. 3172.

Hunterian.

2062. Dentary portions of skull with the teeth. O. C. 3171.

As in No. 2029, the mandible presents the rare anomaly of a supernumerary molar in each ramus behind the normal third molar. These having no homotypes in the upper jaw, have played obliquely on the back part of the third molars of that jaw, and project so far above the normal series as to have occasioned ulceration and absorption in the opposite part of the upper jaw.

Purchased.

2063. Section of facial portion of cranium. O. C. 3147.

The posterior premolar (p. 4) projects further than the other teeth of the series, probably from its development having been in advance of that of its homotype in the mandible. The former presence of p. 1 is shown by the socket.

Hunterian.

2064. Hyoid bones.

Presented by the Zoological Society, 1871.

2065. Hyoid bones.

Presented by the Zoological Society, 1867.

2066. Bones of fore and hind limbs of a very small Pony. O. C. 3207 and 3208.

Hunterian.

2067. Right metacarpus. O. C. 3192.

There is an ossification of the partly fibreus, partly muscular structure called by veterinarians the "suspensory ligament of the

406 UNGULATA.

Equus caballus.

fetlock," which resembles a third splint bone at the back of the principal metacarpal or cannon bone.

Presented by Sir Philip Grey-Egerton.

2068. Bones of the manus of a eart-horse.

Presented by the Zoological Society, 1865.

2069. Bones of the right pes of the same animal.

Presented by the Zoological Society, 1865.

2070. Bones of the left earpus and tarsus of the same animal.

Presented by the Zoological Society, 1865.

2071. Separate bones of head of a Foal six days old.

All the milk-teeth except the lateral incisors have emerged from their alveolar cavities.

Presented by George Fleming, Esq., 1876.

2072. Disarticulated cranium with the hyoid bones of an animal of about the same age.

Parker Collection. Purchased, 1858.

2073. Skull and bones of right fore leg (showing a complete ulna) of a fœtus about the ninth month of intra-uterine lite.

Presented by George Fleming, Esq., 1879.

2074. Skeleton, naturally articulated, of very young fœtus.

In Museum before 1862.

Subfossil specimens of this or allied species of *Equus*. Some of these may be referred to *E. fossilis* (H. von Meyer, Paleologica, 1832, p. 79); others to *E. plicidens* (Owen, Trans. Brit. Assoc. 1843, p. 231).

2075. An inferior molar. O. C. F. 955.

From the drift-deposits at Iffley, near Oxford.

Hunterian.

2076. Inferior molar of a recent Horse, placed by Hunter by the side of the preceding fossil to illustrate its nature. O. C. F. 955'.

Hunterian.

2077. An extremely worn inferior molar. O. C. F. 956.

From the drift deposits at Iffley.

Hunterian.

2078. A proximal phalanx. O. C. F. 957.

Locality unrecorded.

Hunterian.

2079. A right upper middle molar. O. C. F. 958.

The crown is as much curved as in the South-American specimen (No. 2012) to which the name E. curvidens has been given.

Three specimens are recorded in the former catalogue from Kent's Hole, Torquay, of which this is one, although apparently not that figured in Owen's 'British Fossil Mammals' (1846), fig. 143, p. 383, under the name of Equus fossilis. The other two are missing.

Presented by Gerard Smith, Esq.

2080. Left os calcis. O. C. 1018.

From the Hyæna-cavo at Kirkdale, Yorkshire.

Presented by John Gibson, Esq.

Equus caballus?

2081. Left lower second ineisor. O. C. F. 1019.

From the drift gravel above the chalk at Hessle, near Hull. Figured in Owen's 'British Fossil Mammals,' p. 389, fig. 148.

Presented by William Spence, Esq.

2082. Left upper molar.

From a gravel-pit at Cropthorne Ford.

Presented by George Busk, Esq., 1882.

The following specimens (to No. 2091, inclusive) were diseovered by Mr. Joseph Whidbey, Civil Engineer, in the cavernous fissures at Oreston, near Plymouth, and were presented through Sir John Barrow, Secretary to the Admiralty. They form part of the specimens referred to by Dr. Buckland in the 'Reliquite Diluvianæ,' pp. 72, 73, and 75, in which work will be found a full description of the caverns in the Oreston limestone *.

2083. Left lower third molar. O. C. F. 977.

The grinding-surface is figured in Owen's 'British Fossil Mammals,' p. 387, fig. 145, as Equus fossilis.

2084. Six upper and seven lower molars, of apparently the same species.

2085. Five incisors.

2086. Right upper second molar. O. C. F. 964.

Described in the Catalogue as remarkably distinguished from the corresponding tooth in the recent Horse by the more complicated and elegant plications of the central islands of the

^{*} See also 'Philosophical Transactions' for 1817.

enamol, as also by the greator proportional antero-posterior diameter of the crown. It is figured in the British Fossil Mammals, p. 393, fig. 153, as Equus plicidens, this and the next being the specimens upon which that species was founded.

2087. Left upper first molar. O. C. F. 967.

Figured as E. plicidens in 'British Fossil Mammals,' p. 392, fig. 152.

2088. Unworn left lower canine. O. C. F. 975.

Figured in 'British Fossil Mammals,' p. 394, fig. 154.

2089. Left astragalus. O. C. F. 1005.

Figured in 'British Fossil Mammals,' p. 395, fig. 155.

2090. Ungual phalanx. O. C. F. 1015.

Figured in 'British Fossil Mammals,' p. 395, fig. 156.

2091. Twenty-nine other bones or fragments of bones.

The three following specimens are referred to in Owen's 'British Fossil Mammals,' p. 396, as examples of the Fossil Ass or Zebra, Asinus fossilis.

2092. Left upper middle molar. O. C. F. 1023.

From the drift above the London Clay at Deptford or Chatham.

Presented by Sir Everard Home.

Equus caballus?

2093. Right upper middle molar. O. C. F. 1024?

Fig. 157 (reversed, as in most of the other specimens of teeth figured in this work). Stated in the text to be from the drift at Kessingland, Suffolk, in the description under the figure to be from Oreston, and in the Catalogue from Grays, Essex.

Presented by William Ball, Esq.

2094. Left upper posterior molar. O. C. F. 1025.

Fig. 153, with the same discrepancy as to locality, but marked on the specimen and in the Catalogue "Kessingland."

Presented by William Ball, Esq.

2095. Left lower middle molar. O. C. F. 1026.

From a pleistocene freshwater deposit in Essex.

Presented by William Ball, Esq.

Equus asinus.

Linnæus, Syst. Nat. ed. 12, i. p. 100 (1766).

THE COMMON Ass.

Hab. Probably North-east Africa originally. In a domesticated state, nearly the whole babitable world.

2096. Skeleton. O. C. 3216.

The sockets of the upper rudimentary premolars (p, 1) are present.

Vertebræ: C. 7, D. 18, L. 5, S. 5, C. 11 (incomplete).

Hunterian.

2097. Skull, J.

The left rudimentary upper premolar (p, 1) is present. That of the right side has been lost and the socket partially obliterated.

Stores, 1869.

2098. Skull, J. O.C. 3217.

Hunterian.

2099. Skull of aged female.

The upper canines are absent. The right lower canine is more fully developed than in a Horse of the same sex; that of the left side has been shed and its socket partly obliterated. The premolars of the right side have been irregularly worn.

Presented by George Gulliver, Esq., 1868.

2100. Skull of young. O. C. 3218.

The only permanent teeth in use are p. 2, m. 1, and m. 2. i. 1 and p. 3 are on the point of appearing above the gums, being rather more advanced in the lower than in the upper jaw. i. 2, i. 3, p. 4, and m. 3 are still concealed within the alveoli. p. 1 is represented in the upper jaw by minute rudiments.

Presented by William Clift, Esq.

2101. Skull of a younger animal. O. C. 3141.

The milk-teeth alone are in place. p. 1 has been present and well developed on both sides of the upper jaw, as shown by the large size of the sockets.

Presented by Henry Cline, Esq.

2102. Skull of a very young Ass.

The central incisors and the three molars of the milk series are just appearing above the gums, those of the lower being more advanced than those of the upper jaw.

Parker Collection. Purchased, 1858.

Equus asinus.

2103. Disarticulated skull, cervical and anterior dorsal vertebræ, and pelvis of an Ass, soon after birth.

Parker Collection. Purchased, 1858.

2104. A preparation of the upper molar series of teeth of both sides of a young animal.

It shows the three milk-molars, the three premolars, and the three true molars of each side. The milk-molars and the anterior true molars were in use, the premolars and the ultimate and penultimate true molars being not fully developed. The anterior premolar (p, 1) is not represented.

Presented by Mr. E. Horniblow, 1875.

2105. Anterior portion of mandible, showing the incisor teeth, the surfaces of which are considerably worn. O. C. 3220.

Purchased.

2106. Skull of a Mule, or hybrid between this species and Equus caballus.

Presented by Sir Astley Paston Cooper.

Equus hemionus.

Pallas, Nov. Comm. Acad. Sc. Im. Petrop. xix. 1774, p. 394 (1775).

THE DSHIKKETAI OF KIANG.

Hab. Central Asia.

2107. Skull, 3.

There are no traces of the rudimentary first premolars (p. 1). From an animal shot in Ladak by Dr. Stoliczka of the Indian Geological Survey.

Purchased, 1868.

2108. Skull of young.

The milk-teeth and first true molars are in place. There are seekets for p. 1 on both sides of the uppor jaw, and a very small one on the left side of the mandible.

The basioccipital is wanting.

Shet in 1879 in the Changchonmo valley, Ladak.

Presented by Richard Lydekker, Esq., 1883.

2109. Casts of the left upper and lower molar series of teeth.

From a specimen in the British Museum.

Presented by George Busk, Esq., 1882.

Equus quagga.

Gmelin, Syst. Nat. i. p. 213 (1788).

THE QUAGGA.

Hab. South Africa.

2110. Skull of male. O. C. 3212.

Brookes Museum. Purchased, 1828.

2111. Skull of male. O. C. 3213.

The animals from which these two skulls were prepared belenged to Mr. Sheriff Parkins, and were driven by him in harness in Hyde Park. After their death they were presented to Mr. Brookes. A small oil-painting of one of them taken from life by Agasse is in the Censervator's Office.

In neither is there any trace of the rudimontary p. 1.

Brookes Museum. Purchased, 1828.

Equus quagga.

2112. Casts of the grinding-surfaces of four upper and four lower molar teeth.

Presented by George Busk, Esq., 1882.

Equus burchelli.

Asinus burchellii, Gray, Zool. Journ. i. p. 247 (1824).

Burchell's Zebra.

Hab. South Africa.

2113. Casts of grinding-surfaces of two upper and three lower left molar teeth.

From a specimen in the British Museum.

Presented by George Busk, Esq., 1883.

Equus zebra.

Linnæus, Syst. Nat. ed. 12, i. p. 101 (1766).

THE ZEBRA.

Hab. South and East Africa.

2114. Articulated skeleton. O. C. 3214.

Vertebræ: C. 7, D. 18, L. 6, S. 5, C. 17.

A small rudimentary tooth is present on the right side of the mandible, between the outer incisor and the eanine.

Prepared from an animal formerly in the possession of His Majesty King George the Fourth.

Brookes Collection. Purchased, 1828.

2115. Imperfect skeleton.

In Museum before 1862.

2116. Skull and bones of the extremities of young.

The milk-teeth and first and second molars are in place. The four small canine teeth came out during maceration, and, as they could not be replaced with certainty, are preserved separately.

Taken from a speilt skin, the markings on the legs of which showed that it certainly belonged to this species.

Purchased, 1869.

2117. Mandible. O. C. 3215.

Presented by Mr. Cvoss.

2118. Casts of the grinding-surfaces of three upper and four lower left molar teeth.

From a specimen in the British Museum.

Presented by George Busk, Esq., 1882.

Family RHINOCEROTIDÆ.

Genus RHINOCEROS.

Linnæus, Syst. Nat. ed. 12, i. p. 104 (1766).

Dentition:—i. $\frac{2}{2}$, e. $\frac{0}{0}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, $=\frac{9}{9}$: total 36.

The large lateral tooth in the front of the mandible, here reekoned an incisor, is considered by some anatomists to be a canine. The incisors vary much, and may be rudimentary or entirely wanting. The anterior premolar (p, 1), though often early deciduous, is more constant than in the Equide.

Rhinoceros minutus.

Rhinoceros minutus, Cuvier, Ossemens Fossiles, 2º édit. ii. p. 93 (1822).

R. pleuroceros, Duvernoy, Archives du Muséum d'Hist. Nat. vii. p. 42 (1854).

Hab. Europe. Upper Miocene.

It is only by using the generic word Rhinoceros in its widest

Rhinoceros minutus.

sense that this species (which has a pair of laterally placed conical eminences on the nasal bones, apparently for the support of horns) can be included in it. It may belong to the genus *Diceratherium* of Marsh.

2119. Cast of left side of cranium, and of portion of the ramus of the mandible.

The original, discovered in 1850 at Gannat (Allier), France, is described and figured by Duvernoy (Archives du Muséum, vii. pls. i. & iii.).

Presented by the Paris Museum of Natural History.

2120. Cast of a considerable portion of both rami of the lower jaw of another individual.

From the same locality.

Presented by the Paris Museum of Natural History.

The existing species of *Rhinoceros* are naturally grouped into three sections, which some zoologists consider genera*.

A. Rhinoceros proper.

Rhinoceros unicornis.

Rhinoceros unicornis, Linnæus, Syst. Nat. ed. 12, i. p. 104 (1766). R. indicus, Cuvier, Ménag. du Muséum d'Hist. Nat. (1801).

THE INDIAN RHINOCEROS.

Hab. Nepal, Bhotan, and Assam.

* For the characters of these sections, with notes upon the specimens in the Collection, see "On some Cranial and Dental Characters of the Existing Species of Rhinoceroses," by W. H. Flower, Proc. Zool. Soc. 1876, p. 443.

2121. Articulated skeleton.

The posterior upper molars are not fully in place; and the epiphysis of the upper end of the femur is not quite united. The hind feet and the patellæ are wanting, and have been modelled from another specimen.

Vertebræ: C. 7, D. 19, L. 3, S. 6, C. 21 (not complete).

Purchased.

2122. Incomplete skeleton without skull. O. C. 2945–2956.

Formerly erroneously ascribed to R. bicornis.

Hunterian.

2123. Skull. O. C. 2969.

The left upper posterior molar has been removed and horizontally bisected and polished (O. C. 3077).

Hunterian.

The three following specimens are from the Nepal Terai, and were presented to H.R.H. the Prince of Wales during his visit to India in 1876 by Sir Jung Bahadoor.

2124. Skull of an old animal with nasal horn much worn.

There are three small incisor teeth in the front of the mandible, between the large pointed lateral teeth.

Presented by H.R.H. the Prince of Wales, K.G., 1878.

2125. Skull with nasal horn.

All the permanent teeth are in place. A malformed supplementary incisor is present in the right præmaxilla, in front of the ordinary large incisor. The central lower left incisor has a bilobed erown.

Presented by H.R.H. the Prince of Wales, K.G., 1875.

PART II. 2 R

Rhinoceros unicornis.

2126. Skull of younger animal, with nasal horn.

The third milk-molars are retained; and the posterior true molars are not yet in place.

Presented by H.R.H. the Prince of Wales, K.G., 1878.

2127. Skeleton of young female. O. C. 2975–3074.

The milk-teeth are in place, with the first true molars.

Vertebræ: C. 7, D. 19, L. 3, S. 4, C. 22.

From an animal which died in captivity in this country.

Purchased.

2128. Skull, wanting the præmaxillæ, of a still younger animal.

The milk-teeth alone are in place.

From the Bhotan Terai.

Presented by A. II. Garrod, Esq., 1875.

Rhinoceros sondaicus.

Rhinoceros sondaicus, Cuvier, in Desmarest's Mammalogic, p. 399 (1822).

R. javanicus, Fréd. Cuvier, Mammifères, 1824.

THE SONDAIC RHINOCEROS.

Hab. Bengal Sunderbunds, Burma, Malay peninsula, Java, Sumatra, and Borneo.

2129. Skull. O. C. 2971.

Purchased.

2130. Cranium. O. C. 2934.

This specimen is described and figured by Gray (Proc. Zool. Soc. 1867, p. 1015) under the name and as the type of *Rhinoceros floweri*. In the former catalogue it is ascribed to *R. sumatrensis*.

Presented by Sir T. Stamford Raffles, 1820.

2131. Skull of nearly adult.

The last molars are not yet in place. Most of the teeth have been lost.

Presented by T. A. Shaw, Esq., 1856.

2132. Skull.

The last molars are not fully in place. The præmaxillæ have been lost.

From an animal killed in the Bengal Sunderbunds in 1859.

Presented by Arthur Grote, Esq., 1882.

2133. Skull of young, wanting the præmaxillæ and most of the teeth. O. C. 2970.

The permanent premolars are still in their formative sockets.

Hunterian.

2134. Skull of a younger animal.

The milk-teeth are in place, with the first true molars not fully developed. In the fore part of the mandible, three milk-teeth have been in place on each side—the large lateral milk-incisor (or canine), the usual small central incisor (as shown by the socket), and another between or rather behind these two.

Presented by J. II. Green, Esq., 1843.

2135. Skull, wanting the præmaxillæ, of a very young animal. O. C. 2973.

The anterior promolars (p.1), which have no predecessors, have not yet emorged from their formative alveoli, though the milk-molars which precede the second and third premolars are fully developed and slightly worn.

Presented by J. H. Green, Esq., 1843.

2136. The separated bones of the skull of a still younger animal. O. C. 2974.

The milk-molars corresponding to the second and third pre-2 E 2

Rhinoceros sondaicus.

molars have begun to protrude from their formative sockets; but their summits are unworn. The germ of the smaller molar (p.1) anterior to these may be seen in its socket; and in front of this is a minute, simple, conical, obtuse tooth, placed like a canine close to the premaxillary suture. (See Owen's 'Odontography,' p. 592, and pl. 138. fig. 13.)

From a young female, killed by the side of its mother on the Malay coast, opposite Penang, in 1816.

Presented by J. H. Green, Esq., 1843.

2137. Mandible of an old animal, with the teeth much worn.

The two small central incisors found in all the other specimens of this and the last species are absent, and have left no trace in the alveolar border.

Presented by T. A. Shaw, Esq., 1856.

2138. Mandible. O. C. 2972.

Purchased.

2139. A pair of upper second molars.

Obtained by the donor in Sumatra, and described by Mr. Busk in the 'Proceedings of the Zoological Society' for 1869, p. 415.

Presented by A. R. Wallace, Esq., 1869.

2140. The germs, or unworn crowns, of the right and left upper middle molars.

They are in a simifossilized state.

Sent from Sarawak, Borneo, by Rajah Brooke, to Sir Charles Lyell, and described and figured by Mr. Busk in the 'Proceedings of the Zoological Society' for 1869, p. 409.

Presented by George Busk, Esq., 1882.

B. CERATORHINUS.

Gray, Proc Zool. Soc. 1867, p. 1006.

Rhinoceros sumatrensis.

Rhinoceros sumatrensis, Cuvier, Règne Animal, i. p. 240 (1817). R. sumatranus, Raffles, Trans. Linn. Soc. xiii. p. 268 (1820-22).

THE SUMATRAN RHINOCEROS.

Hab. Burma, Malay peninsula, Sumatra, Borneo.

2141. Articulated skeleton. O. C. 2933.

From a perfectly adult and probably female animal.

Vertebræ: C. 7, D. 19, L. 3, S. 4, C. 22.

This skeleton is badly figured in the 'Philosophical Transactions' for 1821, pl. xxii.

From Sumatra.

Presented by Sir T. Stamford Raffles.

2142. Incomplete skeleton of male. (Cranium, O. C. 2935; pelvis, 2940.)

The premolars have been acquired; but the posterior true molars are not yet in place.

The mandible, atlas, one rib, and the left radius are wanting. Vertebræ: D. 19, L. 3, S. 4, C. 22.

From Sumatra.

Presented by Sir T. Stamford Raffles, 1821.

2143. Skeleton. (Skull, O. C. 2937, 2938, and 2939.)

From an animal of smaller size, probably a female. It is somewhat younger than the last, as the posterior milk-

Rhinoceros sumatrensis.

molars are retained in both jaws. The alveoli of the small lateral upper incisors are present in both præmaxilæ.

Vertebræ: C. 7, D. 20, L. 3, S. 4, C., incomplete.

From Sumatra.

Presented by Sir T. Stumford Raffles.

2144. Skull of young. O. C. 2936.

All the milk-molars are retained. The præmaxillæ are wanting; and the anterior part of the conjoined nasals has been cut off.

This specimen was sent to England from Sumatra by Mr. William Bell, and is stated, in the first edition of the Catalogue, to be the one figured in the 'Philosophical Transactions' for 1793, vol. lxxxiii. pls. iii. and iv.; but it differs so materially from the drawing, that, with every allowance for inaccuracy on the artist's part, it is impossible to believe that it could have been the subject intended.

Presented by Sir Joseph Banks, P.R.S.

2145. Skull of young.

The posterior upper milk-molars are retained; and the last true molars have not yet been acquired. The præmaxillæ are wanting.

From North Borneo.

Presented by W. B. Tegetmeier, Esq., 1882.

2146. Skull.

The posterior molars are not yet in place.

From an animal killed near Comillah in Tipperah.

This specimen is described in the 'Proceedings of the Zoological Society' for 1878, p. 634, where the differences which it presents from the ordinary form of *R. sumatrensis* are pointed out, with the suggestion that it may belong to the species described by Sclater under the name of *lasiotis*, the skull of which is at present unknown.

Presented by W. D. Stewart, Esq., 1878.

C. ATELODUS.

Pemel, Ann. Scient. Lit. et Indust. de l'Auvergne, xxvi. p. 114 (1853).

Rhinoceros bicornis.

Rhinoceros bicornis, Linnæus, Syst. Nat. ed. 12, i. p. 104 (1766). R. africanus, Cuvier, Règne Animal, i. p. 240 (1817). R. keitloa, A. Smith, Cat. South African Museum, p. 7 (1837).

THE TWO-HORNED RHINOCEROS.

Hab. South and East Africa.

2147. Skull. O. C. 2941.

The posterior molars are not yet in place; but all the milk-molars have been shed, except the hindermost of the right side of the mandible.

Purchased.

- 2148. Mutilated upper part of cranium, comprising the greater part of the supraoccipital, parietal, frontal, and nasal bones.
- 2149. Cranium, with the dried skin and horns. O. C. 2942.

The milk-molars only are in place, with the first promolar (p.1), which has no predecessor and is soon shed. The summit of the first true molar is just appearing.

Hunterian.

2150. The bones of the left fore foot and the right hind foot. O. C. 2957 and 2958.

Probably from the same individual as the last,

Hunterian.

Rhinoceros bicornis.

2151. The disarticulated bones of the skull of a very young animal. O. C. 2943 and 2944.

The erowns of the penultimate and ultimate milk-molars are beginning to protrude from their formative alveoli. The dried gum which covered the anterior end of the mandible has been removed to expose the four rudimentary incisors, two on each side of the symphysis, the outer ones being the largest. These are figured in Owen's 'Odontography,' pl. 138. fig. 14.

Purchased.

2152. Skull of a still younger animal.

Obtained by Mr. Esler in the Bogos district, Abyssinia. It was killed by the side of its mother, whose horns presented the characters commonly assigned to those of the variety ealled *R. keitloa* by Andrew Smith.

Purchased, 1873.

2153. A much-worn lower molar tooth. O. C. 2961.

Hunterian.

Rhinoceros simus.

Burchell, Bull. Soc. Philomat. 1817, p. 96.

Burchell's Rhinoceros.

Hab. South Africa.

2154. Skull with the two horns.

From an aged animal shot in South Africa by the late R. Gordon Cumming, Esq.

The anterior horn measures 34 inches (86 cm.) in a straight hue, the posterior $10\frac{1}{2}$ inches (27 cm.).

Gordon-Cumming Collection. Purchased, 1866.

2155. The calcified but unworn crown of a left upper molar attributed to this species. O. C. 2959.

In the freedom of the extremities of the combing-plates, which cut off no accessory valleys, it more resembles R. bicornis.

Presented by W. J. Burchell, Esq.

2156. A much-worn tooth, said to be the posterior upper milk-molar. O. C. 2960.

Presented by W. J. Burchell, Esq.

The determination of the species to which the following specimens of the nasal horns of Rhinoceroses belong is somewhat uncertain, having been made, in most cases, without any information regarding the animal from which they were obtained. They are therefore placed together in this place, instead of under the respective species to which they are assigned. The inclusion of these epidermal appendages in the osteological series is only justified by convenience in the arrangement of the Museum.

2157. Anterior and posterior horns. R. simus. O. C. 2968.

The length of the front horn is 39 inches (99 cm.), its basal eircumference being 26 inches (66 cm.).

Presented by W. J. Burchell, Esq.

2158. Anterior and posterior horns. R. simus. O. C. 2965.

Presented by Henry Salt, Esq., 1811.

2159. Anterior horn. R. simus.

2160. Anterior horn. *R. simus.* O. C. 3090.

Hunterian.

Rhinoceros simus.

2161. Anterior horn. R. simus. O. C. 3091.

Hunterian.

2162. Anterior horn. *R. simus.* O. C. 3089.

Hunterian.

2163. Anterior and posterior horns. R. bicornis. O. C. 2963.

From Abyssinia. The posterior horn presents the compressed form assigned to the variety called R. keitloa.

Presented by Henry Salt, Esq., 1811.

2164. Anterior and posterior horns. R. bicornis. O. C. 2967.

Purchased.

2165. Anterior and posterior horns of young. R. bicornis. O. C. 2962.

Presented by Henry Salt, Esq., 1811.

- 2166. Anterior and posterior horns. R. bicornis. O. C. 2964.

 Presented by Sir Joseph Banks, P.R.S.
- 2167. The left half of a vertically bisected posterior horn and part of the integument of the nose. R. bicornis. O. C. 3078.
- 2168. The horn of a young male Indian Rhinoceros (R. unicornis) accidentally torn from the head of the living animal in the Gardens of the Zoological Society, 10th August, 1870.

A new horn speedily grew in its place (see 'Proceedings of the Zoological Society,' 1871, p. 8).

Presented by the Society, 1871.

2169. Horn. R. unicornis. O. C. 3088.

Hunterian.

2170. Horn. *R. unicornis*. O. C. 3084.

Hunterian.

2171. Horn. O. C. 3082.

Hunterian.

2172. Horn. O. C. 3083.

Hunterian.

2173. Horn. O. C. 3081.

polished.

Hunterian.

2174. Anterior horn. R. sumatrensis. O. C. 3086.

Purchased.

2175. Anterior horn. R. sumatrensis. O. C. 3087.

It has been transversely bisected and one of the cut surfaces

Hunterian.

2176. Anterior horn. R. sumatrensis. O. C. 3085.

Hunterian.

2177. Posterior horn. R. sumatrensis. O. C. 3079.

Hunterian.

2178. Posterior horn. R. sumatrensis? O. C. 3080.

Hunterian.

2179. A small and straight horn.

Rhinoceros antiquitatis.

Rhinoceros antiquitatis, Blumenbach, Handbuch der Naturgeschichte*.

R. tichorhinus, G. Fischer, Zoogr. Syst. 1813; Cuvier, Oss. Fossiles, 2nd edit. ii. p. 93 (1822).

THE TICHORHINE OF WOOLLY RHINOCEROS.

Hab. Europe and North Asia. Pleistocene Period.

2180. Cast of cranium. O.C. F. 847.

The original was discovered in the drift formation in Siberia, and is figured in Cuvier's 'Ossemens Fossiles,' 2nd ed. (1822), pl. 12.

Presented by the Very Rev. Dr. Buckland.

2181. Portion of the left ramus of the lower jaw containing the last premolar and the three true molar teeth, the third not having yet risen into place.

Dredged from the sea-bottom off Brighton.

Presented by B. Waterhouse Hawkins, Esq., 1872.

- 2182. Twelve teeth obtained by the donor in the cave called "Wookey Hole," Mendip Hills, Somerset.
 - a. Unworn crown of right upper second milk-molar.
 - b. Unworn crown of right upper third milk-molar.
 - c. Slightly worn crown of left upper third milk-molar.
 - d. Broken unworn crown of right upper fourth milk-molar.
 - e. Worn right upper fourth premolar.
 - f. Worn left first premolar.
 - g. Worn right upper second molar.
 - h. Right lower second milk-molar.
 - i. Right lower third milk-molar.
 - k. Right lower third premolar.
 - l. Much-worn right first molar.
 - m. Right second molar.

Presented by W. Boyd Dawkins, Esq.

* As the early editions of this work are not to be found in the libraries to which I have had access, I have not been able to ascertain the date of the first occurrence of this name. It is found in the French translation of the sixth German edition (1803) vol. i. p. 408.

- 2183. Four teeth from Kent's Hole, Torquay.
 - a. Right upper fourth milk-molar. O. C. F. 855.

b. Left upper first molar. O. C. F. 857.

- c. Unworn crown of right third molar. O. C. F. 856.
- d. Right lower second molar. O.C. F. 866.

Presented by Gerard Smith, Esq.

2184. Right upper second and third molars. O. C. F. 858 and 859.

From the drift, five miles west of Worcester.

Presented by Sir Everard Home, Bart.

2185. Two upper molar teeth. O. C. F. 860 and 861.

From the drift of Gloucestershire.

Presented by Mr. Fisher.

2186. A left upper second molar. O. C. F. 862.

From the unstratified drift of Brunn, near Enzersdorf, in Lower Austria.

Hunterian.

2187. A portion of the crown of a right upper posterior molar. O. C. F. 863.

Locality unrecorded.

Hunterian.

2188. A right lower molar. O. C. F. 865.

From the cave at Kirkdale, Yorkshire.

Presented by John Gibson, Esq.

2189. A right lower molar. O. C. F. 867.

Locality unrecorded.

Hunterian.

Rhinoceros antiquitatis.

2190. Right humerus.

From an alluvial deposit in Lincolnshire.

Presented by John Wood, Esq., 1870.

2191. Distal extremity of the left femur. O. C. F. 876. From the drift in the neighbourhood of Moscow.

Purchased.

2192. Four fragments of bones, gnawed by Bears or Hyænas. O. C. F. 872 to 875.

From Kent's Hole, Torquay.

Presented by Gerard Smith, Esq.

Rhinoceros leptorhinus.

Rhinoceros leptorhinus, Cuvier, Ossemens Fossiles, 2º édit. ii. p. 93 (1822).

R. megarhinus, De Christol, Ann. des Sc. Nat. 2° sér. iv. p. 76 (1835).

Hab. Europe. Pleistocene Period.

The following teeth and bones (to No. 2199 inclusive), apparently of the same individual, were discovered by the donor in a cavernous fissure in the limestone-quarries at Oreston, near Plymouth, in 1816 (see the former edition of this Catalogue, and Sir E. Home in the 'Philosophical Transactions' for 1817). They are the subject of a paper by Mr. Busk, "On the Species of Rhinoceros whose Remains were found in a Fissure-cavern at Oreston in 1816," published in the 'Quarterly Journal of the Geological Society,' xxvi. p. 457 (1870), in which memoir reasons are given for their specific determination.

Presented by Joseph Whidbey, Esq.

2193. Mntilated crown of right upper molar. O. C. F. 877. Figured by Busk, loc. cit. p. 416.

2194. Mutilated crown of the corresponding left upper molar. O. C. F. 878.

Figured by Busk, loc. cit. p. 460.

- 2195. Left upper second milk-molar. O. C. F. 879.
- 2196. A right lower molar. O. C. F. 880. Figured by Busk, *loc. cit.* p. 463.
- 2197. Worn crown of left lower fourth milk-molar. O. C. F. 881.

Figured by Busk, loc. cit. p. 463.

- 2198. Anterior portion, apparently of the left lower third premolar. O. C. F. 882.
- 2199. Various bones and fragments of bones. O. C. F. 883 to 915.

The epiphyses of the bodies of the vertebræ and of the long bones are detached, showing that the animal had not arrived at maturity.

- 2200. Portions of the argillaceous sand which filled the cavern in which the foregoing fossils were discovered. O. C. F. 917.
- 2201. Part of the head of the right humerus of an older Rhinoceros than that which furnished the foregoing remains, the proximal epiphysis being ankylosed. O. C. F. 916.

From one of the Oreston limestone caverns.

Presented by Joseph Whidbey, Esq.

Of uncertain Species.

2202. Fragment of maxilla with an upper molar tooth. O. C. F. 853.

From the tertiary formations of the Subhimalayan district, India.

Presented by the Rev. E. Everest.

2203. Fragment of mandible, with two worn lower molars. O. C. F. 854.

From the same locality.

Presented by the Rev. E. Everest.

2204. A lower molar.

From the Sewalik hills, India.

Received in exchange from the Indian Museum, 1881.

The following genera are placed provisionally in this family.

Genus CADURCOTHERIUM.

Gervais, Compt. Rend. de l'Acad. des Sciences, lxxvii. p. 106 (1873).

Cadurcotherium capluri.

Gervais, loc. cit.

Hab. Europe. Miocene Period.

2205. Casts of teeth.

- a. Upper posterior molar, very little worn.
- b. Upper posterior molar, much worn.
- c. Germ of a lower molar.
- d. A worn lower molar.

The originals are from the phosphoritic deposits of Quercy (Lot), France, and are described and figured by Gervais in the 'Journal de Zoologie,' ii. p. 362, pl. xiv. (1873).

Presented by the Museum of Natural History, Paris, 1874.

Genus ELASMOTHERIUM.

G. Fischer, Mém. de la Soc. des Naturalistes do Moscou, ii. p. 255 (1809).

Clasmotherium fischeri.

Desmarest, Mammalogio, Suppl. p. 546 (1822).

2206. Cast of left ramus of mandible. O. C. F. 923.

The original, on which the genus was founded, discovered in the frozen drift of Siberia, is in the Museum of Moscow.

It is figured by Cuvier (Oss. Fossil. 2nd edit. ii. p. 98, 1822).

Presented by Sir Roderick I. Murchison.

2207. Cast of a lower molar tooth.

Presented by the Museum of Natural History, Paris, 1869.

Genus MACRAUCHENIA.

Owen, Zoology of the Voyage of H.M.S. 'Beagle,' part i. p. 35 (1840).

Dentition:—i. $\frac{2}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, = $\frac{10}{11}$: total 44.

Macrauchenia patachonica.

Owen, loc. cit.

The following are the original specimens (all probably of one individual) upon which the genus and species were founded. They were discovered by the donor in an irregular bed of sandy soil, overlying a horizontal accumulation of gravel, on the south side of Port St. Julian, Patagonia, and are described and figured in the 'Zoology of the Voyage of the Beagle.'

Presented by Charles Darwin, Esq.

2208. Two middle cervical vertebræ. O. C. F. 924 and 925.

- Macrauchenia patachonica.
- 2209. Twelve fragments of lumbar vertebræ. O. C. F. 926 to 934.
- 2210. Fragments of the pelvis. O. C. F. 935.
- 2211. A considerable portion of the left scapula. O. C. F. 936.
- 2212. Proximal extremity of the ankylosed radius and ulna. O. C. F. 937.
- 2213. Metacarpals and many of the phalanges of the right fore foot. O. C. F. 938 to 946.
- 2214. Right femur. O. C. F. 947.
- 2215. Detached proximal and distal extremities of the right tibia and fibula. O. C. F. 948 and 949.
- **2216.** Right astragalus. O. C. F. 950.
- **2217.** A metatarsal bone. O. C. F. 951.

Macrauchenia boliviensis.

Huxley, Quarterly Journal of the Geological Society, xvii. p. 73 (1861).

2218. A cervical vertebra, left astragalus, and portions of skull and scapula.

They are impregnated with copper, and were discovered in the mines at Corocoro, Bolivia, by Mr. David Forbes. Described and figured by the donor, *loc. cit.* plate vi.

Presented by Professor Huxley, 1862.

UNGULATA OF UNCERTAIN POSITION.

Genus CORYPHODON.

Owen, History of British Fossil Mammals and Birds, p. 299 (1846).

Corpphodon coccenus.

Owen, loc. cit.

2219. Cast of a fragment of the right ramus of the lower jaw, with the last molar and part of the penultimate molar in situ. O. C. F. 826.

The original was dredged from the bottom of the sea, between St. Osyth and Harwich on the Essex coast, and is probably from the Eocene London Clay. It is figured in Owen's 'British Fossil Mammals,' p. 299.

Presented by John Brown, Esq.

2220. A canine tooth, apparently from the right side of the lower jaw. O. C. F. 827.

Discovered at a depth of 160 feet, in sinking a well through the London Clay, near Camberwell.

Figured in Owen's 'British Fossil Mammals,' p. 306.

Presented by Mr. Allport.

2221. Cast of the crown of the right upper posterior molar.

The original, in the Canham Collection in the Ipswieh Museum, is from the bone-bed at the base of the Red Crag, near Woodbridge, Suffolk; but its rolled condition shows that it belonged to some earlier formation, probably the Eocene Clay.

Presented by the Rev. H. Canham. 2 F 2

Genus NESODON.

Owen, Report of British Association, 1846, p. 66.

Desodon imbricatus.

Owen, loc. cit.

2222. Anterior portion of lower jaw, with the teeth.

The type specimen figured in the 'Philosophical Transactions' for 1853, p. 291, pl. xv.

From the banks of the river Gallegos, Patagonia.

Presented by Admiral Sir B. J. Sulivan, K.C.B.

Genus TOXODON.

Owen, Zoology of the Voyage of H.M.S. 'Beagle,' part i. p. 16 (1840).

Dentition:—i. $\frac{3}{3}$, c. $\frac{0}{1}$, p. $\frac{4}{3}$, m. $\frac{3}{3}$, $=\frac{10}{10}$: total 40.

Corodon platensis.

Owen, loc. cit.

The following specimens, discovered by the donor in South America, are those upon which the genus and species were originally founded.

Presented by Charles Darwin, Esq.

2223. A nearly complete cranium, from which the teeth have been lost. O. C. 560.

Discovered in a whitish argillaceous earth, on the banks of the Sarandis, about 120 miles to the north-wost of Monte Video, and described and figured in the 'Zoology of the Voyago of the Beagle,' pp. 16-35, and plates i., ii., iii., and iv.

2224. A right penultimate upper molar. O. C. F. 561.

From the tertiary deposits in the banks of the Rio Tercero, or Carcacana, near the Parana, South America. Figured in the 'Voyage of the Beagle,' plates i. and ii.

2225. A fragment of the right ramus of the mandible, with roots of the incisors and the greater portion of the molar series of teeth. O. C. F. 562.

Discovered at Bahia Blanca, in latitude 39°, on the east coast of South America. Figured in the 'Zoology of the Voyage of the Beagle,' plate v. figs. 1 to 4.

- 2226. A large fragment of the left ramus of a mandible, with portions of four molar teeth.
- 2227. A right lower molar.
- **2228.** A left lower incisor. O. C. F. 565.

From the cliffs at Bahia Blanca. Figured in the 'Voyage of the Beagle,' pl. v. fig. 5.

2229. Various fragments of teeth.

Genus TYPOTHERIUM.

Typotherium, Bravard, Comptes Rendus de l'Acad. xliv. p. 961 (1857).

Mesotherium, Serres, ibid. p. 961.

Dentition:—i. $\frac{1}{2}$, c. $\frac{0}{0}$, p. $\frac{2}{1}$, m. $\frac{3}{3}$, = $\frac{6}{6}$: total 24.

Typotherium cristatum.

Mesotherium cristatum, Serres, Comptes Rendus de l'Acad. lxv. p. 142 (1867).

2230. Cast of skull.

The original, from the province of Santa Fé, Argentine Re-

Typotherium cristatum.

public, is in the Muscum of Natural History, Paris, and is figured by Gervais in 'Zoologie et Paléontologie générales' (1867-69), plates 22 and 23.

Presented by the Paris Museum of Natural History, per Prof. Gervais, 1869.

Suborder HYRACOIDEA.

Family HYRACIDÆ.

Genus HYRAX.

Hermann, Tab. Affinit. anim. p. 115 (1783). Dentition :—i. $\frac{1}{2}$, c. $\frac{0}{0}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, $= \frac{8}{9}$: total 34.

Hyrax capensis.

Cavia capensis, Pallas, Spicilegia Zoologica, ii. p. 32 (1767).

THE CAPE HYRAX.

Hab. South Africa.

2231. Articulated skeleton of female.

Vertebræ: C. 7, D. 22, L. 8, S. 7, C. 4.

Prepared from a specimen which died in the Gardens of the Zoological Society, 2 Jan., 1864.

Purchased.

2232. Skeleton, nearly complete, of young. O. C. 3092-3112. The posterior molar teeth have not come into place.

Purchased.

2233. Skeleton, nearly complete.

The toeth are much worn.

Vertebræ: C. 7, D. 22, L. 8, S. 7, C. wanting.

Presented by George Busk, Esq., 1864.

2234. Skull. O. C. 3113.

The left lower first premolar (p, 1) is rudimentary; but the others are completely developed. The posterior molars are not fully in place.

Purchased.

2235. Skull, vertically and longitudinally bisected.

The last molars are not in place.

Presented by Professor Owen.

2236. Mutilated skull of young female. O. C. 3114 and 3115.

The milk-incisors, the four milk-molars, and the first permanent molars are present.

Presented by the Zoological Society.

2237. The calcified germs of the milk-teeth, removed from the skull of a fœtus and separately displayed.

Presented by Professor Huxley, 1866.

Genus DENDROHYRAX.

Gray, Annals & Mag. Nat. Hist. ser. 4, i. p. 48 (1868).

Dendrohyrax arboreus.

Hyrax arboreus, Androw Smith, Trans. Linnean Soc. xv. p. 468 (1827).

THE TREE HYRAX.

Hab. South Africa

Dendrohyrax arboreus.

2238. Nearly complete skeleton. O. C. 3116–3132.

The milk-incisors and molars are in place, with the first permanent molar.

Vertebræ: C. 7, D. 21, L. 7, S. 6, C. 7 (incomplete).

Presented by the Zoological Society.

Dendrohyrax dorsalis*.

Hyrax dorsalis, Fraser, Proc. Zool. Soc. 1852, p. 99.

Hab. West Africa.

2239. Articulated skeleton.

Vertebræ: C. 7, D. 21, L. 7, S. 6, C. 8.

From the West Coast of Africa.

Purchased, 1870.

2240. Naturally articulated skeleton of young.

The milk-teeth are in place, with the first true molars partially acquired.

Vertebræ: C. 7, D. 21, L. 7, S. 6, C. 7.

Prepared from a specimen sent from the Bight of Benin in spirit.

Presented by Staff-Surgeon J. R. Thomas, 1868.

^{*} Possibly only a variety of the last, with which it appears to correspond in osteological and dental characters.

Suborder PROBOSCIDEA.

Family ELEPHANTIDÆ.

Usual dentition:—i. $\frac{1}{0}$, c. $\frac{0}{0}$, d.m. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{7}{6}$: total 26. The large incisors or tusks are preceded by small milk-teeth shed at an early age.

The mode of succession of the grinding-teeth is very peculiar. During the complete lifetime of the animal there are usually but six on each side of each jaw. The last three represent the true molars of ordinary mammals; those in front appear to be milk-molars, which in existing Elephants are never replaced by permanent successors; but the whole series gradually moves forward in the jaw, and the teeth become worn away and their remnants cast out in front while the development of others proceeds behind. The individual teeth are so large, and the processes of growth and destruction by wear take place so slowly, that not more than one, or portions of two teeth are ever in place and in use on each side of each jaw at onc time, and the whole series of changes coincides with the ordinary duration of the animal's life. The grinding-teeth usually present are sometimes described, as in the former catalogue, as the first, second, third, fourth, fifth, and sixth molars respectively; but the occasional presence of a rudimentary tooth in front of these, bringing up the number of the molar series to that of the typical heterodont placental mammals, renders this nomenclature inadmissible. To avoid confusion it has therefore become usual to follow Dr. Falconer in speaking of the teeth commonly present as the antepenultimate, penultimate, and ultimate milk-molars, and the antepenultimate, penultimate, and ultimate true molars, which respectively represent the teeth indicated in the typical formula by the signs d.m. 2, d.m. 3, d.m. 4, m. 1, m. 2, and m. 3.

Genus ELEPHAS.

Linnæus, Syst. Nat. ed. 12, i. p. 48 (1766).

Section A. Elephas proper. (Euclephas, Falconer.)

The molar teeth of this section or subgenus differ from those of the others in possessing more numerous, elevated, and attenuated plates. The average ridge-formula of the six molars, which, however, is subject to considerable individual variation especially in the posterior teeth, is 4, 8, 12, 12, 16, 24.

Elephas indicus.

Elephas indicus, Linnæus, Mus. Frid. Adolph. i. p. 11 (1754); Cuvier, Tab. d'Hist. Nat. des Animaux, p. 148 (1798).

E. maximus (pars), Linuæus, Syst. Nat. ed. 12, i. p. 48 (1766).

E. asiaticus, Blumenbaeh, Handbuch der Naturgeschichte*.

THE ASIATIC ELEPHANT.

Hab. Southern Asia.

2241. Articulated skeleton of a nearly adult male. O. C. 2654.

The penultimate molars are in place; and the epiphyses are not united to the shafts of the long bones.

The distal ends of the tusks have been fractured and abraded, as is usually the ease with animals which have lived some time in eaptivity. The base of the left tusk has been eut off and made into a separate preparation (No. 2241 A; O. C. 2655). It shows, by the irregular deposit of osteodentine in the pulp-cavity, and by the destruction of part of the parietes of the same cavity, evidence of a previously inflamed state of the matrix.

Vertebræ: C. 7, D. 20, L. 3, S. 4, C. 29 (not quite complete). The twentieth pair of ribs, which must have been very small, are missing †. The long bones measure as follows:—Humerus 90 em.; radius 75 cm.; ulna 85 cm.; femur 108 cm.; tibia 65 cm.; fibula 61 cm. The width between the iliae erests is 108 cm.

^{*} See note to p. 428. This name is probably the most correct according to the British Association Rules, but almost universal custom has sanctioned *E. indicus*.

[†] For some notes on this skeleton see Falconer's 'Palæontological Memoirs,' vol. ii. p. 268 (1868).

The animal from which this skeleton was prepared was known by the name of "Chunee," and was brought to England in 1810, when it was of a size not too large to perform on the stage of Covent Garden Theatre in a pantomime. It was next exhibited in a travelling menagerio by Mr. Polito, at whose death in 1814 it was purchased by Mr. Cross for the collection of animals then kept at Exeter Change, Strand. Here it continued to live and grow, and was submissive to the control of its keepers until the year 1820, when it was first subject to excitement and attempted to kill a keeper. Similar paroxysms recurred with increasing force annually until the year 1826, when the violence of the animal was such as to compel the proprietor of Exeter Change to put it to death. The particulars of the catastrophe are detailed in Hone's 'Every-day Book,' and in Griffin's translation of Cuvier's 'Règne Animal,' vol. iii. p. 348.

Purchased, 1831.

2242. An imperfect skeleton, without the skull, of a nearly full-grown animal. O. C. 2678-2713, 2731-33, and 2742-44.

The left radius and tibia have been divided longitudinally to show the structure and arrangement of the cancellar tissue of the long bones.

Hunterian.

2243. Part of the skeleton of a very large animal.

The bones present are three anterior dorsal vertebræ, seventeen ribs, the scapulæ, the humeri (which measure 90 cm. in length), the innominate bones, and the right femur (which measures 112 cm. in length).

Presented by T. A. Shaw, Esq., Bombay Civil Service, 1856.

2244. Skull of a large male. O. C. 2656.

From Ceylon.

The penultimate and ultimate true molars aro in use.

It is doubtful whether the tusks placed in the sockets belong to this skull. They appear to be those of a smaller animal.

Purchased.

Elephas indicus.

2245. Skull and left femur.

The ultimate molars are fully developed; but the tusks are of very small size. From an animal shot by the donor at Tambligam, Ceylon, 17 July, 1874.

Presented by F. C. Fisher, Esq., 1878.

2246. Skull, ♀. O. C. 2660 and 2677.

The ultimate molars and the posterior part of the penultimate molars were in use.

From Ceylon.

Purchased, 1821.

2247. A longitudinally and vertically bisected skull, with the tusks, 3. O. C. 2657, 2676, and 2824.

The last seven plates of the penultimate molars and the first four or five plates of the ultimate molars were in use in both jaws.

From Malacca.

Presented by Dr. Henderson, 1822.

2248. A mutilated eranium, \(\mathbb{Q} \). O. C. 2662.

The ultimate molars have been acquired.

Hunterian.

2249. Skull, J. O. C. 2659 and 2675.

The penultimate molars have been acquired.

Hunterian.

2250. Skull, 9. O. C. 2661.

The last nine plates of the penultimate, and the first five or six of the ultimate, molars are in use.

From Malacca.

Presented by Dr. Henderson, 1822.

2251. Skull transversely and vertically bisected. O. C. 2658 and 2673.

The immense development of the air-cells surrounding the brain-cavity and separating the outer and inner tables of the skull is well seen in this section.

Hunterian.

2252. Skull. O. C. 2663 and 2672.

The malar bones and the teeth of the left side are wanting. The right antopenultimate molar is present and has been in use.

Hunterian.

2253. Skull. O. C. 2664.

The antepenultimate molars are present. The right malar bone is wanting.

Hunterian.

2254. Skull of a young male. O. C. 2665 and 2751.

The molar teeth present a remarkable abnormality in both upper and lower jaws. The tooth in use, the antepenultimate, is joined to the one behind it by a thick mass of cement, the division between the two being indicated only by a slight constriction on each side.

Hunterian.

2255. Skull of a young male. O. C. 2666 and 2670.

The ultimate milk-teeth are in place. The malar bones are wanting.

Hunterian.

2256. Skull of young. O. C. 2667.

The malar and execcipital benos are wanting. The ultimate and penultimate milk-molars are present in the upper jaw.

Hunterian.

Elephas indicus.

2257. Mutilated skull of an animal of about the same age. O. C. 2794, 2669, and 2816.

Seven plates of the ultimate milk-molar have been in use.

Hunterian.

2258. Mutilated cranium of a still younger animal. O. C. 2793.

The penultimate milk-molars have been acquired. The right tusk has been lost; the left is just protruding from the socket. It is indented longitudinally at the base above and below, so that if it had continued to grow it would have resembled the specimen No. 393 of the Teratological Series, described as a "double tooth of an Elephant." The effect of a similar malformation of the formative pulp of the tooth upon the right socket was mistaken in the former description of the specimen for that produced by the presence of a milk-tusk external to the permanent one.

Hunterian.

2259. Skull of young. O. C. 2668.

The right milk-tusk and the germs of both permanent tusks have been preserved. The penultimate milk-molars are in place.

Hunterian.

2260. Imperfect skeleton of a young animal.

The skull is wanting. The animal was about 1.83 metre high, and was supposed to be three years of age. It died a few days after landing at Southampton. Many of the bones are mounted in the Separate Series.

Vertebræ: C. 7, D. 19, L. 5, S. 4, C. 2 (imperfeet).

Presented by G. T. Whiting, Esq., 1870.

2261. Skeleton of a very young animal not quite complete. O. C. 2714-2723, 2792, and 2810.

Vertebræ: C. 7, D. 19, L. 4, S. 4, C. 24.

The summits of the crowns of the antepenultimate and penultimate milk-molars have appeared above their sockets, but have not been used.

Purchased.

2262. Section of a cranium. O. C. 2724.

The outer table of bone has been removed so as to show the air-eells between it and the inner table.

Hunterian.

2263. Section of cranium of young. O. C. 2728.

The meatus auditorius externus, membrana tympani, tympanum, and upper part of the Eustachian canal, with some of the surrounding air-cells, are displayed. The otostcals are shown in situ.

This specimen is the original of the figure in the Lectures on Comparative Anatomy by Sir Everard Home, vol. iv. tab. xeviii.; and it is noticed in the Croonian Lecture by the same author in the Philos. Trans. vol. xc. p. 4.

Hunterian.

2264. The otosteals or ossicula auditûs of an Elephant three years old. O.C. 2729.

Prepared from an animal which was purchased by the College in 1810 for dissection.

Purchased.

2265. A right, and the contiguous portion of a left nasal bone. The latter has been vertically and longitudinally bisected, so as to show the large air-cells within, which are continuous posteriorly with those of the frontal bones. O. C. 2726.

British Museum. Purchased, 1809.

2266. A left nasal bone with the thin parietes at the back part broken away to expose the air-cells. O. C. 2727.

Hunterian.

2267. Mandible. O. C. 2821.

The penultimate molar is in its most complete state; and twelve of its plates have been used. The remnant of the antepenultimate is still present in the left ramus; and the germ of the ultimate molar behind it is exposed by the removal of the internal alveolar wall of the ramus.

Hunterian.

Elephas indicus.

2268. Mandible. O. C. 2674.

The last ten plates of the antepenultimate molars are abraded; and the summits of five plates of the penultimate molars are exposed.

Hunterian.

2269. Mandible. O. C. 2671 and 2818.

All the plates of the antepenultimate molars, except the last two, are worn; the right penultimate is seen in its formative socket; but the left has been removed. The inner alveolar wall has been removed from the left ramus to show the antepenultimate molar in situ.

Hunterian.

2270. Left ramus of mandible of young. O. C. 2813.

The ultimate milk-molar has nine of its plates worn. The inner alveolar wall has been removed from the left ramus.

Hunterian.

2271. Mandible of a very young animal. O. C. 2811.

The antepenultimate and penultimate milk-molars are visible above the alveolus.

Presented by Dr. Henderson.

Separate incisor teeth, or tusks.

2272. A pair of tusks. O.C. 2745.

One of these measures 1.20 metre in length and 32 em. in basal eireumference; the other measures 1.27 metre in length and 32 em. in eireumference. Both exhibit a slight spiral curve.

Presented by Sir T. Stamford Raffles, P.Z.S.

2273. A single tusk. O. C. 2746.

It measures 1:345 metre in length and 29:5 cm. in circumference at its base.

Presented by Sir T. Stamford Raffles, P.Z.S.

2274. A pair of tusks. O. C. 2747.

These are of a smaller size and slightly curved.

Presented by Sir T. Stamford Raffles, P.Z.S.

2275. A pair of tusks. O.C. 2748.

Of similar size to the previous pair, but more curved.

Presented by Sir T. Stamford Raffles, P.Z.S.

2276. A pair of tusks.

Hunterian.

2277. A pair of tusks. O. C. 2749.

Presented by Sir T. Stamford Raffles, P.Z.S., 1822.

2278. A pair of tusks. O. C. 2750.

Presented by Sir T. Stamford Raffles, P.Z.S., 1822.

2279. A tusk of a young animal. O. C. 2752.

Presented by Sir T. Stamford Raffles, P.Z.S., 1822.

2280. A pair of small tusks. O. C. 2755.

They are nearly straight and abraded obliquely at the point.

Presented by Mrs. Robinson.
2 G

PART II.

Elephas indicus.

2281. A small tusk longitudinally and vertically bisected.

The apex of one half is wanting.

Hunterian

2282. The base of a tusk of an adult male, with the portion of the alveolus in which it was imbedded, longitudinally bisected to show the pulp-cavity.

From an animal which died in the Surrey Zoological Gardens in the summer of 1847.

Purchased.

2283. A transverse section of the base of a tusk of a young Elephant. O. C. 2758.

On the cut surfaces may be discerned the decussating curved striæ characteristic of true ivory, an appearance which is due to the refraction of light caused by the parallel secondary gyrations of the dentinal tubes. (See Owen's 'Odontography,' p. 640.)

Presented by Professor Owen.

- 2284. An oblique section of a tusk showing the structure characteristic of true ivory. O. C. 3423. Hunterian.
- 2285. A section of the base of a tusk, in the substance of which a brass bullet has been imbedded in a closed cavity which has smooth and entire inner surface. There is no outward indication of the presence of such foreign body. O.C. 2761.

The phenomena exhibited in this and the following similar specimens may be thus explained:— Λ ball aimed at the head

of an Elephant may penetrate the thin bony socket and the thinner ivory parietos of the wide conical pulp-cavity occupying the inserted base of the tusk. If the projectile force be then spent, the ball gravitates to the opposito and lower sido of the pulp-cavity. The presence of the foreign body exciting inflammation of the pulp, an irregular course of calcification ensues, which results in the deposition around the ball of a certain thicknoss of osteodentine. The pulp, then resuming its healthy state and functions, coats the surface of the enclosing mass of ostoodentine, together with the rest of the conical cavity into which that mass projects, with layers of normal ivory, closing the breach in the thin parietes of the pulp-cavity by which the ball entered; and as the growth of the tusk proceeds, the ball, so enclosed, is carried forwards into the solid exserted part of tho tusk. Should the ball have penetrated the base of the tusk of a young Elephant, it may be carried on by the uninterrupted growth and wear of the tusk, until the base has become the apex, and be finally exposed and discharged by the continual abrasion to which the apex of the tusk is subjected.

British Museum. Purchased, 1809.

2286. A section of a tusk in which an iron ball is imbedded. O. C. 2762.

Presented by Sir William Blizard.

2287. A transverse section from near the base of a tusk exposing half a leaden bullet imbedded in a mass of osteodentine, which fills up a great part of the pulp-eavity. O. C. 2763.

Hunterian.

2288. A section of a tusk, showing a cavity near the outer surface, in which a flattened leaden bullet is fixed. O. C. 2764.

Presented by William Clift, Esq. 2 G 2

Elephas indicus.

2289. Two sections of the base of a tusk, into the pulp-cavity of which the iron point of a javelin has penetrated and has been broken. O. C. 2765.

Presented by Thomas Keate, Esq.

2290. Three sections of the base of a tusk, with an irregular mass of osteodentine filling up part of the pulp-cavity, in which mass is imbedded a large iron slug. O. C. 2766.

Presented by Lord Denman.

2291. A mass of osteodentine from a tusk perforated by an irregular central canal, in which some foreign body may have been contained*. O. C. 2767.

British Museum. Purchased, 1809.

2292. A portion of the basal part of a tusk with a large irregular stalactic mass of osteodentine growing into the pulp-cavity.

Presented by W. J. Bernhard Smith, 1878.

2293. A portion of a diseased tusk. O. C. 2768.

Presented by Sir Philip de M. Grey Egerton.

2294. Two thin transverse slices removed from one end of the preceding specimen, showing the proportions and relative position of the ivory, cement, and osteodentine. O. C. 2769. Presented by Sir Philip de M. Grey Egerton.

^{*} Several similar specimens of foreign bodies lodged in the tusks of Elephants are arranged in the Pathological Series of Injuries and Diseases of the Teeth.

2295. A diseased tusk of a young Elephant from Ceylon.

The neck of the tooth is extensively and irregularly absorbed. The root is contracted towards the base, and the pulp-cavity filled up.

The specimen was given to the donor in Ceylon by Mr. Swinburne Ward, who stated that the animal had knocked out the tusk by a blow against the trunk of a tree. Some small, hard, cylindrical bodies, probably egg-capsules of a dipterous insect, are adhering to it. The specimen has been mentioned by Dr. Spencer Cobbold, in his paper on the Parasites of Elephants, Trans. Linn. Soc. New Ser. vol. ii. p. 223.

Presented by G. H. K. Thwaites, Esq., 1866.

2296. A tusk of a female.

From a wild animal killed in Malabar. There is an erosion on the surface of the specimen where it protrudes beyond the gum; and it is covered with closely adherent hard bodies, like the egg-capsules of a dipterous insect. Described in the Proc. Zool. Soc. 1871, p. 145, by the donor, and by Dr. Spencer Cobbold in the Trans. Linn. Soc. New Ser. vol. ii. p. 223.

Presented by P. L. Sclater, Esq., 1871.

Separate Molar Teeth.

2297. The remnant of a much-worn right upper penultimate milk-molar (dm, 3). O. C. 2796. Hunterian.

2298. The remnant of a much-worn left upper penultimate milk-molar (dm. 3) of the same animal. O. C. 2797.

Hunterian

2299. Right lower penultimate milk-molar (dm. 3) longitudinally and vertically bisected. O. C. 2780.

It consists of nine plates, all of which are united at their bases. The extreme length of the tooth is 7.5 cm.

Presented by Sir Everard Home.

Elephas indicus.

2300. Right lower penultimate milk-molar (dm. 3). O. C. 2812.

It consists of six plates, the bases of which are confluent. The apices of the first and second plates have been in use.

Hunterian.

2301. Right upper ultimate milk-molar (dm. 4). O. C. 2796.

It consists of twelve plates, of which the summits of the first six have been in usc. The extreme length of the tooth is 12·2 cm. The penultimate (No. 2297) fits on in front of this specimen, both having belonged to the same animal.

Hunterian.

2302. Left upper ultimate milk-molar. O. C. 2797.

From the same animal. The penultimate milk-molar (No. 2298) fits on in front of this tooth.

Hunterian.

2303. Right lower ultimate milk-molar. O. C. 2814.

It consists of twelve plates, all of which have been in use. The length of the tooth is 13.5 cm.

Presented by Dr. Henderson, 1822.

2304. Left lower ultimate premolar of the same animal. O. C. 2815.

Presented by Dr. Henderson, 1822.

2305. Right upper antepenultimate or first true molar (m. 1). O. C. 2802.

It measures 17 cm. in length, and is composed of twelve plates, of which the six anterior ones have been in use.

Hunterian.

2306. Right upper antepenultimate molar. O. C. 2803.

It measures 16 cm. in length, and consists of thirteen plates, oxeluding talons. The tooth is in its most complete state, the first plate not being worn away, and the last plate being completely formed and united with the others.

Presented by Dr. Henderson, 1822.

2307. Left upper antepenultimate molar, vertically bisected. O. C. 2782.

It consists of eleven plates, all of which are confluent at their bases; and all but the last have been in use, the anterior ones being worn down to the common dentinal base. It measures 16 cm. in length.

Presented by Sir Everard Home, 1807.

2308. A moiety of an upper antepenultimate molar. O. C. 2781.

It is composed of thirteen plates, excluding talons, and measures 17 cm. in length. The cut surface is polished to show its different structures.

Hunterian.

2309. Right lower antepenultimate molar. O. C. 2819.

It measures 16 cm. in length, and consists of thirteen plates and a large talon, all of which have been in use except the last.

British Museum. Purchased, 1809.

2310. Remnant of a right lower antepenultimate molar. O. C. 2820.

It has been reduced to the eight posterior plates.

Hunterian.

2311. Germ of a right upper antepenultimate molar, including nine of the constituent plates. O. C. 2798.

Presented by Dr. Henderson, 1822.

Elephas indicus.

2312. Germ of the corresponding tooth of the left maxilla, in cluding eight plates. O. C. 2799.

Presented by Dr. Henderson, 1822.

- 2313. Germ of an upper antepenultimate molar, including eleven plates. O. C. 2800. *Hunterian*.
- 2314. Portion of a germ of a lower antepenultimate molar. O. C. 2817. Hunterian.
- 2315. Left upper penultimate molar (m. 2). O. C. 2806.

A few of the anterior plates have been worn down to their eommon uniting base of dentino; and the other sixteen plates are confluent at their bases, except the last six, which are supported by distinct roots arranged in pairs.

Hunterian.

2316. Right upper penultimate molar. O. C. 2807.

A few of the anterior plates have been worn away.

Hunterian.

2317. Right upper penultimate molar.

Eleven plates remain, the anterior ones being worn away.

Presented by T. M. Stone, Esq., 1877.

2318. Right lower penultimate molar. O. C. 2822.

It is reduced to its twelve posterior plates.

Presented by Dr. Henderson, 1822.

2319. The corresponding tooth of the left side of the same animal. O. C. 2823.

Presented by Dr. Henderson, 1822.

2320. Part of a germ of a right upper penultimate molar. O. C. 2804.

Presented by Dr. Henderson, 1822.

2321. Part of the germ of the corresponding tooth of the left side of the same jaw. O.C. 2805.

Presented by Dr. Henderson, 1822.

2322. Left upper ultimate molar (m. 3). O. C. 2808.

It consists of twenty-two plates; but some appear to be wanting from the hinder end, where they are not yet confluent and have been fractured. The eight anterior plates have come into use.

Presented by Mrs. Robinson.

2323. Left upper ultimate molar. O. C. 2809.

The hinder part of the tooth is folded forwards, as it were, on the inner concavity. It consists of at least twenty-six plates, ten of which have come into use; but the number is not distinctly definable, from the distorted character of the tooth.

Hunterian.

2324. Right upper ultimate molar. O. C. 2770.

It consists of twenty-two plates; and two or three in course of formation at the back part of the tooth have been detached and lost. The nine anterior plates have come into use. The maximum antero-posterior length of the tooth is 30 cm., the greatest height of any individual plate 21 cm.

Hunterian.

2325. A moiety of a vertically and longitudinally bisected right upper ultimate molar.

It consists of nineteen plates. Several of the anterior ones have been worn away.

Purchased, 1878.

Elephas indicus.

2326. Left lower ultimate molar. U. C. 2825.

It consists of eighteen plates, some of those in front having been worn away.

Hunterian.

2327. A portion of the left lower ultimate molar. O. C. 2829.

It includes eleven plates, all of which have been in use.

Hunterian.

2328. Part of a germ of a right upper ultimate molar. O. C. 2830.

It consists of the sixteen anterior plates and a talon in front.

Presented by Dr. Henderson, 1822.

2329. Part of a germ of an upper ultimate molar, including the twelve anterior plates and an anterior talon. O. C. 2831.

Presented by Dr. Henderson, 1822.

2330. Part of a germ of an upper ultimate molar. O. C. 2833.

The first three plates are confluent at their bases.

Presented by Dr. Henderson, 1822.

2331. Part of a germ of an upper ultimate molar. O. C. 2834.

The first two plates are confluent at their bases.

Presented by Sir Everard Home, 1807.

2332. Part of the germ of a left lower ultimate molar. O.C. 2826.

It eonsists of seventeen plates, of which the first five are confluent at their bases, and an anterior talon.

Presented by Dr. Henderson, 1822.

2333. Part of the germ of the corresponding tooth of the left side of the same mandible. O. C. 2827.

It eonsists of thirteen plates and the anterior talon.

Presented by Dr. Henderson, 1822.

2334. Part of the germ of a right lower ultimate molar. O. C. 2828.

It includes the ten anterior plates.

Presented by Dr. Henderson, 1822.

2335. Part of an inferior ultimate molar, including the nine anterior plates. O. C. 2835.

Presented by Dr. Henderson, 1822.

2336. Fourteen plates of the germ of an ultimate molar, probably of the upper jaw. O. C. 2832.

Presented by Dr. Henderson, 1822.

2337. Five plates of the germ of an ultimate molar, probably of the lower jaw. O. C. 2836.

Presented by Dr. Henderson, 1822.

2338. A remnant of a lower molar. O. C. 2837.

It is reduced to the bases of four plates; and the fangs have been absorbed, so that it fell out naturally from an Elephant of about twenty-four years of age.

Presented by Colonel Everett.

Elephas indicus.

2339. A corresponding remnant of the opposite molar of the same animal. O. C. 2838.

It was shed about two months after the preceding.

Presented by Colonel Everett.

- 2340. The last remnant of a molar of a young animal, which has been naturally shed and the major part of the fang absorbed. O. C. 2839.

 Hunterian.
- 2341. The hinder part of a molar, showing the plates worn very obliquely. O. C. 2840. Hunterian.
- 2342. The hinder part of a lower molar with the plates worn rather obliquely, and supported by a long root of confluent fangs. O. C. 2841.

British Museum. Purchased, 1809.

2343. The hinder part of a lower molar, supported on a long and hollow compressed root. O. C. 2842.

British Museum. Purchased, 1809.

2344. The hinder part of an upper molar, said to be the penultimate, obliquely and irregularly worn, and with the roots absorbed and apparently carious at the fore part of its base. O. C. 2843.

The following note was transmitted with the specimen:—
"This grinder was extracted from the mouth of one of the
Hon. East India Company's Elephants at Trichinopoly, in the
year 1814. The animal having become much emaciated and
refusing his rations, the cause was sought for, and found to
arise from a carious tooth, which it was determined should be
extracted. To this end an instrument was formed similar to a

balling-iron, or such as is commonly used for administering a ball of medicino to a horse; only that it was made of very tough wood. The animal was then placed in such a position under a large banyan tree that his tusks could be lashed to two of its branches, and his proboscis or trunk secured to one of his own tusks by a rope. The before-mentioned instrument was then introduced between his jaws, when his keeper, passing a small but strong rope through the orifice, hitched it over a small notch which may be observed in the tooth, and giving a strong and steady pull brought away the tooth, the animal very shortly after recovering his health and strength.

(Signed) "W. Ireland Jones,
"25th Sept. 1824." "Major, 18th Regt. M.N.I."

Presented by Henry Cline, Esq., 1824.

2345. A portion of the molar tooth from a corresponding part of the lower jaw of the same Elephant.

It is less obliquely worn, but shows a similar absorbed or carious condition of the base of the crown. It was extracted in the same manner as the preceding molar.

Presented by Henry Cline, Esq., 1824.

2346. Various separate plates or imperfectly formed constituents of the complex molar teeth in different stages of growth. O. C. 2776 and 2777.

Presented by Sir Everard Home, Dr. Henderson, and others.

Separate Bones.

2347. Hyoid bones of female.

From an animal 21 years old, which died in the Gardens of the Zoological Society, Regent's Park, in 1875. The bones have never been separated, and the unusual attachment of the stylo-hyal ligaments to the thyro-hyal bones is preserved. This, however, is only apparent, as the ligaments are really continued to their ordinary insertion, but bound down to the thyro-hyals in the inferior part of their course.

Presented by the Zoological Society, 1875.

Elephas indicus.

2348. Hyoid bones of young male.

These are described by the donor in the 'Proceedings of the Zoological Society,' 1875, p. 365.

Presented by A. H. Garrod, Esq., 1875.

2349. The basi-hyals and the thyro-hyals of an adult animal.

Taken from a spirit-specimen in the stores. The eartilages of the larynx of the same animal are preserved and mounted in the Comparative-Anatomy Series in the gallery.

2350. The stylo-hyals of a young animal.

In Museum before 1862.

- 2351. A transverse section of the left humerus of a young animal.

 O. C. 2730. Hunterian.
- 2352. Four transverse sections of the left ulna of a young animal. O. C. 2734.

 Hunterian.
- 2353. The upper half of the diaphysis of a left femur from which a longitudinal section has been removed. O. C. 2735.

Hunterian.

- 2354. The section removed from the previous specimen. O. C. 2736.

 Hunterian.
- 2355. The lower half of probably the same femur longitudinally bisected. O. C. 2737 and 2738. Hunterian.

2356. The diaphysis of the left femur of a young animal longitudinally bisected. O. C. 2739, 2740, and 2741.

Hunterian.

2357. The bones of the four fect of a large animal.

Many of the phalanges are wanting. The right manus is mounted in the Series of Separate Bones.

Presented by Major H. Basevi, Bengal Staff Corps, 1871.

2358. Bones of the right manus of a young Elephant.

The skin of the sole of the foot with the nails is preserved. Cartilages, apparently representing radial sesamoids, which were found when the foot was dissected, are reproduced by models in this and the next specimen.

Prepared from a specimen sent from India in spirit.

Presented by Sir Joseph Fayrer, K.C.S.I., 1873.

2359. Bones of the right hind foot of the same animal.

Presented by Sir Joseph Fayrer, K.C.S.I., 1873.

The following specimens were entered in the Old Catalogue of Fossil Mammalia as *Elephas primigenius*, but have been identified by Falconer and others as *Elephas indicus*.

- 2360. A vertically and longitudinally divided upper penultimate molar, with the surfaces of the section polished. O. C. F. 568 and O. C. 2783.

 Hunterian.
- 2361. Upper penultimate molar, much worn. O. C. F. 587.

 Said to be from the Pleistocene beds near Cambridge.

Purchased.

Elephas indicus.

2362. An ultimate upper molar of the right side. O. C. F. 566.

Said to be from the British Pleistocene beds.

Hunterian.

2363. Lower antepenultimate molar. O. C. F. 606.

Locality unrecorded.

Parkinson Collection. Purchased, 1827.

2364. Left lower penultimate molar. O. C. F. 608. Locality unrecorded.

Parkinson Collection. Purchased, 1827.

2365. Left lower ultimate molar. O. C. F. 567.

Described and figured by Prof. Owen in his 'British Fossil Mammals and Birds,' p. 226, fig. 90.

Hunterian.

2366. Right lower ultimate molar. O. C. F. 576.

Some of the anterior plates are wanting. Locality unrecorded.

Hunterian.

Elephas primigenius.

Blumenbaeh (see note to p. 428).

THE MAMMOTH.

Hab. Northern Europe, Asia, and America. Pleistocene.

2367. A complete right tusk. O. C. F. 626.

It measures 3·1 metres in length and ·533 metre in circum-

ference at its base, and is characterized by the degree and direction of its double curvature.

From the neighbourhood of the Ohio, North America*.

Ingham's Collection. Purchased, 1836.

2368. A left tusk with less curvature than the previous specimen.

Ingham's Collection. Purchased, 1836.

2369. A right tusk of a young animal. O. C. F. 627.

It measures 152.4 cm. in length and 28 cm. in circumference at the thickest part, and 71.1 cm. across the chord of its curve. This specimen is mentioned in Owen's 'British Fossil Mammals and Birds,' p. 248 (1846).

From the drift gravel near Cambridge, twelve feet below the surface.

Purchased, 1842.

2370. The extremity of a right tusk. O. C. F. 637.

From the neighbourhood of the Ohio, North America.

Purchased.

2371. The right tusk (imperfect) of a young or female animal. O. C. F. 636.

From the neighbourhood of the Ohio, North America.

Purchased.

* Of the bones and teeth of the Mammoth and Mastodon from the neighbourhood of the river Ohio, some were purchased at the sale of Mr. Bullock's collection in 1820, and others at that of Mr. Ingham's in 1836. The latter are stated, in the sale catalogue, to have been found 22 feet below the surface at Big Bone Liek in Boone County, State of Kentueky, in the autumn of 1830, and dug up by Capt. Benjamin Finnell and others. Big Bone Liek lies back from the Ohio about 10 or 12 miles, and is about 60 miles below Cincinnati. The specimens from the two collections are not distinguished in the Old Catalogue, but some of them are labelled "Bullock's Collection."

PART II.

Elephas primigenius.

2372. Imperfect tusk of a young animal in three parts. O. C. F. 635.

From the British drift or Pleistocene beds.

Hunterian.

2373. Portion of the base of a large tusk. O. C. F. 632. From the British drift.

Hunterian.

2374. Portion of a tusk. O. C. F. 631.

Locality unrecorded.

Brookes's Collection. Purchased, 1828.

2375. Portion of a tusk. O. C. F. 638.

Locality unrecorded.

Hunterian.

2376. Section of the base of a tusk. O. C. F. 630.

From the British Pleistocene beds.

Hunterian.

2377. Portion of a tusk consisting of the outer basal laminæ. O. C. F. 633.

From the Pleistocene beds of Flintshire.

Hunterian.

2378. Portion of the basal part of a tusk, in which the various laminæ of which it is composed have by exposure become separated. O. C. 2760.

British Museum. Purchased, 1809.

2379. A fragment of a tusk. O. C. F. 634.

Locality unrecorded.

Hunterian.

2380. A transverse section of a large tusk.
From Siberia.

Purchased, 1876.

2381. Two transverse sections of a tusk.

From Siberia.

Purchased, 1874.

2382. Transverse section of a tusk.

From British Pleistocene gravel.

Purchased, 1874.

2383. Transverse section of a tusk. O. C. 2759.

British Museum. Purchased, 1809.

2384. An imperfect skull. O. C. F. 586, 620, and 622.

It consists of the maxillary and palatal portions of the cranium and the two horizontal rami of the mandible. The antepenultimate molars are in place in both upper and lower jaws. That in the left ramus of the mandible is displayed in situ by the removal of the inner alveolar wall. The remains of the sockets of the ultimate upper premolars, which have been shed, are visible on each side in front of the molars. Behind the molars, in the upper jaws, are the sockets for the ponultimate molars; but in the mandible these teeth are in position, though not come into use. Each antepenultimate molar has from 13 to 15 plates in use. On the anterior aspect of the cranium is seen a portion of the posterior wall of the socket of the right tusk. Dr. Falconor mentions this specimen as

Elephas primigenius.

exhibiting very characteristic examples of both upper and lower antepenultimate molars. (Palæontological Memoirs, vol. ii. pp. 163 and 171.)

From the neighbourhood of the Ohio, North America.

Ingham's Collection. Purchased, 1836.

2385. A portion of a cranium. O.C.F. 621.

The ultimate molar of the right side is in place, and has been somewhat worn away anteriorly. The corresponding tooth of the left side has been lost. On the anterior aspect are portions of the sockets of both tusks.

From the neighbourhood of the Ohio.

Purchased.

2386. The symphysis of a mandible. O. C. F. 625.

From the neighbourhood of the Ohio.

Bullock's Collection. Purchased, 1820.

2387. Right upper ultimate molar. O. C. F. 615.

Falconer has described this specimen as "a very fine illustration which yields all the typical characters of the true Mammoth." About seventeen of the transverse plates are worn on the surface, and about seven or eight have not yet come into use.

From the neighbourhood of the Ohio. Labelled "From Dr. Casper Wister."

Hunterian.

2388. Left upper ultimate molar.

From the Ohio.

Bullock's Collection. Purchased, 1820.

2389. A lower molar, probably the antepenultimate.

From the Ohio.

Bullock's Collection. Purchased, 1820.

2390. A lower molar much worn. O. C. F. 593.

From the Ohio.

Bullock's Collection. Purchased, 1820.

2391. A lower molar. O. C. F. 618.

From the Ohio.

Bullock's Collection. Purchased, 1820.

2392. An almost complete mandible.

The nearly obliterated sockets of the penultimate molars remain; the ultimate molars are partially in use.

From the gravel near Crayford.

Presented by J. Grantham, Esq.

2393. A mandible not so complete as the previous specimen.

A portion of the right ramus is wanting. The penultimate molar is reduced in size by wear. About ten plates of the ultimate molar have come into use.

In Museum before 1862.

2394. Right upper ultimate milk-molar. O. C. F. 585.

From the drift or Pleistoeene beds at Hinton, Somersetshire. This specimen is mentioned by Falconer (Palcontological Memoirs, vol. ii. p. 160) as "a fine illustration of this tooth," and also by Leith Adams ('British Fossil Elephants,' p. 80, Palcontograph. Soc. 1879).

Hunterian.

2395. Right lower ultimate milk-molar. O. C. F. 584.

Locality uurecorded.

Hunterian.

Elephas primigenius.

2396. Right upper penultimate molar. O. C. F. 590.

This tooth has been much worn by mastication.

Locality unrecorded.

Hunterian.

2397. Left lower penultimate molar.

Dredged from the bottom of the sea off Yarmouth.

Presented by T. M. Stone, Esq., 1877.

2398. Left lower penultimate molar. O. C. F. 609.

This presents considerable resemblance to E, indicus. Its history is unknown.

Hunterian.

2399. A much-worn left lower penultimate molar. O. C. F. 592. Locality unrecorded.

Hunterian.

2400. Right upper ultimate molar.

From the gravel at Green Street Green, near Bromley, Kent.

Presented by Sir John Lubbock, 1878.

2401. Left upper ultimate molar. O.C. F. 588.

From the drift or Pleistoeene beds of Cambridge.

Purchased.

2402. Right upper ultimate molar. O. C. F. 575.

Locality unrecorded.

Hunterian.

2403. Left upper ultimate molar. O. C. F. 611.

Locality unrecorded.

Hunterian.

2404. Left upper ultimate molar. O. C. F. 619.

From the Pleistoccno beds of Siberia. Sent by Dr. Rogerson of St. Petorsburg.

Hunterian.

2405. Right upper ultimate molar. O. C. F. 610. Locality unrecorded.

Hunterian.

2406. Right lower ultimate molar. O. C. F. 572.

From the freshwater Pleistocene beds of Bridport, Dorsetshire.

Presented by H. B. Way, Esq., 1809.

2407. Left lower ultimate molar. O. C. F. 571. From the same locality.

Presented by H. B. Way, Esq., 1809.

2408. A worn fragment of an upper molar exhibiting a longitudinal median division of the plates.

From a gravel-pit near Fladbury, Evesham.

Presented by Spencer G. Percival, Esq., 1880.

2409. A portion of a molar. O. C. F. 579. IIunterian.

2410. Anterior portion of an upper molar. O. C. F. 607.

From the drift of Halston Field near Stratford-on-Avon,
Warwickshiro.

Hunterian.

Elephas primigenius.

2411. Two portions of a molar tooth.

From the gravel at Green Street Green, near Bromley, Kent.

Presented by Sir John Lubbock, 1878.

2412. Portion of a molar. O. C. F. 578.

Hunterian.

2413. Portion of an upper molar. O. C. F. 581. Hunterian.

2414. Portion of a molar. O. C. F. 582.

Hunterian.

2415. Portions of two plates of a molar. O. C. F. 573.

Presented by Prof. Owen.

2416. A single plate of a molar. O.C. F. 574.

Presented by Sir Everard Home.

The following molar teeth of *Elephas primigenius* (to No. 2442 inclusive) formed part of the collection of the late John Gibson, Esq., F.G.S., of Stratford, Essex, and were mostly presented to the College after his death by his widow in 1846. They were probably all found in the Pleistocene drifts at Ilford, Essex (see Owen, Brit. Foss. Mam. p. 245).

2417. A portion of the upper maxilla with the left penultimate milk-molar. O. C. F. 583.

From the Pleistoeene beds at Ilford. This specimen is referred to by Falconer (Palcontological Memoirs, vol. ii. p. 160) as belonging to *E. primigenius*; in his annotated copy of the Catalogue of the Museum it is marked thus: "*E. antiquus*, second milk-molar well worn, 7 plates." It was presented by Mr. Gibson to the Museum before his death.

2418. Upper penultimate milk-molar.

This is stated by Prof. Leith Adams to be the largest specimen of this tooth he had seen ('British Fossil Elephants,' p. 90, Palæontograph. Soc. 1879).

- 2419. Right upper penultimate milk-molar.
- 2420. Left upper penultimate milk-molar.
- 2421. Left upper penultimate milk-molar.
- 2422. Right upper penultimate milk-molar.
- 2423. Portion of a posterior milk-molar much worn.
- 2424. Right lower ultimate milk-molar.
- 2425. Left lower ultimate milk-molar.
- 2426. Right upper antepenultimate molar.
- 2427. Much-worn upper antepenultimate molar.
- 2428. Right upper penultimate molar.
- 2429. Right upper penultimate molar.

Elephas primigenius.

- 2430. Left upper penultimate molar.
- 2431. Left upper penultimate molar.
- 2432. Right upper ultimate molar.
- 2433. Right ramus of the mandible with the ultimate molar exposed in situ, in front of which is situated the remaining portion of the penultimate tooth.
- 2434. Left lower ultimate molar.
- 2435. Right lower ultimate molar.
- 2436. Posterior portion of the right lower ultimate molar.
- 2437. Portion of a molar tooth somewhat deformed.
- 2438. Portion of a molar tooth.
- 2439. Portion of a molar tooth.
- 2440. Portion of a molar tooth.
- 2441. Portion of a molar tooth.
- 2442. Portion of a molar tooth.

2443. Two portions of the right and left rami of a mandible with the sockets of two teeth. O. C. F. 623 and 624.

Locality unrecorded.

Parkinson's Collection. Purchased, 1827.

2444. Left upper ultimate molar. O. C. F. 600.

Of small size. Described by Owen as the "fifth in succession in the upper jaw," and figured in British Fossil Mammals,' figs. 91 and 92, p. 237, where it is erroneously stated to be from Essex Till. Parkinson mentions this specimen in his 'Organic Remains,' vol. iii. p. 345. Prof. Leith Adams (British Fossil Elephants,' p. 115, Palæontograph. Soc. 1879) agrees with Falconer (Palæont. Memoirs,' vol. ii. p. 168) in considering it to be an ultimate molar.

Found 15 feet deep in a stone-quarry near Wellesbourn, Warwiekshire.

Parkinson's Collection. Purchased, 1827.

2445. Right upper ultimate molar. O. C. F. 612.

It closely resembles the previous specimen, and is described and figured by Parkinson in his 'Organie Remains,' vol. iii. p. 346, pl. xx. fig. 5, also by Owen in his 'British Fossil Mammals,' pp. 241 and 242, fig. 94, and mentioned by Prof. Leith Adams in his 'British Fossil Elephants,' Palæontograph. Soc. p. 115 (1879).

Purchased by Mr. Parkinson at the sale of Raekstrow's Museum, and described in the Catalogue of that collection as having been taken up with ballast from the bottom of the Thames (Organic Remains, vol. iii. p. 346).

Parkinson's Collection. Purchased, 1827.

2446. Right upper molar. O. C. F. 614.

Probably the last, much worn. Entered in the Old Catalogue as "a left lower molar," but determined by Falconer, apparently with good reason, to belong to the right side of the upper jaw.

Parkinson's Collection. Purchased, 1827.

Elephas primigenius.

2447. A remnant of a much-worn molar. O. C. F. 613.

Described and figured by Parkinson in his 'Organic Remains,' vol. iii. pp. 347-348, pl. xx. fig. 7, also by Owen in 'British Fossil Mammals,' p. 243, fig. 95. It was purchased by Parkinson at the sale of Mr. Foster's Collection, the locality from which it was obtained being unknown.

Parkinson's Collection. Purchased, 1827.

2448. A portion of the hinder part of a molar, including five lamellar divisions of the crown. O. C. F. 603.

Locality unrecorded.

Parkinson's Collection. Purchased, 1827.

2449. A portion of a much-worn molar. O. C. F. 597.

From British Pleistocene beds.

Parkinson's Collection. Purchased, 1827.

Elephas columbi.

E. columbi, Falconer, Quart. Journ. Geol. Soc. vol. xiii. Synop. Tab. opposite p. 319 (1857); Palæont. Memoirs, vol. ii. p. 212.

E. texianus, Owen, Report Brit. Assoc. Leeds, 1858, Address, p. lxxxiv; Blake, Geologist, 1861, vol. iv. p. 470.

E. primigenius (pro parte) of American Palæontologists.

Hab. North and Central America. Pleistocene.

2450. Left lower antepenultimate molar.

This specimen is described and figured by Falconer, 'Nat. Hist. Review,' Jan. 1863, and 'Palæont. Momoirs,' vol. ii. p. 212, pl. x. fig. 2.

From Mexico.

Presented by — Taylor, Esq., about 1856.

- 2451. Body of a dorsal vertebra, probably of the same Elephant.

 Labelled "Mexico, Mr. Taylor."
- 2452. A lower penultimate molar.

Labelled, in Falconer's writing, "Elephas columbi, Falc., fossil found near Zacateras in Mexico. Penult. lower molar."

Presented by Carey Bowden, Esq., 1864.

Elephas hysudricus.

Falconer and Cautley, Fauna Antiqua Sivalensis, p. 41, pl. i. fig. 3 a (1846).

Hab. Sewalik Hills, India. Pliocene.

2453. A vertically and longitudinally bisected left upper molar (probably the penultimate). O. C. 2865.

Presented by Dr. Falconer.

2454. Portion of a left maxilla, containing the upper ultimate molar, which has not come into use.

Received in exchange from the Indian Museum, Calcutta, 1881.

Elephas namadicus.

Falconer and Cautley, Fauna Ant. Sival. p. 45, pl. xii. A (1846); Palæont. Mem. vol. i. p. 435 (1868).

Hab. Nerbudda valley, Central India. Pliocene.

2455. Portion of a cranium, comprising the maxillaries, the palate, molars, and portions of the tusks, apparently of this species.

This specimen is mentioned by Prof. Leith Adams in his monograph on *Elephas antiquus*, Palæontograph. Soc. 1877, p. 43. Locality unknown.

In Museum before 1862.

Elephas antiquus.

Falconer and Cautley, Fauna Antiqua Sivalensis, pl. xiv. B (1847?). See Falconer, Palæont. Mem. vol. ii. pp. 81 and 176 (1868).

Hab. Europe. Early Pleistocene.

2456. Right upper penultimate molar. O. C. F. 580.

From the Pleistocene beds forming the brick-earth of Grays in Essex. Mentioned by Leith Adams in his monograph on *Elephas antiquus*, Palæontograph. Soc. for 1877, p. 28.

Parkinson's Collection. Purchased, 1827.

2457. Right upper penultimate molar. O. C. F. 605.

Much smaller than the preceding specimen. Locality unrecorded.

Parkinson's Collection. Purchased, 1827.

2458. Right lower penultimate molar.

Dredged from the sea-bottom near Yarmouth by fishermen; originally from the "Forest Bed."

Presented by Edward Cooke, Esq., 1875.

2459. Right lower penultimate molar. O. C. F. 599.

Mentioned by Leith Adams in his monograph on *Elephas antiquus*, Palæontograph. Soc. 1877, p. 29.

From the drift of Staffordshire.

Parkinson's Collection. Purchased, 1827.

2460. An upper ultimate molar, probably the left. O. C. F. 602.

This tooth has not come into use, and is invested with a thick outer coat of cement. It is mentioned by Leith Adams, *loc. cit.* p. 40.

Found in the brick-earth in the village of Grays in Essox upwards of 30 feet bolow the surface.

Purchased.

2461. Left lower ultimate molar. O. C. F. 601.

Mentioned by Leith Adams, loc. cit. p. 32. From the Pleistocene brick-earth of Grays in Essex.

Hunterian.

2462. Right lower ultimate molar.

No history.

Mentioned by Leith Adams, loc. cit. p. 41, where he says of this and the following that "their light colour is indicative of Grays Thurrock specimens."

In Museum before 1862.

2463. Left lower ultimate molar. O. C. F. 589.

Mentioned by Leith Adams, loc. cit. p. 41. From British drift or Pleistocene beds.

Parkinson's Collection. Purchased, 1827.

2464. A horizontally bisected left lower molar. O. C. F. 569 and 570.

From the drift or Pleistocene at Brentford.

Presented by Sir Joseph Banks, P.R.S.

2465. Posterior portion of an upper molar. O. C. F. 577.

From the Pleistocene beds at Walton in Essex, 1804. Presented to Sir W. Blizard by Mr. Coek of Colehester.

Presented by Sir William Blizard.

Elephas antiquus.

2466. Cast of a left humerus of large size, measuring 135 cm. in length.

This is regarded by Leith Adams as belonging to *Elephas antiquus* (see mcmoir in Palæontograph. Soc. 1877, pp. 58 and 61). The original was discovered in 1866 in a gravel-pit at Montreuil, near Paris (see Belgrand, 'Basin de Paris,' p. 176, pl. xiv.).

Presented by the Museum of Natural History, Paris, per Professor Gervais, 1869.

Of uncertain Species.

The following bones belong to extinet British Elephants.

2467. An atlas dredged up by a Yarmouth trawler in the North Sea, 150 miles N.E. of Yarmouth.

Presented by R. R. B. Norman, Esq., 1877.

2468. A posterior dorsal vertebra. O. C. F. 642.

From the Plcistocene brick-earth at Ilford, Essex, 22 feet below the surface.

Presented by John Gibson, Esq.

2469. A fragment of the head of a humerus. O. C. F. 644.

From the Pleistocene beds at Bridport in Dorsetshire.

Presented in 1810 by the Earl of Essex to Sir Joseph Banks, by whom it was presented to the College.

2470. Part of the shaft of a humerus. O. C. F. 645.

From the Pleistoceno beds at Bridport.

Presented by H. B. Way, Esq., to Sir Joseph Banks, by whom it was presented to the College.

2471. The inner condyle and part of the shaft of a right humerus. O. C. F. 647.

From the Pleistocene beds forming the cliffs near Mannington, Suffolk. "From Dr. Woodward's collection."

Hunterian.

The following six specimens are casts of some of the bones of a very large right foot of a fossil Elephant found in the brickearth at Grays, Essex, referred to by Leith Adams as most probably belonging to *Elephas antiquus* (see Monograph on *Elephas antiquus*, Palæontograph. Soc. 1877, p. 90). The originals are in the British Museum.

Presented by W. Ball, Esq., F.G.S.

2472. Cast of right os cuneiforme. O. C. F. 649.

2473. Cast of right os magnum. O. C. F. 650.

2474. Cast of the right os unciforme. O. C. F. 651.

2475. Cast of the right second metacarpal bone. O. C. F. 652.

2476. Cast of the right third or middle metacarpal. O. C. F. 653.

2477. Cast of a phalanx. O. C. F. 653 A.

PART II.

2478. The epiphysis of the head of a femur, measuring 18 cm. across the detached surface. O. C. F. 657.

From the freshwater deposits of the cliffs at Walton in Essex, 1804.

Presented by Sir William Blizard.

Uncertain Species.

2479. The epiphysis of the head of a still larger femur, measuring 22.5 cm. across the detached surface.

Presented by W. Ball, Esq.

The five following are Hunterian specimens, but are without record of the locality from which they were obtained.

2480. The body of an anterior dorsal vertebra. O. C. F. 640.

2481. A dorsal vertebra. O. C. F. 641.

2482. A left os cuneiforme. O. C. F. 648.

It is noted in the Manuscript Catalogue as being "half-petrified."

- 2483. Second metacarpal bone of the left fore foot. O. C. F. 655.

 It is heavily impregnated with iron.
- 2484. The proximal half of a right tibia, with the articular surfaces mutilated. O. C. F. 659.

The bone seems to have been imbedded in a reddish calcareous matrix, some of which still adheres to its posterior surface.

2485. A right tibia, wanting the proximal end. O.C. F. 660. From the Drift of the neighbourhood of Moscow.

Purchased.

2486. Body of a lumbar vertebra of a fossil Elephant. O. C. F. 679.

From the Tertiary formations of the Sub-Himalayan district of India.

Presented by the Rev. E. Everest.

2487. Proximal end of a left femur. O. C. F. 680.

The great trochanter has been broken off. From the Tertiary deposits of the Sub-Himalayan district.

Presented by the Rev. E. Everest.

2488. Distal end of a right femur from the same locality. O. C. F. 681.

Presented by the Rev. E. Everest.

2489. Distal end of left femur from the same locality. O. C. F. 682.

Presented by the Rev. E. Everest.

2490. Right astragalus from the same locality. O. C. F. 683.

Presented by the Rev. E. Everest.

Section B. Loxodon.

Loxodonta, Fréd. Cuvior, Hist Nat. des Mammifères (1835). Loxodon, Falconer, Quart. Journ. Geol. Soc. Nov. 1857, p. 318.

Average ridge-formula of molar series of teeth :-

$$\frac{3}{3}$$
, $\frac{6}{6}$, $\frac{7}{7}$, $\frac{7}{7}$, $\frac{8}{8 \text{ or } 9}$, $\frac{10}{10 \text{ or } 11}$.

Elephas africanus.

Elephas africanus, Blumenbach, Handbuch der Naturgeschichte*. Elephas capensis, Cuvier, Tableau d'Histoire Naturelle des Animaux, p. 142 (1798).

Elephas maximus (in part), Linnæus, Systema Naturæ, ed. 12, i. p. 48 (1766).

THE AFRICAN ELEPHANT.

Hab. Africa.

2491. Skull, probably of an old female. O. C. 2845.

The tusks are wanting. The ultimate molars are present in both upper and lower jaws. Seven plates of those of the upper jaw and eight of those in the mandible have been in use.

Brookes Collection. Purchased, 1828.

2492. A mutilated cranium of a large male, with the tusks.

The penultimate molars are in use. The ultimate molars are just coming into place: of these, the right is shown in situ by the removal of its external alveolar wall; it has ten plates and a talon.

Obtained by Consul Petherick on the White Nilo.

Purchased, 1860.

2493. Cranium, vertically and longitudinally bisected, of a large male.

The tusks are wanting.

The ultimate molars arc in place, and eight of the plates have been in use. In addition to these are two unused plates and

^{*} I have not been able to verify the earliest date of the occurrence of this now universally adopted name, for the reason given at p. 428. In the French translation of the sixth German edition (1803) it occurs at vol. i. p. 155.

a talon. The surface shown in section is figured in Flower's 'Osteology of the Mammalia,' ed. 1876, p. 181.

From the Camaroon River, Bight of Biafra, west coast of Africa.

Presented by Dr. Hugh Falconer, 1863.

2494. A mutilated cranium of a smaller animal, vertically and transversely bisected.

The antepenultimate molars are in place, all of the seven plates of which they are composed having been in use.

From the Camaroon River.

Presented by Dr. Hugh Falconer, 1863.

2495. A longitudinally and vertically bisected skull of a very young animal.

The right exoccipital and the lacrymal bones are wanting. The left half, which is mounted in the Separate Series, shows the milk-tusk and the germ of the permanent tusk in place together.

This specimen is figured in Flower's 'Osteology of the Mammalia,' ed. 1876, p. 181.

From the Camaroon River.

Purchased, 1874.

2496. The left half of the skull of an animal supposed to have been six months old when shot by the donor.

The milk-tusk is present, with the cavity for the germ of the permanent tusk beside it.

From Lake Ngami, South Africa.

Presented by J. Baines, Esq., 1865.

2497. A mandible, J. O.C. 2846.

The molars present appear to be the antepenultimates, each having seven plates, all of which have been in uso. The right molar has been bisected longitudinally and vortically.

Hunterian.

Elephas africanus.

2498. A mandible, \(\text{\text{?}} \). O. C. 2847 and 2859.

The penultimate molars are in place; all their plates except the two last have been in use.

Hunterian.

2499. A tusk, with an abnormal spiral curvature, evidently depending on a diseased condition of the pulp, leading to incomplete formation of the ivory on one side of the tooth. O. C. 2757.

This specimen is figured in Grew's 'Musæum Regalis Societatis,' 1681, p. 31, and described as follows:—"A spiral or wreathed tusk of an Elephant. Presented from the Royal African Company by Thomas Crispe, Esq. It is twisted or wreathed from the bottom to the top with three circumvolutions standing between two straight lines. 'Tis also furrow'd by the length. Yet the furrows surround it not as in the horn of the Sea Unicorn, but run parallel therewith. Neither is it round as the said horn, but somewhat flat. The top very blunt (fig. tab. 4)." The collection of the Royal Society was transferred to the British Museum on the removal of the Society from Crane Court to Somerset House in 1781.

British Museum. Purchased, 1809.

2500. A tusk showing a somewhat similar spiral curvature.

This also was caused by disease of one side of the pulp, resulting in defective growth of a limited tract of the eircumference of the tooth. The spiral is not so regular as in the preceding specimen, the disease and resulting deformity having increased in intensity as time advanced, until growth must have been completely arrested, and the tusk probably dropped out of its socket.

From the Gaboon.

Purchased, 1875.

2501. A tusk with spiral curve. O. C. 2756.

A fissure in the pulp-cavity leads to a longitudinal groove on the outer surface, where the ivory has been incompletely formed.

British Museum. Purchased, 1809.

2502. A tusk grown from an abnormally shaped pulp, furrowed on one side.

In Museum before 1862,

2503. A tusk of a young animal considerably curved and with a slight tendency to a spiral direction. O. C. 2753.

Hunterian.

2504. An abnormally curved tusk. O. C. 2754.

Hunterian.

2505. Transverse section of a tusk.

This specimen shows very well the characteristic structure of vorv.

From Angola.

Purchased, 1875.

- 2506. Two germs of tusks showing the rough enamel with which they are tipped.

 Purchased.
- 2507. A left upper molar, probably the penultimate. O. C. 2857.

It consists of eight plates, five of which have been in uso.

Hunterian.

2508. An upper molar, probably the right penultimate. O. C. 2858.

It presents seven plates, but some that were behind these have been broken away. The first six plates have been in use.

Hunterian.

2509. A right upper penultimate molar. O. C. 2861.

It consists of eight plates and a talon. Four of the plates have been in use. The tooth has been longitudinally and vertically bisected.

Hunterian.

2510. A right upper molar, probably the penultimate. O. C. 2852.

It includes six plates and a talon. Some of the anterior plates have been broken off and lost.

Hunterian.

Elephas africanus.

2511. A left lower molar, probably the penultimate. O. C. 2853.

It eonsists of seven plates and a talon, all of which have been in use. One or two plates seem to be wanting in front. The tooth is much worn.

Hunterian.

2512. A left upper penultimate molar, probably of a female. O. C. 2854.

It consists of eight plates and a talon. Five of the plates have been in use.

Hunterian.

2513. A left lower penultimate molar, probably of a female. O. C. 2860.

It consists of nine plates and a talon. All of the plates have been in use.

British Museum. Purchased, 1809.

2514. A left upper ultimate molar. O. C. 2848.

It possesses nine plates, but is imperfect behind. The six anterior plates have been in use.

Hunterian.

2515. A right lower ultimate molar.

It possesses nine plates, but is imperfect in front, being much worn.

Stores.

2516. A remnant of a much-worn upper molar. O. C. 2856.

It consists of seven plates.

Hunterian.

2517. A remnant of a much-worn upper molar. O. C. 2855.

It consists of five plates.

British Museum.

2518. A remnant of a much-worn molar, longitudinally and vertically bisected. O. C. 2863 and 2864.

One moiety has been polished.

Presented by Sir Everard Home, 1807.

2519. A remnant of a worn molar, consisting of four of the constituent plates. O. C. 2849 and 2850.

Presented by Sir Everard Home, 1807.

2520. Part of a germ of a right upper molar. O. C. 2851.

It includes five plates, the first of which is slightly worn.

Hunterian.

2521. Part of a germ of a lower molar. O. C. 2862.

It includes four plates, the first two of which have coalesced at their base.

Hunterian.

Elephas meridionalis.

Nesti, Ann. Mus. Imp. Firenze, i. 9, t. i. (1808).

Hab. Europe. Pliocene.

2522. Left upper ultimate molar. O. C. F. 596.

Figured and described by Parkinson in his 'Organic Remains,' vol. iii. fig. 6, p. 344; and also in Owen's Brit. Foss. Mamm. fig. 93, p. 239. Parkinson states that it was purchased at the salo of the Calonnian Museum by Mr. George Humphries, and that it was said to have been found in Staffordshire. Falconer describes this tooth in his 'Palæontological Memoirs,' vol. ii. p. 139.

Parkinson Collection. Purchased, 1827.

Elephas meridionalis.

2523. Posterior portion of a longitudinally bisected left upper molar.

From the Forest-bed, Norfolk.

Purchased, 1881.

2524. Section of a molar tooth.

From the Forest-bed, Norfolk.

Purchased, 1875.

2525. Horizontal section of a molar tooth.

From the Forest-bed, Norfolk.

Purchased, 1881.

2526. A similar section to the last.

From the Forest-bed, Norfolk.

Purchased, 1881.

2527. A transverse section of a tusk, probably of this species.

From the Forest-bed, Norfolk.

Purchased, 1874.

Glephas planifrons.

Falconer and Cautley, Fauna Antiqua Sivalensis, pl. ii. figs. 5 a and 5 b, p. 38 (1846).

Hab. India. Plio-Miocene.

2528. A cranium almost complete.

The tusks have been broken off short, and the molar teeth are much worn.

This specimen was in the Museum before 1862, but not catalogued. It may be one of the duplicate specimens of the Falconer and Cautley collection, presented by the British Museum, Jan. 3, 1848, or one of those presented by W. Crozier, Esq., and Captain T. C. Blagrave, as recorded in the Minutes of the Museum Committee, 6 Dec., 1852.

2529. A portion of the right ramus of a mandible, containing the last molar.

This was labelled "E. (Loxodon) planifrons" in Dr. Falconer's handwriting.

In Museum before 1862.

2530. A portion of a mandible containing the last molar.

Received in exchange from the Indian Museum, Calcutta, 1881.

Undetermined Species.

- 2531. A case containing casts of teeth of extinct pygmy Elephants from Malta. Described and figured in the 'Trans. Zool. Soc.' vol. vi. p. 227 et seq. pl. liii. (1865) by Mr. Busk, by whom they have been named as follows:
 - a, b. Deciduous incisor of E. melitensis? (p. 284).

c, d. Antepenultimate lower milk-molars (p. 286).

- e, f. Fragment of probably the penultimate lower milk-molar (p. 287).
- g, h. Left lower penultimate milk-molar (p. 288).
- i, j. Last lower milk-molar of the left side (p. 288).
- k, l. Penultimate upper milk-molar, in germ (p. 289).
- m, n. Fragment of germ of last upper milk-molar.
- o, p. Portion of last upper milk-molar? (p. 290).
- q, r. First upper true molar of E. falconeri? (p. 295).
- s, t. An upper molar of the right side (p. 290, fig. 44).
- u, v. Last (?) lower molar of the left side of E. melitensis? (p. 294).
- w. Greater part of the last lower molar of the right side (p. 291).
- x. Posterior half of the last lower molar of the right side (p. 293).
- y. Portion of a germ of a milk-molar (?).

Presented by George Busk, Esq., 1882.

Section C. STEGODON.

Falconer and Cautley, Quart. Journ. Geol. Soc. 1857, p. 318.

Average ridge-formula of molar series of teeth:—

 $\frac{2}{2}$, $\frac{5}{5}$, $\frac{6 \text{ or } 7}{6 \text{ or } 7}$, $\frac{6 \text{ or } 7}{6 \text{ or } 7}$, $\frac{8}{8 \text{ or } 9}$, $\frac{10 \text{ or } 11}{11 \text{ to } 13}$.

Elephas insignis.

Elephas insignis, Falconer and Cautley, Faun. Ant. Sival. p. 37. Mastodon elephantoides (in part), Clift, Trans. Geol. Soc. 2nd ser. vol. ii. p. 372 (1829).

Hab. Asia. Plio-Miocene.

2532. Cranium, nearly perfect. O.C.F. 663.

The large eancelli which compose the greater bulk of the Elephant's head are well seen in this specimen, filled with petrified material.

From the Tertiary formations of the Sub-Himalayan district of India.

Presented by Walter Ewer, Esq.

2533. A palate with the right and left upper penultimate molars in use and the ultimate molars appearing behind them. O. C. F. 664.

This specimen is mentioned in a footnote to Falconer's 'Palæontological Memoirs,' vol. i. p. 461, as *E. clifti*. It does not agree, however, with the essential characters of that species, as defined by Dr. Falconer, either as regards the disposition of cement or the number of ridges.

From the Sub-Himalayan district of India.

Purchased.

2534. Right ramus of mandible. O. C. F. 665.

Described and figured by Falconer in the 'Fauna Antiqua Sivalensis,' pl. xxiv. A. figs. 3 and 3 a. See also 'Palcontological Memoirs,' vol. i. p. 456.

From the Tertiary formations of the Sub-Himalayan district of India.

Purchased.

2535. Cast of the left ramus of a mandible somewhat mutilated. O. C. F. 666.

The original, in the Museum of the Geological Society, was obtained by Mr. Crawfurd on the left bank of the Irawadi during his mission to the Burman Empire, and was presented by him to the Society.

It is described and figured by Clift as Mastodon elephantoides in the 'Trans. Goolog. Society,' 2nd series, vol. ii. 1829, p. 372, pl. xxxviii. fig. 2; also mentioned and re-named by Falconer, 'Palcont. Mem.' vol. i. pp. 453 and 461, and vol. ii. p. 85; also pl. xx. figs. 9 and 9 a, and pl. xx. A. fig. 6 of the 'Fauna Ant. Sival.'

Presented by the Geological Society about 1828.

2536. Part of the left ramus of a mandible. O. C. F. 667.

Two molar teeth are present. From the Sub-Himalayan district of India.

Purchased.

2537. The right and left rami, somewhat mutilated, of the mandible of a young animal apparently of this species. O. C. F. 669 and 670.

Two molars are in place; the erown of the first has seven transverso ridges, that of the second nine or ten.

From the Sub-Himalayan district of India.

This specimen is mentioned by Falconer (Palæont. Mem. vol. i. p. 469, note 1), and named by him *Mastodon sivalensis*. There appears, however, to be some error regarding it, as it undoubtedly belongs to his subgenus *Stegodon*, and is not a *Mastodon*.

Presented by Thomas Bacon, Esq.

2538. Portion of the left ramus of a mandible, with a molar tooth in situ, vertically and longitudinally bisected. O. C. F. 671.

From the Tertiary formations of the Sub-Himalayan district of India.

Presented by the Rev. E. Everest.

Elephas insignis.

2539. A fragment of the right ramus of a mandible. O. C. F. 675.

From the Sub-Himalayan district.

Presented by the Rev. E. Everest.

2540. Portion of the left ramus of a mandible, longitudinally and vertically divided into three sections to show the structure of the teeth. O. C. F. 668.

From the Sub-Himalayan district.

Presented by the Rev. E. Everest.

- 2541. Portion of a mandible, with the corresponding part of a molar tooth. O. C. F. 674.
- 2542. Cast of a portion of an upper molar. O. C. F. 676.

The original, in the Museum of the Geological Society, was obtained by Crawfurd on the left bank of the Irawadi, Ava.

It is figured and described by Clift as Mastodon elephantoides in Trans. Geol. Soc. 2nd ser. vol. ii. pl. 39. fig. 6, and renamed by Falconer (Palæont. Mem. vol. i. pp. 453 and 461).

Presented by the Geological Society.

2543. Portion of the crown of an upper molar. O. C. F. 672. From the Tertiary formations of the Sub-Himalayan district of India.

Presented by the Rev. E. Everest.

2544. Portion of an ultimate lower molar tooth.

From Northern India.

Received in exchange from the Indian Museum, Calcutta, 1881.

Elephas bombifrons.

Falconer and Cautley, Fauna Antiqua Sivalensis, p. 46.

2545. Cast of a lower ultimate milk-molar.

The original was found in the Siwalik hills of the Punjab, and is figured and described by Lydekker in his Memoirs of the Geological Survey of India, pl. xlv. fig. 3, pp. 83 and 264.

Received in exchange from the Indian Museum, Calcutta, 1881.

Elephas clifti.

Elephas cliftii, Falconer, Faun. Ant. Sivalensis (Palæont. Mem. i. p. 82).

Mastodon elephantoides (in part), Clift, Trans. Geol. Soc. vol. ii. 2nd series, pl. xxxix. fig. 6 (1829).

2546. Cast of an antepenultimate upper molar. O. C. F. 677.

Figured by Clift in the Trans. Geol. Soc. vol. ii. 2nd series, pl. xxxix. fig. 6, and mentioned by Falconer (Palæont. Mem. i. p. 108).

From the Tertiary deposits of the left bank of the Irawadi river, Ava.

Presented by the Geological Society.

Of uncertain Species.

2547. Portion of a tusk of a fossil Elephant. O. C. F. 678.

From the Sub-Himalayan district of India.

Presented by the Rev. E. Everest.

Uncertain Species.

2548. A transverse ridge of a large upper molar, displaying the course of the enamel-fibres on the fractured surfaces. O. C. F. 673.

From the Sub-Himalayan formations at Nahn.

Presented by II. Clarke, Esq., Surgeon, H.E.I.C.

Genus MASTODON.

Cuvier, Ann. du Muséum, tom. viii. p. 270 (1806).

a. Tetralophodont Series.

Usual ridge-formula:-

 $\frac{2}{2}, \frac{3}{3}, \frac{4}{4}, \frac{4}{4}, \frac{4}{4}, \frac{5}{5}.$

Mastodon sibalensis.

Falconer and Cautley, Fauna Antiqua Sivalensis, p. 49 (1846).

Hab. India. Plio-Miocene.

2549. Portion of the left ramus of the mandible with a molar tooth, probably the penultimate. O. C. F. 690.

There are four transverse ridges and a talon, all of which have come into use.

From the Sub-Himalayan district of India.

Purchased.

2550. Portion of a mandible containing part of a molar tooth.

From India.

Received in exchange from the Indian Museum, Calcutta, 1881.

Mastodon longirostris.

Kaup, Oss. Foss. de Darmstadt, iv. p. 65 (1835).

Hab. Europe. Miocene.

2551. Cast of portion of the right maxilla of a very young animal, showing the antepenultimate molar with two ridges, and the penultimate and ultimate molars each with four ridges. O. C. F. 693.

The original, from which this cast was taken, was found at Epplesheim, Hesse Darmstadt, and is in the possession of the Earl of Enniskillen. It is figured by Kaup, op.cit. pl. xx. fig. 2, and also by Falconer, 'Fauna Antiqua Sivalensis,' pl. xl. figs. 6 & 6 a.

Presented by Dr. Kaup.

2552. Cast of the palatal and alveolar portions of the maxillary bones, with the antepenultimate molar of the right side and the penultimate molars of both sides. O. C. F. 694.

From a specimen found at Epplesheim.

Presented by Dr. Kaup.

2553. Cast of a large portion of the maxillaries, showing the whole palate with the ultimate and penultimate molars of both sides. O. C. F. 695.

The original was found at Epplesheim.

Presented by Dr. Kaup.

2554. Cast of the crown of a molar which has not come into use. O. C. F. 696.

The original is from Epplesheim.

Presented by Dr. Kaup. 2 K

PART IJ.

Mastodon longirostris.

2555. Crown of a right lower ultimate molar.

History unknown.

In Museum before 1862.

2556. Cast of a portion of a mandibular tusk. O. C. F. 704.

The original was found at Epplesheim.

Presented by the Earl of Enniskillen.

Mastodon latidens.

Clift, Trans. Geol. Soc. 2nd ser. vol. ii. p. 371 (1829).

2557. Cast of portion of the right maxilla with the ultimate and penultimate molars. O. C. F. 686.

The penultimate molar has four ridges, the auterior of which is much worn; the ultimate has five ridges and a talon on the last ridge.

The original, from which this east was taken, is the type of the species, and was described and figured by Clift in the 'Trans. Geol. Soc.' 2nd series, vol. ii. p. 368, pl. xxxvii. fig. 1, and also figured by Falconer in the 'Fauna Antiqua Sivalensis,' pl. xxxi. figs. 3 & 3 a. It was obtained by Mr. Crawfurd during his mission to the Burman Empiro, on the left bank of the river Irawadi, and is now in the Muscum of the Geological Society.

Presented by the Geological Society.

2558. Cast of part of the right ramus of a mandible with the ultimate molar. O. C. F. 688.

The original, from which this was taken, is described and figured by Clift in the 'Trans. Geol. Soc.' 2nd series, vol. ii. p. 368, pl. xxxviii. fig. 1, and also by Falconer, 'Fauna Antiqua Sivalensis,' pl. xxx. figs. 6, 6 a. It was obtained by Mr. Crawfurd on the left bank of the river Irawadi, and presented by him to the Museum of the Geological Society of London.

Presented by the Geological Society.

2559. Cast of a fragment of a molar presenting two unworn ridges. O. C. F. 689.

Figured by Clift, 'Trans. Geol. Soc.' 2nd ser. vol. ii. pl. xxxvii. fig. 4, and by Falconer, 'Fauna Antiqua Sivalensis,' pl. xxxi. figs. 5 & 5 a.

From an original in the Museum of the Geological Society, obtained by Mr. Crawfurd on the left bank of the Irawadi.

Presented by the Geological Society.

2560. Cast of a right upper molar. O. C. F. 687.

Figured by Falconer in the 'Fauna Antiqua Sivalensis,' pl. xxxi. figs. 2 & 2 a.

The original, collected by Mr. Crawfurd on the left bank of the Irawadi, is in the Museum of the Geological Society.

Presented by the Geological Society.

2561. A portion of a last lower molar.

From India.

Received in exchange from the Indian Museum, Calcutta, 1881.

Mastodon arbernensis.

Croizet et Jobert, Recherches sur les Ossemens Fossiles du Département du Puy-de-Dôme, p. 138 (1828).

Hab. Europe. Miocene.

2562. Cast of a portion of a mandibular tusk from the fluviomarine Crag, Norwich.

The original is in the possession of R. Fitch, Esq., of Norwich, and is figured in Owen's 'British Fossil Mammals and Birds,' fig. 101, p. 291.

Presented by Robert Fitch, Esq.

Mastodon arbernensis.

2563. Crown of a molar, longitudinally and vertically bisected and polished.

From the Suffolk Crag.

Baker Collection. Purchased, 1875.

2564. Cast of the crown of a left lower molar. O.C. F. 691.

The original was found in the fluvio-marine Crag of Norfolk.

Presented by Robert Fitch, Esq.

2565. A polished section of a fragment of a molar.

From the "bone-bed" at the base of the Red Crag, Suffolk.

Purchased, 1874.

2566. Cast of the crown of a left lower molar which seems to be indistinguishable from this species. O. C. F. 692.

From the Miocene Tertiary formations of Baltimore, U.S. America.

Presented by Dr. Richard Harlan.

b. Trilophodont Series.

Usual ridge-formula :-

 $\frac{1}{1}, \frac{2}{2}, \frac{3}{3}, \frac{3}{3}, \frac{4}{3}, \frac{4}{4}.$

Mastodon americanus.

Elephas americanus, Cuvier, Tabl. Elém. Hist. Nat. p. 149 (1798); Mém. de l'Institut, ii. Mémoires, p. 21 (1799).

Mammut ohioticum, Blumenbach, Handb. der Naturgesch. 6th ed. p. 698 (1799) *.

Mastodon giganteum, Cuvier, Règne Animal, i. p. 233 (1817).

Hab. North America. Pleistocene.

* From Leidy, who gives a very copious synonymy of this species. "Synopsis of Extinct Mammals of North America," Journ. Acad. Nat. Sc. Philadelph. 2nd series, vii. p. 392 (1869).

2567. Cast of a mutilated cranium.

The ultimate melars have been newly acquired, the anterior plates only having come into use. The sockets of the penultimates remain as well as those of the tusks.

The original from which this cast was taken is in the British Museum.

Presented by the Trustees of the British Museum.

2568. Cast of a very perfect skull of a young animal.

The ultimate milk-molars and the antepenultimate true molars are present on each side of the maxillæ and mandible, and are three-ridged. The seekets of the penultimate milk-molars are present, and the crowns of the penultimate true molars are just appearing.

Presented by Dr. John C. Warren of Boston, 1852.

2569. Right ramus of a mandible. O. C. F. 716.

The ultimate and penultimate molars are in place; the former has five ridges, the latter three; the socket of the antepenultimate molar remains.

From the neighbourhood of the river Ohio *.

Purchased.

2570. Imperfect left ramus of a mandible. O. C. F. 715.

The ultimate and penultimate molars are present. The last molar has five ridges, the penultimate three.

From near the river Missouri.

Bullock's Collection. Purchased, 1820.

2571. Imperfect left ramus of a mandible. O. C. F. 719.

The ultimate molar (which is of smaller size than the same

^{*} See note to p. 465.

Mastodon americanus.

tooth in the previous specimen) is in situ, with the socket of the penultimate molar.

From the Ohio.

Purchased.

2572. An imperfect right ramus of a mandible. O. C. F. 720.

The ultimate molar is present.

From the Ohio.

Purchased.

2573. Left ramus of a mandible, with part of the symphysis and the last molar in situ. O. C. F. 718.

From the Ohio.

Purchased.

2574. A portion of the right ramus of a mandible, with the last molar much worn. O. C. F. 721.

From the Ohio.

Hunterian.

2575. A portion of the right ramus of a mandible, with the antepenultimate and penultimate molars in situ and the socket of the last molar. O. C. F. 714.

From the Ohio.

Purchased.

2576. A portion of the maxilla and palate, with the left antepenultimate and penultimate molars in situ. O. C. F. 711.

Hunterian.

2577. Cast of the mandible of a young animal, with the milk-dentition present. O. C. F. 712.

The antepenultimate, penultimate, and ultimate milk-molars are present in the left ramus, and in the right the antepenultimate milk-molar is absent, but the antepenultimate true molar is present. The left tusk is *in situ*, but the right has fallen out, though its socket still remains.

The original of this specimon is presorved in Peel's Museum, New York, and was first described by Dr. Godman as the type of the genus of Proboseidians to which he gave the name *Tetracaulodon*, in the 3rd vol. of the New Serios of the 'Transactions of the American Philosophical Society.' It has likewise been figured and described by Isaac Hays in the 4th vol. of the samo work, pl. 26. figs. 1 & 2. It is from the post-tertiary deposits about twelve miles from Newbury, in Orange County, New York.

Presented by the Geological Society.

2578. Cast of the mandible of a young animal with the milk-dentition.

The ultimate milk-molar has three transverse ridges, the penultimate two, with a talon on the second ridge, and the antepenultimate two ridges. The sockets of two incisors are present in the anterior part of the symphysis.

In Museum before 1862.

2579. A portion of the right ramus of a mandible, showing the sockets of the penultimate and last molar teeth. O. C. F. 717.

From the Ohio.

Purchased.

2580. Symphysis of the mandible of a young animal, showing the remains of the alveoli of the two deciduous incisors. O. C. F. 713.

From the Ohio.

Mastodon americanus.

Detached Teeth.

2581. The basal conical lamellæ of a tusk. O. C. F. 742.

From Kentucky.

Purchased.

2582. A tusk, nearly complete, of a young or female animal. O. C. F. 743 and 744.

From Kentucky.

Purchased.

2583. A tusk, nearly complete, of a young or female animal. O. C. F. 745.

It measures 61 cm. in length, by 31.5 cm. in circumference at the base.

From the neighbourhood of the Missouri.

Purchased.

2584. A tusk, nearly complete.

It is 68 cm. long, without the terminal part, which has been broken off.

In Museum before 1862.

2585. A portion of a tusk. O. C. F. 746. From the Ohio.

Purchased.

2586. A portion of a tusk, one half of which has been worn away lengthwise. O. C. F. 747.

From the Ohio.

Purchased.

2587. A portion of a tusk worn in a similar manner, with the pulpcavity laid open. O. C. F. 749.

The marks of abrasion in this and the previous specimen

are most probably due to inorganic forces acting after death.

From the Ohio.

Purchased.

2588. An upper ultimate molar. O. C. F. 722.

It has four transverse ridges, and a talon attached to the last.

From the Ohio.

Hunterian.

2589. An upper ultimate molar. O. C. F. 723.

It has four ridges, the last of which is rather small, and with a talon attached to it.

From the Ohio.

Bullock's Collection. Purchased, 1820.

2590. An upper ultimate molar. O. C. F. 724.

It has five transverse ridges, and a very small talon attached to the last.

From the Ohio.

Hunterian.

2591. An upper ultimate molar. O. C. F. 725.

It has four transverse ridges, and a talon attached to the last. The grinding-surface has been abraded by mastication, and the whole of the inner surface of the tooth worn away and polished by some aecidental eircumstance connected with the stratum in which the tooth was embedded.

From the Ohio.

Bullock's Collection. Purchased, 1820.

2592. A lower ultimate molar. O. C. F. 727.

It has five ridges, and a talon attached to the last. From the Ohio.

Mastodon americanus.

2593. A right lower ultimate molar. O. C. F. 726.

It has four ridges, and a talon on the last. From the Ohio.

Purchased.

2594. A lower ultimate molar, in perfect condition.

It has five ridges, and a small talon on the last.

In Museum before 1862.

2595. An ultimate molar.

It has four ridges and a talon, much worn on the grinding-surface.

In Museum before 1862.

2596. An ultimate molar.

One half of the crown has been broken off.

In Museum before 1862.

2597. A left lower ultimate molar. O. C. F. 729.

It has four transverse ridges and a talon. From the Ohio.

Purchased.

2598. A left lower ultimate molar. O. C. F. 730.

It has four transverse ridges and a talon. From the Ohio.

Purchased.

2599. An ultimate lower molar of the left side, longitudinally and vertically bisected. O. C. F. 728.

It has four transverse ridges and a talon. From the Ohio.

2600. The posterior half of a right lower ultimate molar. O. C. F. 731.

From the Ohio.

Purchased.

2601. The crown of an ultimate molar, the roots of which had not yet been developed. O. C. F. 737.

From near the river Missouri.

Presented by S. P. Pratt, Esq.

2602. A left upper antepenultimate molar of a young animal. O. C. F. 733.

The base, in which the indentations indicative of the three roots have just begun to appear, is a thin shell of dentine bounding a large and widely open pulp-cavity.

From the Ohio.

Purchased.

2603. The corresponding molar of the right side, apparently of the same animal, with one extremity vertically split off. O. C. F. 734 and 735.

The detached portion shows the thickness of the enamel and the direction of its fibres and also that of the dentinal tubes. From the Ohio.

Purchased.

2604. An intermediate molar, further advanced in its development, as indicated by the commencement of the formation of the divisions of the roots. O. C. F. 738.

From the Ohio.

Mastodon americanus.

2605. A left lower antepenultimate molar, fully developed. O. C. F. 739.

From the Ohio.

Hunterian.

2606. A much-worn intermediate molar. O. C. F. 740. From the Ohio.

Purchased.

2607. A similar but still more worn molar. O. C. F. 741. From the Ohio.

Purchased.

Bones.

2608. An atlas vertebra. O.C. F. 750. From the Ohio.

Purchased.

2609. An atlas vertebra.

Purchased.

2610. An atlas vertebra. O. C. F. 751.

From the Ohio.

Purchased.

2611. An axis vertebra. O. C. F. 752. From the Ohio.

Purchased.

2612. A fourth cervical vertebra. O. C. F. 753. From the Ohio.

2613. A dorsal vertebra, wanting the spinous process. O. C. F. 754.

Locality unrecorded.

Hunterian.

2614. The neural arch and spine of an anterior dorsal vertebra, somewhat mutilated. O. C. F. 755.

From the Ohio.

Purchased.

2615. The base of a spine of an anterior dorsal vertebra. O. C. F. 756.

From the Ohio.

Purchased.

2616. An imperfect os sacrum. O. C. F. 757. From the Ohio.

Purchased.

2617. A portion of an os sacrum. O. C. F. 758. From the Ohio.

Purchased.

2618. Eight fragments of ribs. O. C. F. 759 to 766. From the Ohio.

Purchased.

2619. A manubrium sterni. O. C. F. 767. From the Ohio.

Purchased.

2620. A left humerus, almost complete, except the proximal extremity. O. C. F. 769.

From the Ohio.

Bullock's Collection. Purchased, 1820.

Mastodon americanus.

2621. A portion of the head of a left humerus. O. C. F. 768. From the Ohio.

Purchased.

2622. The distal extremity of a left humerus. O. C. F. 770. From the Ohio.

Purchased.

2623. A right ulna. O. C. F. 771. From the Ohio.

Purchased.

2624. A left os cuneiforme. O. C. F. 772. From the Ohio.

Purchased.

2625. A right second metacarpal. O. C. F. 773. From the Ohio.

Purchased.

2626. A right third metacarpal. O. C. F. 774.

Purchased.

2627. A left fourth metacarpal. O. C. F. 656.

From the Pleistocene deposits of the Ohio. From Bullock's Collection, entered as belonging to the Mammoth.

Purchased, 1820.

2628. A left fifth metacarpal bone of a much larger animal. O. C. F. 775.

From the Ohio.

2629. The greater portion of a right innominate bone. O. C. F. 776.

From the Ohio.

Bullock's Collection. Purchased, 1820.

2630. A right innominate bone of a smaller animal, not quite complete. O.C. F. 777.

From the Ohio.

Purchased.

2631. A left innominate bone, apparently belonging to the same animal as the previous specimen. O. C. F. 778.

From the Ohio.

Purchased.

2632. A left femur, complete. O. C. F. 779.

It is 90 cm. long. From the Ohio.

Purchased.

2633. The proximal end of a femur. O. C. F. 781.

From the Ohio.

Purchased.

2634. The distal end of a right femur. O. C. F. 782. From the Ohio.

Purchased.

2635. The distal epiphysis of a left femur. O. C. F. 783.

From the Ohio.

Purchased.

2636. A right patella. O. C. F. 784. From the Ohio.

Mastodon americanus.

2637. A portion of the thick compact part of a femur. O. C. F. 785.

From Kentucky.

Purchased.

2638. A right tibia. O. C. F. 786. From Kentucky.

Purchased.

2639. A left tibia, probably of the same animal. O. C. F. 787. From Kentucky.

Purchased.

2640. A right tibia of large size. O. C. F. 788.

It is about 68 cm. long.

From the Ohio.

Purchased.

2641. A left astragalus. O. C. F. 789. From the Ohio.

Purchased.

2642. A right os calcis. O. C. F. 790.

From the Ohio.

Purchased.

Mastodon borsoni.

Hays, Trans. Am. Phil. Soc. new series, iv. p. 334 (1834). Hab. Europe. Miocene.

2643. Cast of an intermediate left upper molar.

The original, which was found in the Red Crag near Woodbridge, Suffolk, is now in the possession of Mr. Reed, of York, and has been described and figured by Prof. E. R. Lankester in the 'Journal of the Geological Society,' 1870, xxvi. p. 507, pl. xxxiv.

Purchased, 1877.

2644. Cast of a first milk-molar, probably of this species.

The original, in the collection of the Rev. H. Canham, was obtained from the bone-bed at the base of the Red Crag, near Woodbridge, Suffolk.

Presented by the Rev. H. Canham.

Mastodon angustidens.

Mastodonte à dents étroites, Cuvier, Ann. du Mus. viii. p. 412 (1806).

Hab. Europe. Miocene.

2645. Cast of a penultimate upper molar. O. C. F. 698.

The original was discovered at Simorre, and is described and figured by Cuvier in the 'Ossemens Fossiles,' ed. 1821, tom. i. p. 255, and pl. i. fig. 4. It is also figured by Falconer in the 'Fauna Antiqua Sivalensis,' pl. xl. figs. 9 and 9 c. Seo also 'Palæont. Mem.' vol. i. p. 89.

Presented by Baron Cuvier.

2646. Cast of a lower antepenultimate molar. O. C. F. 697.

The original of this cast was transmitted from Saxony by Prof. Hugo, of Göttingen, to Bernard de Jussieu.

Cuvier has figured it in the 'Ossemens Fossiles,' 1821, tom. i. pl. ii. fig. 11, and has noticed it at page 267.

Presented by Baron Cuvier.

2647. Crown of an upper antepenultimate molar. O. C. F. 699. From the Miocene formations of the south of Franco.

Purchased.

2648. Portion of a much-worn molar tooth, probably of this species. O. C. F. 700.

Locality unrecorded.

Hunterian.

PART II.

Mastodon andium.

Mastodonte des Cordilières, Cuvier, Ann. du Mus. viii. p. 413 (1806).

2649. Unworn crown of a left lower penultimate molar.

This is the specimen described and figured by Prof. Owen as "a fossil molar tooth of a Mastodon discovered by Count Strzlecki in Australia," *Mastodon australis*, Owen, Ann. & Mag. Nat. Hist. Oct. 1844, vol. xiv. p. 268, and referred by Falconer to *M. andium*; see 'Palæont. Mem.' vol. ii. p. 271, where its characters and probable origin are fully discussed.

Presented by Count Strzlecki.

The following specimens have been assigned by Prof. Owen to this species, and are therefore retained under the name, though, owing to their imperfect condition, it is impossible to identify them with certainty.

2650. Portion of the ramus of a mandible with a molar tooth much worn. O. C. F. 707.

From Tarija, Upper Peru.

Purchased.

2651. Fragment of an upper molar tooth. O. C. F. 705. From a Tertiary deposit in South America.

Presented by Charles Darwin, Esq.

2652. Portion of a molar tooth. O. C. F. 706.

From Tarija, Upper Peru.

Purchased.

2653. Proximal half of a right femur. O. C. F. 708. From Tarija, Upper Peru.

2654. Distal half of a right tibia, broken longitudinally and vertically. O. C. F. 710.

From Tarija, Upper Peru.

Purchased.

Family DINOTHERIIDÆ.

Genus DINOTHERIUM.

Kaup, Isis, xxii. p. 401 (1829).

Dentition:—i. $\frac{0}{1}$, e. $\frac{0}{0}$, p. $\frac{2}{2}$, m. $\frac{3}{3}$, =22. All present at the same time, there being no horizontal succession, and the premolars replacing milk-molars in the ordinary manner. The presence of incisors in the upper jaw has not been proved.

Dinotherium pentapotamiæ.

Falconer, MS. See Lydekker, Indian Tertiary and Post-tertiary Vertebrata, i. p. 54 (1876).

2655. Cast of a lower ultimate molar.

The root supporting the first ridge is wanting. From the Sewalik hills.

Received in exchange from the Indian Museum, Calcutta, 1881.

Dinotherium giganteum.

Tapir gigantesque, Cuvier, Ossem. Foss. ii. pt. 1, pp. 165-175 (1822).

Dinotherium giganteum, Kaup, Isis, vol. xxii. p. 401 (1829).

The following easts of *Dinotherium giganteum* were presented by Dr. J. Kaup, except where otherwise stated, and were taken from specimens discovered by him at Epplesheim, Hessen-Darmstadt, and now in the Museum of Darmstadt.

2656. Cast of the palatal and alveolar portions of the upper jaw of a young animal, with the ultimate and penultimate

Dinotherium giganteum.

milk-molars and the first permanent molar present on each side. O. C. F. 791.

The original is figured and described by Kaup in his 'Ossemens Fossiles du Muséum de Darmstadt,' 1^r cah. pl. i. p. 4 (1832).

2657. Cast of the crown of the penultimate permanent premolar of the left side, which was removed from the closed alveolus in the preceding specimen. O. C. F. 792.

Specimen figured by Kaup, op. cit. pl. iii. fig. 5.

- 2658. Cast of the crown of the ultimate permanent premolar of the left side, which was removed from the closed alveolus of the same specimen. O. C. F. 793.
- 2659. Cast of the anterior part of the palatal and alveolar processes of the upper jaw of a mature animal, with the ultimate and penultimate premolars of the left side, and the penultimate premolar of the right side in place. O. C. F. 794.
- 2660. Cast of a portion of the right maxilla with three true molars in situ. O. C. F. 795.

Figured and described by Kaup, op. cit. pl. ii. fig. 1, p. 6.

- 2661. Cast of the left ramus of a mandible, with the penultimate and antepenultimate molars, and the ultimate and penultimate premolar in place. The incisor tusk is also present. O. C. F. 796.
- 2662. Cast of the left ramus of a mandible, with the ultimate, penultimate, and antepenultimate molars, and the ultimate and penultimate premolars. The incisor tusk is present. O. C. F. 797.

2663. Cast of a larger left ramus of a mandible in two pieces, with the symphysis complete. O. C. F. 798.

The ultimate and penultimate true molars only are present; the left tusk is complete, but the right has been broken at the junction of its middle and proximal thirds.

This specimen is figured by Kaup in 'Ossemens Fossiles,' 1^rcah. pl. iv., as originally restored, with the onds of the tusks pointing upwards, an error which Kaup afterwards corrected.

- 2664. Cast of a first milk-molar of the upper jaw. O. C. F. 799.
- 2665. Crown of a right upper third (ultimate) milk-molar. O. C. F. 800.

In the original Hunterian Catalogue this tooth is described as "part of a grinder without the root, consisting of three risings or prominences, of a Hippopotamus."

Locality unrecorded.

Hunterian.

- 2666. Cast of a left upper penultimate premolar. O. C. F. 801. Figured by Kaup, pl. ii. fig. 6.
- 2667. Cast of the crown of a left upper ultimate premolar. O. C. F. 802.
- 2668. Cast of the crown of a left upper ultimate premolar. O. C. F. 803.
- 2669. Cast of a right upper ultimate premolar, much worn. O. C. F. 804.

Figured by Kaup, pl. ii. fig. 4.

2670. Cast of the crown of a right upper antepenultimate molar. O. C. F. 805.

Binotherium giganteum.

2671. Cast of a left upper penultimate molar. O. C. F. 806.

2672. Cast of the crown of a similar molar which has been crushed by some geological force in the stratum in which it was imbedded. O. C. F. 807.

The original of this tooth is in the possession of the Earl of Enniskillen, and was obtained from Epplesheim.

Presented by the Earl of Enniskillen.

2673. Cast of the crown of a right lower ultimate milk-molar. O. C. F. 808.

Figured by Kaup, op. cit. pl. iii. fig. 8.

2674. Cast of the crown of a left lower antepenultimate molar. O. C. F. 810.

Figured by Kaup, op. cit. pl. v. fig. 3.

2675. Cast of a left inferior antepenultimate molar. O. C. F. 811.

Figured by Kaup, op. cit. pl. iii. fig. 7.

- 2676. Cast of a left inferior ultimate molar. O. C. F. 814. Figured by Kaup, op. cit. pl. iii. fig. 6.
- 2677. Cast of an unworn crown of a left inferior ultimate molar. O. C. F. 816.
- 2678. Cast of a much-worn right inferior ultimate molar. O. C. F. 817.

2679. Cast of a cranium somewhat imperfect in its facial and anterior parts.

The original is in the Paris Museum, and was found at Samaran, Département du Gers. Three molars and two premolars are present on each side, all of which agree entirely in character with the specimens from Epplosheim.

Presented, per Prof. Gervais, by the Museum of Natural History of Paris, 1870.

2680. Cast of the crown of a left lower penultimate molar. O. C. F. 812.

The original was discovered 6 feet below the surface of the ground in a stratum of Mioceno tertiary sand at Arbeichan near Auch, Département du Gers, and is figured and described by Cuvier in the 'Ossemens Fossiles,' ed. 1822, tom. ii. pt. 1, p. 166.

Presented by Baron Cuvier.

2681. Cast of the worn crown of a left lower penultimate molar. O. C. F. 813.

The original, the origin of which is unknown, is described and figured by Cuvier in the 'Ossemens Fossiles,' tom. ii. pt. 1, p. 166, pl. iv. fig. 3.

Presented by Baron Cuvier.

2682. A model of the cranium and mandible with complete dentition, much reduced in size.

In Museum before 1862.

The following specimens were formerly named *Dinotherium* cuvieri, Kaup. The later researches of Kaup, as well as the observations of de Blainville and Falconer, show that the species can be no longer retained, as the specimens by which it is represented only differ from those of *D. giganteum* in size. See Falconer, Palæont. Mem. vol. i. p. 408.

2683. Casts of both rami of a mandible. O. C. F. 819.

The right ramus contains three posterior molars and the socket of the fourth in advance; the left ramus has four teeth.

Binotherium giganteum.

Described by Bourjot (Comptes Rendus, 1838, p. 1081), and figured by Gervais, 'Zoologic et Paléontologie françaises' (1859), pp. 70 & 71.

From Chevilly.

Presented by the Professors of the Museum of Natural History, Paris.

2684. Cast of a right lower ultimate milk-molar. O. C. F. 809.

The original was discovered in the Miocene tertiary formations at Chevilly in the plain of Beauce, near Orleans; described and figured by Cuvier, 'Ossemens Fossiles,' 1822, tom. ii. pt. 1, p. 171, pl. iv. fig. 5, and referred to by Kaup, 'Ossemens Fossiles du Darmstadt,' 1^r cah. p. 15.

Presented by Baron Cuvier.

2685. Cast of a right inferior penultimate molar. O. C. F. 821.

The original was discovered in the Miocene strata at Chevilly; described and figured by Cuvier in the 'Ossemens Fossiles,' 1822, tom. ii. pt. 1, p. 170, pl. iv. fig. 1, and referred to by Kaup, 'Ossemens Fossiles du Darmstadt,' 1^r cah. p. 15.

Presented by Baron Cuvier.

2686. Cast of the crown of a right upper ultimate premolar. O. C. F. 818.

The original is mentioned by Kaup in 'Ossem. Foss. du Darmstadt,' 1^r cah. p. 15, and compared with Cuvier's specimen figured in 'Ossemens Fossiles,' tom. ii. 1822, pt. 1, pl. viii. fig. 4. From Epplesheim.

Presented by Dr. Kaup.

2687. Cast of the crown of a left lower ultimate molar, imperfect in front. O. C. F. 820.

From Epplesheim.

Presented by Dr. Kaup.

Order SIRENIA.

Family HALICORIDÆ.

Genus HALICORE.

Illiger, Prodrom. Syst. Mamm. et Av. p. 140 (1811).

Halicore dugong.

Trichechus dugung, Erxleben, Syst. Reg. Animal. p. 599 (1777). Trichechus dugong*, Gmelin, Syst. Nat. i. p. 60 (1788).

THE DUGONG.

Hab. The Indian Ocean and its dependencies, from the Red Sea to Northern Australia.

2688. Articulated skeleton. O. C. 2543 and 2547.

It is uncertain whether the skull belongs to the same animal as the rest of the skeleton.

Vertebræ: C. 7, D. 19, L. 4, C. 17 (incomplete).

Length 6 feet 9 inches (2.060 m.).

From Sumatra.

Presented by Sir T. Stamford Raffles.

2689. Incomplete skeleton of female. O. C. 2553 to 2625.

Vertebræ: C. 7, D. 18, L. 4, C. 20.

From Sumatra.

Presented by Sir T. Stamford Raffles.

^{*} This mode of spelling has been generally adopted.

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Halicore dugong.

2690. Incomplete skeleton of male. O. C. 2546.

The sockets of three molar teeth arc present on each side of each jaw.

Vertebræ: C. 7, D. 19, L. 3 (1 wanting), C. 23 (incomplete). From Sumatra.

Presented by Sir T. Stamford Raffles.

2691. Incomplete skeleton of young, Q.

In Museum before 1862.

2692. Incomplete skeleton of a younger animal, ♀. O. C. 2549.

The sockets of four molars are present in the mandibles. In the upper jaw there are five well-marked sockets on either side, and apparently the remains of a sixth in front.

Vertebræ: C. 7, D. 18, L. 5, C. 22 (incomplete).

Presented by the Zoological Society, 1831.

2693. Articulated skeleton of young, ♀. O. C. 2544.

Four molar teeth have been acquired in each jaw, though not completely developed. The germ of the last molar can be seen in its socket. The deciduous tusks are present, together with their permanent successors.

Vertebræ: C. 7, D. 19, L. 5, C. 27.

From Sumatra.

Presented by Sir T. Stamford Raffles.

2694. Skull of male. O. C. 2545.

The molar teeth arc reduced to two on each side of both jaws, except on the left side of the mandible, where a third is present in front of the others.

From the Indo-Malayan Archipelago.

Presented by Hugh Cuming, Esq.

2695. Skull of young, J. O. C. 2548.

The cranium has been longitudinally and vertically bisected,

and on the left side the roots of the teeth have been exposed by the removal of the bone covering their inner surfaces. A section of the tusk has also been made, and its root exposed in situ. There are five sockets on each side of the jaw for the molars.

Presented by Professor Owen.

2696. Mutilated skull of young, Q.

The sockets of six teeth are present in each side of the maxilla, and those of five in the mandible.

In Museum before 1862.

2697. Articulated skeleton of female. O. C. 2632.

Length 7 feet (2.130 m.).

The deciduous upper tusks have not been shed. The alveolar wall of the left permanent tusk has been removed to show it and the deciduous tusk in situ.

Vertebræ: C. 7, D. 19, L. 4, C. 27: total 57. From Shark's Bay, North Australia*.

Presented by Lieut. Helpman, R.N., 1851.

2698. Skull, J. O.C. 2633.

Only two molars are present on each side, and in both jaws.

From Australia.

Purchased, 1852.

2699. Skull, ♀.

The milk-tusk on the left side is still retained in front of the permanent tusk.

From Queensland.

Presented by E. Thorne, Esq., 1872.

^{*} The Australian Dugong has been described by Prof. Owen as a distinct species under the name of *Halicore australis* (Jukes, Voyage H.M.S. 'Fly,' ii. p. 323, 1847).

524 SIRENIA.

Halicore dugong.

2700. Skull, ♀. O. C. 2634.

From Port Essington, North Australia.

Presented by J. B. Jukes, Esq.

2701. Skull. O. C. 2635.

There are sockets for six teeth of the molar series on each side of both maxillæ and mandible. The sockets of the deciduous tusks are present as well as the germs of their permanent successors.

Presented by J. B. Jukes, Esq.

2702. Mutilated skull, young 9.

Locality unknown.

In Museum before 1862.

2703. Mandible.

In Museum before 1862.

2704. Tympanic and periotic bones and auditory ossicles. O. C. 2550.

Presented by Sir T. Stamford Raffles.

2705. Periotic bones and auditory ossicles. O. C. 2551.

Presented by Sir T. Stamford Raffles.

2706. Auditory ossicles. O. C. 2552.

Presented by Sir T. Stamford Raffles.

2707. Pair of tusks.

Presented by R. J. Hulme, Esq.

2708. Upper tusk of male. O. C. 2626.

Presented by Professor Owen.

2709. Upper tusk of female. O. C. 2627.

Presented by Professor Owen.

2710. Rudimentary or abortive incisor of mandible of adult male. O. C. 2628.

Presented by Professor Owen.

2711. Second, third, fourth, and fifth upper and lower molar teeth. O. C. 2629.

Presented by Sir T. Stamford Raffles.

2712. Molar tooth, vertically bisected, and with the cut surfaces polished. O. C. 2630.

Presented by Sir Everard Home.

2713. Polished transverse section of a molar tooth. O. C. 2631.

Presented by Sir Everard Home.

2714. Left scapula and a rib.

From Freemantle, Western Australia.

Purchased, 1871.

The following specimens (to No. 2720 inclusive) from North Australia were presented by J. B. Jukes, Esq.

2715. Penultimate molar. O. C. 2636.

2716. Ultimate molar of old animal. O. C. 2637.

A small bony tumour is attached to one margin of its base.

2717. Tusk of female. O. C. 2638.

The pulp-cavity is almost obliterated.

2718. Eight ribs. O. C. 2639 to 2644.

526 SIRENIA.

Halicore dugong.

2719. Right and left scapulæ. O. C. 2645.

2720. Tympanic and periotic bones with the malleus and incus. O. C. 2646.

Family HALITHERIIDÆ.

Genus HALITHERIUM.

Kaup, Neucs Jahrbuch f. Mineralogie, &c. 1838, pp. 319 & 536.

Halitherium canhami.

Flower, Quarterly Journal of the Geological Society, xxx. p. 1, pl. i. (1874).

2721. Cast of a mutilated and water-worn cranium.

The original (the type of the species, and interesting as presenting the first-discovered evidence of the former existence of Sirenia in England) was found in the bone-bed underlying the Red Crag at Foxhall, near Woodbridge, Suffolk, and is now in the Canham collection in the Ipswich Museum. It is described and figured as above.

Presented by the Rev. H. Canham, 1873.

2722. Cylindrical portion of bone which appears to be the distal end of a rib of *Halitherium*.

From the bone-bed at the base of the Red Crag, Suffolk.

Presented by Professor Flower.

Of uncertain Species.

2723. Cast of pelvic bone.

The original was found at Flonheim, near Darmstadt.

Presented, per Professor Gervais, by the Museum of Natural History of Paris, 1870.

2724. Four portions of ribs.

From Decatur Co., Georgia, U.S.A.

Presented by Sir Charles Lyell, 1868.

2725. Transverse process of vertebra and eleven portions of ribs.

From Sanderville, Georgia, U. S. A.

Presented by Sir Charles Lyell, 1868.

2726. Portion of base of skull, and fragments of vertebræ and ribs, of dark colour.

From the Upper Miocene at La Chausserie, Rennes, Brittany.

Presented by Sir Charles Lyell, 1866.

2727. Four portions of ribs.

These specimens are of a yellowish-brown colour, but are said to have come from the same locality.

Presented by Sir Charles Lyell, 1866.

Family RHYTINIDÆ.

Genus RHYTINA.

Rytina, Illiger, Prod. Syst. Mammal. et Av. p. 141 (1811).

Rhytina gigas.

Manati gigas, Zimmermann, Geogr. Geschiehte, ii. p. 426 (1780). Trichechus manatus, var. borealis, Gmelin, Syst. Nat. i. p. 61 (1788).

Trichechus borealis, Shaw, General Zoology, i. p. 240 (1800).

Rytina stelleri, Desmarest, Nouv. Dict. d'Hist. Nat. xxix. p. 574 (1819).

STELLER'S RHYTINA.

Hab. North Pacific. Recently extinct.

Rhytina gigas.

2728. Model of skull.

From the original in the Zoological Museum of the Imperial University of Moscow.

Presented by M. Anatole Bogdanow, Director of the Museum, 1876.

Family MANATIDÆ.

Genus MANATUS.

Storr, Prod. Meth. Mamm. p. 41 (1780); Illiger, Prod. Syst. Mamm. et Av. p. 140 (1811).

Manatus americanus.

Trichechus manatus, var. australis (in part), Gmelin, Syst. Nat. i. p. 60 (1788).

Trichechus australis (in part)*, Tilcsius, Tiles. Jahrbuch der Naturgeschichte, i. p. 23 (1802).

Lamantin d'Amérique, Cuvier, Ann. du Muséum, xiii. p. 282 (1809).

Manatus americanus (ex Cuv.), Desmarest, Nouv. Dict. d'Hist. Nat. xvii. p. 262 (1817).

THE AMERICAN MANATEE.

Hab. Coasts and rivers of eastern side of Tropical America.

2729. Articulated skeleton.

Vertebræ: C. 6, D. 17, L. 2, C. 23. Length 8 feet 7 inches (2.640 m.). From the south coast of Cuba.

Presented by Henry Christy, Esq., 1863.

* This name belongs properly to the African species (if distinct), as that locality is mentioned first both by Gmelin and Tilesius, and is the only one given by Shaw (1800). Cuvier first distinguished the two forms by their osteological characters, and his names, subsequently Latinized by Desmarest, are the most convenient. Some authors believe that there are more than one distinct species in America—in which case Cuvier's name should be retained for the one from Cayenne, as it was founded on a skeleton from that locality.

2730. Articulated skeleton of young female. O. C. 2647.

The two deciduous teeth in the anterior part of the upper jaw have been shed. There are six molar teeth in place on each side of both upper and lower jaws.

Vertebræ: C. 6, D. 17, L. 2, C. 23.

Prepared from a specimen which was sent from Jamaica by the Duko of Manchester when Governor of the island, and described and figured by the donor in the 'Philosophical Transactions,' vol. exvi. pl. xxvii.

Presented by Sir Everard Home, 1821.

2731. Mutilated skull. O. C. 2648.

Hunterian.

2732. Portion of vertebral column of young male.

The specimen includes the last 6 dorsal, the 2 lumbar, and the 24 caudal vertebræ, with their 12 chevron bones.

From an animal, originally from Trinidad, which lived for seventeen months in the Brighton Aquarium.

Most of the viscera and other parts of the body are preserved in the Comparative Anatomy Series in the Galleries.

Presented by the Directors of the Brighton Aquarium, 1881.

2733. A rib.

From an animal killed on the river S. Juan, on the north coast of Honduras, in 1845.

Presented by S. C. Harrington, Esq., 1877.

Manatus senegalensis.

Trichechus manatus, var. australis (in part), Gmelin, Syst. Nat. i. p. 60 (1788).

Trichechus australis, Shaw, General Zoology, i. p. 244 (1800)*. Lamantin du Sénégal, Cuvior, Ann. du Muséum, xiii. p. 294 (1809). Manatus senegalensis (ox Cuv.), Desmarest, Nouv. Diet. d'Hist. Nat. xvii. p. 262 (1817).

THE AFRICAN MANATEE.

Hab. Coast and rivers of the western side of Tropical Africa.

* This name has been so generally used for the American form, that no little confusion would arise from restoring it to its original owner.

PART II. 2 M

530 SIRENIA.

Manatus senegalensis.

2734. Skeleton.

Vertebræ: C. 6, D. 17, L. 2, C. 25.

The axis and third eervieal vertebræ are united together by their bodies and spinous processes. None of the ehevron bones are joined in the middle line below. One of the ribs of the left side has been broken during life, and a false joint formed between the fragments.

Sent from the River Gaboon, West Africa, by M. Du Chaillu.

Purchased, 1864.

2735. Skeleton.

The skull is mutilated, its anterior portion being entirely wanting. The hyoid, sternum, and pelvie bones are missing, but the rest of the skeleton is complete.

Vertebræ: C. 6, D. 17, L. 2, C. 24.

The axis and third eervieal vertebræ are ankylosed together by their bodies and spinous processes.

From the West Coast of Africa.

Presented by Captain Harris, 1872.

2736. Skull. Presented by Andrew Murray, Esq., 1866.

2737. Cranium. O. C. 2649.

British Museum. Purchased, 1809.

The species to which the following specimens belong is uncertain.

2738. A left rib of large size.

Said to have been dug out of the gravel in making the East London Railway in 1880.

Purchased, 1880.

2739. Five ribs. O. C. 2650 & 2652.

British Museum. Purchased, 1809.

2740. A right rib of a young animal. O. C. 2651. Hunterian.

2741. A longitudinally bisected rib. O. C. 2653. Hunterian.

Order CETACEA.

Suborder MYSTACOCETI.

Family BALÆNIDÆ.

Genus BALÆNA.

Linnœus, Syst. Nat. ed. 12, i. p. 105 (1766).

Balæna mysticetus.

Linnæus, loc. cit.

THE GREENLAND RIGHT WHALE.

Hab. The Arctic Seas.

2742. Articulated skeleton of female.

Vertcbræ: C. 7, D. 12, L. 14, C. 22: total 55.

The animal from which this skeleton was prepared, a gravid female, was captured off the Danish Settlement of Holsteinsborg, South Greenland, during the winter of 1861-62.

The bones were sent to the Zoological Museum at Copenhagen, from which Institution they were purchased by the Council of the College in 1864. The skeleton is complete, and as now mounted measures, in a direct line from the anterior extremity of the skull to the last caudal vertebra, 46 feet 2 inches, or 13.930 meters. The greatest length of the cranium in a straight line is 17 feet, or 5.180 m.

The fore limbs were sent entire, with the cartilaginous portions connecting the bones; those have been carefully reproduced by models in cork on the left side. In the right manus, the essified portions of the skeleton alone have been kept, fixed exactly in the relative position they occupied in nature. The pelvic bones and both femures are present; but the tibias, if they existed, as is usually the case in this species, have not been preserved. Some of the baleen-plates from the anterior and posterior extremities of each lateral series are retained and attached to the skeleton. The right tympanic benchmark been detached from the cranium, and is preserved separately for convenience

Balæna mysticetus.

of comparison, being numbered 2766. Some descriptive notes relating to this specimen, with figures of the cervical vertebræ, pelvie benes, and elfactory organ, will be found as an appendix to Eschricht and Reinhardt's memoir on the Greenland Right Whale, in 'Recent Memoirs on the Cotacca,' edited by W. H. Flower, and published by the Ray Society, 1866, p. 145.

Purchased, 1864.

2743. Skull. O. C. 2432.

The greatest length of the cranium between the occipital eondyles and the tip of the premaxillæ is 17 foet $3\frac{1}{2}$ inches (5·270 m.). Each ramus of the mandiblo from the most posterior part of the eondyle to the symphysis in a straight line is 17 feet 9 inches (5·410 m.).

This is the specimen referred to in Hunter's "Observations on the Structure and Œeonomy of Whales," 'Philosophical Transactions' for 1787, p. 401.

Hunterian.

2744. The united cervical vertebræ.

The true number of vertebræ ecossified in this and the following specimens is shown by the intervals for the passage of the nerves between the neural arches.

In Museum before 1862.

2745. The united cervical vertebræ.

In Museum before 1862.

2746. The united cervical vertebræ. O. C. 2435.

These three specimens, presumably belonging to this species, present considerable individual differences.

Hunterian.

2747. Cast of the right pelvic bone, with the rudimentary femur and tibia of an adult male.

The original, from Greenland, is in the Paris Museum.

Presented by Professor Gervais, 1870.

2748. Rami of the mandible of a young Whale, probably of this species.

In Museum before 1862.

Balæna australis.

Desmoulins, Dict. Classique d'Histoire Naturollo, ii. p. 161 (1822).

THE SOUTHERN RIGHT WHALE.

Hab. Temperate Southern Ocean.

2749. Natural skeleton of a very young or feetal animal. O. C. 2436 and 2437.

Vertebræ: C. 7, D. 15, L. 10, C. 25: total 57.

Length 13 feet 4 inches (4.060 m.).

Brought from the Cape of Good Hope by Verrcaux.

The skull is figured in Huxley's 'Anatomy of Vertebrated Animals' (1871), p. 396, and also in section in Flower's 'Osteology of the Mammalia,' ed. 1876, p. 197.

Purchased, 1838.

Of uncertain Species.

2750. A lumbar and two caudal vertebræ of a Right Whale, but differing from those of *B. mysticetus*. O. C. 2456, 2457, and 2458.

Presented by Sir William Blizard.

2751. A caudal vertebra. O. C. F. 1446.

The transverse processes are broken away.

From the gravel in the old bed of the Thames; found 30 feet below the surface in excavations near the Temple Church.

Purchased.

2752. Eight ribs of the left side. O. C. 2459.

Presented by Sir Anthony Carlisle.

2753. A right humerus.

It is larger and more massive in proportion to its length than that of the mounted skeleton of Balæna mysticetus.

Said to have been dug up in the Wandsworth Road, Surrey, at the depth of 14 feet below the surface.

Presented by W. H. Jackson, Esq., 1881.

Genus BALÆNOPTERA.

Laeépède, Hist. Nat. des Cétacés, Tab. des Ordres &c. p. xxxvi (1804).

Balænoptera musculus.

? Balæna musculus, Linnæus, Syst. Nat. ed. 12, i. p. 106 (1766). Balænoptera rorqual, Laeépède, Cétaeés, pp. xxxvii & 126 (1804). Balæna antiquorum, Fiseher, Synopsis Mamm. p. 525 (1829).

Balænoptera musculus (Linn.), Companyo, Mém. deser. de la Baleine échouée près de St.-Cyprien, p. 23 (1830); Van Beneden & Gervais, Ostéographie des Cétacés, p. 167 (1869–80), and most modern authors.

Balænoptera physalus (Linn.), Gray, Zool. Erebus and Terror, p. 18 (1846).

Physalus antiquorum, Gray, Proe. Zool. Soc. 1847, p. 90.

THE COMMON RORQUAL OF FIN-WHALE.

Hab. North Atlantic and Mediterranean.

2754. Portion of a skeleton, consisting of the complete cervical vertebræ, the first, fourth, seventh, and twelfth dorsal, the first, seventh, eleventh, and fifteenth lumbar, and the first, fifth, eighth, twelfth, seventeenth, and twentieth caudal vertebræ, the fifteen ribs of the left side, the sternum, hyoid bones, and right scapula, humerus, radius, and ulna.

From a nearly adult animal stranded at Margate in 1850. The skull and most of the remaining bones of the same individual are in the Cambridge University Museum.

Purchased, 1865.

2755. Skull of young.

Part of the baleen is preserved in position.

From an animal, said to have been 48 feet long, which was driven ashore in a gale at Winterton, near Great Yarmouth, on the 5th of January, 1857. (See 'Illustrated London News,' 24 January, 1857.)

Purchased.

2756. Cast of the pelvic bone and femur of a male.

From an animal taken in the R. Schelde in 1869, described by Prof. Van Beneden in the 'Mémoires de l'Acad. Roy. des Sciences de Belgique,' xxxviii. (1871).

Presented by Prof. Van Beneden, 1870.

Balænoptera rostrata.

Balæna rostrata, Fabricius, Fauna Grænlandica, p. 40 (1780); Hunter, Phil. Trans. 1787, p. 373.

THE LESSER RORQUAL OF FIN-WHALE. "PIKED WHALE" of Hunter.

Hab. North Atlantic.

2757. Articulated skeleton of nearly adult male.

Vertebræ: C. 7, D. 11, L. 12, C. 19: total 49.

The baleen of the right side is preserved in its natural position in the mouth. The length of the skeleton is 24 feet $(7.325 \text{ m.})^*$.

From an animal washed ashore at Overstrand, near Cromer, in November 1860. The skeleton is described in the 'Proceedings of the Zoological Society' for 1864, p. 252.

Presented by John Henry Gurney, Esq., 1864.

2758. Articulated skeleton of a young female. O. C. 2444.

Vertebræ: C. 7, D. 11, L. 12, C. 18: total 48.

Length 15 feet 9 inches (4.790 m.).

From an animal, caught upon the Dogger Bank, dissected by Hunter, and of which numerous preparations are preserved in the Museum. The external characters are well represented in Hunter's figure in the 'Philosophical Transactions' for 1787, pl. xx., of which the original is among the Hunterian drawings in the possession of the College.

^{*} The length of the skeletons of Cetacea is always taken in a straight line from the most anterior portion of the skull to the terminal caudal vertebra.

Balænoptera rostrata.

This, with the exception of one of the same species at Bremen, is probably the oldest Cetacean skeleton preserved in any Museum.

The right side of the cribriform plate, turbinals, and surrounding bones have been removed from the skull, and form a separate preparation. The corresponding parts of the opposite side are mounted in spirit, and numbered 1546 in the Physiological Series.

Hunterian.

2759. A specimen which was labelled "Cribriform plate and ossa spongiosa, Piked Whale, Hunterian," but not entered in the Catalogue.

It is from a larger animal than the preceding.

Hunterian.

2760. Cast of the atlas of a young animal.

From the specimen described by Carte and Macalister in the 'Philosophical Transactions' for 1868, p. 201, where certain peculiarities in the mode of ossification of the bone are pointed out.

Presented by Dr. A. Carte, 1867.

2761. Pelvic bones of a young female.

They are almost entirely eartilaginous, with a single centre of ossification in each near the middle of the bone.

From an animal eaught at Weymouth in 1870, and described by Mr. Perrin in the 'Proceedings of the Zoological Society' for that year, p. 805.

Presented by J. Beswick Perrin, Esq., 1870.

Balænoptera borealis.

Balænoptera borealis (in part), Lesson, Hist. Nat. Cétaeés, 1828 (fide Van Beneden).

B. borealis (in part), Fischer, Synopsis Mammalium, p. 524 (1829).

B. borealis, Lesson, Hist. Nat. des Cétacés, p. 342 (1834).

B. laticeps, Gray, Zool. Erebus and Terror, p. 20 (1846). Sibbaldus laticeps, Gray, Proc. Zool. Soc. 1864, p. 223.

RUDOLPHI'S RORQUAL.

Hab. North Atlantic.

2762. The rami of the mandible, the first and seventh cervical and one caudal vertebræ, the hyoid, four ribs (the first having the bifid head), and both scapulæ, apparently of an individual of this species.

History unknown.

In Museum before 1862.

Of uncertain Species.

2763. An atlas vertebra. O. C. 2446.

Hunterian.

2764. The atlas, axis, two other eervical vertebræ, a double-headed first rib, another rib, and the malar bone of a Rorqual.

Locality unknown.

Purchased, 1867.

2765. Several of the disk-like epiphyses from the ends of bodies of the eaudal vertebræ of a Whale. O. C. 2440 and 2441.

Hunterian.

Tympanic Bones.

The tympanie bones of Whales, owing to the excessive density of their structure and the readiness with which they become detached from the rest of the eranium, are very frequently preserved when all other parts of the skeleton have perished; and as they appear to afford characters useful in distinguishing the species to which they belong, they have received special attention from ectologists. Most of the specimens in the Museum have unfortunately no history, or any indications connecting them with the particular animal from which they were derived. For these reasons it has been thought advisable to place them together in one series, instead of under the respective species to which they may be presumed to belong. The specimens to which no histories are attached were found in the Museum Stores in 1862.

Tympanic Bones.

2766. Right tympanic bone of Balæna mysticetus.

From the skeleton from Greenland, No. 2742.

2767. Right tympanic bone.

This agrees in all essential characters with the last. The keel is even sharper and the anterior extremity produced to a more decided angle.

Purchased, 1875.

The two following specimens present the usual characters of Balæna mysticetus.

2768. Right tympanic bone.

2769. Left tympanic bone.

The next four, though agreeing with Balana mysticetus generally, differ in the greater curvature of the inferior margin and the less development of the anterior extremity.

2770. Right tympanic bone.

2771. Right tympanic bone, mutilated.

2772. Left tympanic bone, considerably mutilated.

2773. Right tympanic bone, from which a section has been taken from the anterior extremity to show the dense character of the osseous tissue composing it.

The four following specimens, evidently from young animals, may be referred with great probability to Balana mysticetus.

2774. Right tympanic and periotic bones.

The auditory ossicles removed from this specimen are in the special collection of Ear-bones in the gallory, and are figured in

Mr. Doran's memoir, published in the 'Transactions of the Linnean Society,' 2nd series, Zoology, vol. i. p. 371 (1876).

Purchased, 1875.

2775. Right tympanic bone.

2776. Left tympanic bone, with the outer wall broken away.

2777. Right tympanic bone of a very young Whale, with part of the overarching plate sawn off to show the density of its structure. O. C. F. 1450.

The two following are attributed by Professor Van Beneden to B. japonica, but they resemble the tympanic of B. mysticetus more closely than those of the group to which B. japonica belongs. The originals, in the Leiden Museum, were brought from Japan by Von Siebold, and are described and figured by Van Beneden ('Bull. de l'Acad. Roy. de Belgique,' 2e sér. xli. p. 28, 1876).

2778. Cast of left tympanic bone.

Presented by Professor Van Beneden.

2779. Cast of mutilated left tympanic bone.

Presented by Professor Van Beneden.

The remaining eight specimens of tympanic bones attributed to the genus Balæna differ from those of B. mysticetus in the rounded curve of the inferior margin, the absence of produced anterior inferior angle, and the greater extension downwards of the anterior (Eustachian) end of the aperture, and also of the fissure opening behind the process to which the malleus is attached. In these characters of the tympanic bone all the Right Whales of the temperate and southern seas appear to agree.

2780. Left tympanic bonc.

Presented by T. W. Erle, Esq., 1877.

Tympanic Bones.

2781. Cast of the left tympanic and periotic bones of a Whale caught on the Atlantic coast of the United States, and described by Cope (Proc. Acad. Nat. Sci. Philadelphia, 1865, p. 168) under the name of Balæna cisarctica.

Presented by Professor Van Beneden, 1869.

2782. Right tympanic and periotic bones.

From Tasmania.

They closely resemble the figures in Van Beneden and Gervais's 'Ostéographie des Cétacés,' pl. i. fig. 2, of those of *Balæna australis* from the Cape of Good Hope, in the Paris Museum.

Presented by W. L. Crowther, Esq., 1840.

2783. Cast of right tympanic bone.

The original belongs to a skeleton sent from New Zealand to the Paris Museum by Mr. Hutton. It is figured by Gervais in the 'Journal de Zoologie,' vi. pl. x. (1877).

Presented by Professor Gervais, 1878.

The three last specimens resemble each other very closely in all their characters.

2784. Right and left united tympanic and periotic bones of the same Whale. O. C. 2438.

From the South Seas. The left is figured by Huxley in the 'Anatomy of Vertebrated Animals,' ed. 1871, p. 397.

Presented by Dr. George Bennett.

2785. Cast of the right tympanic and periotic bones.

The original, from the coast of Chile, is in the Louvain Museum.

Presented by Professor Van Beneden, 1869.

2786. Right tympanic and periotic bones. O. C. 2439.

They are said to have been brought from the southern hemisphere, and much resemble the last in their characters.

Presented by J. Babington, Esq.

2787. Left tympanic bone of a Rorqual, probably Balænoptera musculus.

Purchased, 1875.

2788. Cast of the right tympanic bone of Rudolphi's Rorqual (Balænoptera borealis).

The original is in the Paris Museum of Natural History, and belongs to an animal stranded on 29th July 1874, between Bidart and Biarritz (Basses Pyrénées). See Fischer, 'Journ. de Zoologie,' v. p. 462 (1876).

Presented by Professor Gervais, 1878.

2789. Left tympanic bone of the Lesser Rorqual (Balanoptera rostrata).

From the skeleton from the Norfolk Coast (No. 2757).

2790. Right tympanic bone, resembling, but smaller than, the last.

This was labelled "Ear of Whale, Miocene, Virginia."

In Museum before 1862.

The following specimens of more or less waterworn tympanic bones are from the so-called "Coprolite" beds at the base of the Red Crag of Suffolk. Unless otherwise stated, they were collected at the localities indicated, in the year 1873, by Professor Flower. Without any knowledge of the remainder of the organization of the animals to which they belonged, their generic and specific determination must be attended with some uncertainty. Differences observed in several of the earliest discovered specimens, however, enabled Professor Owen ('Proc. Geol. Soc.' 13 Dec. 1843, vol. iv. p. 283, and 'British Fossil Mammals,' p. 526, 1846)

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Tympanic Bones.

to distinguish four distinct forms, to which names were assigned, and with one or the other of which nearly all the subsequently collected specimens are found in the main to agree, though presenting considerable variations in detail.

Specimens resembling Baliena affinis, Owen.

2791. Cast of left tympanic bone. O. C. F. 1448.

From the type specimen from Felixstow, described in the 'Proceedings of the Geological Society,' iv. p. 283.

Presented by the Rev. Professor Henslow, 1843.

2792. Right tympanic bone. O. C. F. 1449.

From Felixstow.

Presented by the Rev. Professor Henslow, 1843.

2793. Right tympanic bone.

From Mr. Whincopp's collection.

Purchased, 1874.

2794. Right tympanic bone.

In Museum before 1862.

2795. Right tympanic bone.

Presented by E. Packard, Esq., 1873.

2796. Left tympanic bone.

Presented by E. Packard, Esq., 1873.

2797. Right tympanic bone. From Falkenham, 1873.

2798. Left tympanic bone.
From Falkenham, 1873.

2799. Right tympanic bone. From Falkenham, 1873.

- 2800. Right tympanic bone. From Walton, 1873.
- 2801. Left tympanic bone. From Felixstow, 1873.
- 2802. Left tympanic bone. From Felixstow, 1873.
- 2803. Left tympanic bone. From Felixstow, 1873.

Specimens resembling Balana definita, Owen.

2804. Cast of a mutilated right tympanic bone. O. C. F. 1451.

From the type specimen found near Felixstow.

Presented by the Rev. Professor Henslow, 1843.

2805. Right tympanic bone. O. C. F. 1452. From Felixstow.

Presented by the Rev. Professor Henslow, 1843.

- 2806. Right tympanic bone. From Falkenham, 1873.
- 2807. Right tympanic bone. From Falkenham, 1873.
- 2808. Left tympanic bone.

 From Falkenham, 1873.
- 2809. Left tympanic bone.

 From Falkenham, 1873.

Specimens resembling B. definita, Owen.

- 2810. Left tympanic bone. From Trimley, 1873.
- 2811. Right tympanic bone. From Walton, 1873.
- 2812. Right tympanic bone. From Walton, 1873.
- 2813. Right tympanic bone. From Walton, 1873.
- 2814. Left tympanic bone. From Felixstow, 1873.
- 2815. Left tympanic bone.

Presented by E. Packard, Esq., 1873.

2816. Right tympanic bone.

Presented by E. Packard, Esq., 1873.

Specimens resembling Baltena gibbosa, Owen.

2817. Right tympanic bone. O. C. F. 1453.

One of the type specimens from Felixstow.

Presented by the Rev. Professor Henslow, 1843.

2818. Right tympanic bone.

In Museum before 1862.

2819. Left tympanic bone.

From Falkenham, 1873.

2820. Right tympanic bone. From Falkenham, 1873.

2821. Right tympanic bone.

Presented by E. Packard, Esq., 1873.

Specimens resembling Baltena emarginata, Owen.

2822. Cast of left tympanic bone. O. C. F. 1454.

From the type specimen found near Felixstow.

Presented by the Rev. Professor Henslow.

2823. Left tympanic bone.

Presented by E. Packard, Esq., 1873.

2824. Right tympanic bone.

Presented by E. Packard, Esq., 1873.

2825. Left tympanic bone.

From Falkenham, 1873.

2826. Right tympanic bone. From Falkenham, 1873.

2827. Left tympanic bone. From Walton, 1873.

2828. Left tympanic bone. From Walton, 1873.

2829. Left tympanic bone. From Felixstow, 1873.

2830. Left tympanic bone.

From Felixstow, 1873.
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Tympanic Bones.

The two following specimens do not appear to agree with either of the forms defined by Professor Owen.

2831. An unusually perfect specimen of a right tympanic bone.

It resembles *B. affinis* in the form of the thickened inner margin, but differs in the general external form and in the contour of the lower margin. As far as the condition of the specimen permits of comparison, it does not differ from some of the existing Right Whales of the type to which *B. australis* and *B. biscayensis* belong.

Formerly in Mr. Baker's Collection.

Purchased, 1883.

2832. Left tympanic bone of a Balanoptera.

From Felixstow, 1873.

Suborder ARCHÆOCETI.

Family ZEUGLODONTIDÆ.

Genus ZEUGLODON.

Basilosaurus, Harlan, Bull. Soe. Géol. de France (1833), iv. p. 124 (1835), withdrawn by author in favour of

Zeuglodon, Owen, Lond. & Edinb. Philos. Mag. xiv. p. 302 (1839); Proe. Geol. Soc. (9 Jan. 1839), iii. p. 24 (publ. 1842).

Zenglodon cetoides.

Owen, Trans. Geol. Soc. 2nd ser. vi. p. 69 (1841).

2833. Two sections of a molar tooth, taken near the base, where the two roots have become nearly separated from one another, producing the appearance of "yoked teeth," whence the generic name was derived.

These are the original specimens described and figured by Owen, loc. cit.

Presented by Dr. Richard Harlan.

2834. Three sections of a rib. O. C. 1442.

From the Tertiary deposits of the State of Alabama, U.S. America.

Presented by Dr. Richard Harlan.

Of uncertain Species.

2835. Body of a lumbar vertebra.

The terminal epiphyses are detached and one of them is preserved, showing the remarkable extent to which the two ossifications interlock with one another.

From a formation of Eocone age, in Crawford County, Georgia, U. S. America.

Presented by Sir Charles Lyell, 1868.

2836. A posterior dorsal vertebra, probably of the same individual.

The epiphyses are in the same condition.

The short transverso processes, with excavated surfaces for the attachment of the ribs, show that in this important structural character Zeuglodon differs widely from the Mystacocetes, and from both Physeteridæ and Delphinidæ among the Odontocetes, but resembles the Platanistidæ.

From the same locality as the last.

Presented by Sir Charles Lyell, 1868.

2837. Two fragments of bones of Zeuglodon.

From the same locality.

Presented by Sir Charles Lyell, 1868.

2838. Body of a dorsal vertebra, probably of a Zeuglodon.

From Sanderville, Georgia, U.S. America.

Presented by Sir Charles Lyell, 1868. 2 N 2 548 CETACEA.

Uncertain Species.

The following casts of portions of Zeuglodon were in the Museum before 1862.

2839. Cast of cranium.

Although not agreeing exactly, the teeth having been restored and portions of the matrix eleared in the interval between taking the east and drawing the figures, this is evidently from the specimen figured by G. C. Carus under the name of Z. hydrachos (Acad. Cas.-Leop. Nova Acta, 1847, xxii. figs. 39, A & B) and by J. Müller as Z. brachyspondylus ('Foss. Resto der Zeuglodonten von Nordamerica,' tab. xxvi. 1849).

- 2840. Cast of part of ramus of mandible and molar tooth.
- 2841. Cast of part of ramus of mandible and molar tooth.
- 2842. Cast of molar tooth.
- 2843. Cast of part of molar tooth.
- 2844. Cast of anterior single tooth.
- 2845. Cast of part of tympanic bone.

Suborder ODONTOCETI.

Family PHYSETERIDÆ.

Genus PHYSETER.

Linnæus, Syst. Nat. ed. 12, i. p. 107 (1766).

Physeter macrocephalus.

Linnæus, loc. cit.

THE CACHALOT OF SPERM-WHALE.

Hab. Tropical and temperate seas throughout the world.

2846. Articulated skeleton of male.

Vertebræ: C. 7, D. 11, L. 8, C. 24: total 50.

The extremo length of the skoleton is 15.279 m. (50 feet 1 inch), of the cranium 5.110 m. (16 feet 9 inches), of the lower jaw 4.420 m. (14 feet 6 inches). One of the pelvie bones only was received with the skeleton; from this the other now mounted with it has been modelled. The rudimentary teeth which were embedded in the gum of the upper jaw are preserved separately in one of the cases on the floor.

This skeleton was prepared from an animal eaught off the south east of the island of Tasmania in 1864, and is the subject of a fully illustrated memoir, by W. H. Flower, published in the 'Transactions of the Zoological Society,' vol. vi. p. 309 (1868).

Presented by William Lodowyck Crowther, Esq., 1866.

2847. Skull of young male.

From an animal killed in the South Seas by the side of its mother. The teeth, of which but few remain, had not pierced the gum. This specimen is figured in the memoir on the "Osteology of the Caehalot," referred to above.

Presented by W. L. Crowther, Esq., 1866.

2848. Skull of fœtus. O. C. 2447.

The relations of the osseous elements of which it is composed are described in great detail by Prof. Owen in the former Catalogue. It is also described and figured in Huxley's 'Anatomy of Vertebrated Animals,' p. 401 (1871).

Purchased.

2849. Lower jaw and teeth.

This is the largest speeimen known to have been taken in the Tasmanian Whale-fishery, and was preserved for some time at Hobart Town on account of its great size. It measures, from the anterior part of the symphysis to the centre of a straight line drawn across the most prominent part of the condyles, 16 feet 2 inches (4.930 m.).

Presented by W. L. Crowther, Esq., 1865.

2950. Lower jaw and teeth.

The fibrous gum which holds the teeth in place, and by which

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Physeter macrocephalus.

they are almost concealed during life, is preserved. The length of this specimen is 14 feet 2 inches (4.330 m.).

Presented by W. L. Crowther, Esq., 1862.

2851. Lower jaw and teeth.

Length 13 feet 6 inches (4·110 m.). The fibrous structure round the teeth has been removed, showing their mode of implantation.

This and the last specimen are from animals captured near the South-west Cape of Tasmania. They formed the entrancedoors of the Tasmanian trophy in the London International Exhibition of 1862.

Presented by W. L. Crowther, Esq., 1862.

2852. Two rami of the lower jaw, wanting the teeth. O. C. 2448.

They are slightly imperfeet at the anterior extremity.

Hunterian.

2853. The dentary portion of the rami of the lower jaw. O. C. 2449.

The teeth are of large size and much worn, showing that the animal was of eonsiderable age.

Hunterian.

2854. Lower jaw of very small size, although adult, and therefore probably that of a female. O. C. 2450.

It measures 6 feet $10\frac{1}{2}$ inches (2·100 m.) in length.

Presented by F. D. Bennett, Esq.

2855. Anterior portion of the rami of a lower jaw of corresponding size, without the teeth. O. C. 2451.

Brookes Collection. Purchased, 1828.

2856. The dentary portion of the right ramus of a small lower jaw, with a very remarkable abnormal curve. O. C. 2452.

Such specimens are not uncommon in Museums. See Dr. Murie, "On Deformity of the Lower Jaw in the Cachalot" (Proc. Zool. Soc. 1865, p. 390), where the present example is described and figured*.

Presented by F. D. Bennett, Esq.

2857. A transverse section from one of the rami of the lower jaw. O. C. 2453.

Presented by Dr. George Bennett.

2858. A portion of the superior maxilla, exhibiting the thin compact outer layer, and the coarse cellular structure of which the greater part of the bone is composed. O. C. 2724.

Hunterian.

2859. The right and left tympanic and periotic bones. O. C. 2454 and 2455.

One of these is figured of the natural size in Owen's 'British Fossil Mammals and Birds,' p. 526 (1846).

Presented by George Bennett, Esq.

2860. The right and left tympanic and periotic bones of an adult male.

From Tasmania.

Presented by W. L. Crowther, Esq., 1865.

2861. The right and left tympanic and periotic bones of an adult male.

From Tasmania.

Presented by W. L. Crowther, Esq., 1871.

* See also Fischer, "Sur une déformation pathologique de la mâchoire inférieure du Cachalot," Journ. de l'Anat. et de la Physiol. t. iv. p. 382 (1867).

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Physeter macrocephalus.

2862. The twelve terminal caudal vertebræ of an adult male, with the posterior chevron bones.

From Tasmania.

Presented by W. L. Crowther, Esq., 1866.

2863. The articulated bones of the right anterior extremity.

The bones are all in their correct relative situations, having been received in connection and carefully marked before cleaning. The pisiform bone and terminal phalanx of the second digit are wanting. This specimen is figured in the Trans. Zool. Soc. vi. pl. 61 (1868).

The other fore limb of the same animal is in the Cambridge University Muscum.

From Tasmania.

Presented by W. L. Crowther, Esq., 1865.

2864. The bones of the right anterior extremity.

This is of smaller size than the preceding. The pisiform bone was composed of a large number of osseous nodules embedded in cartilage.

From Tasmania.

Presented by W. L. Crowther, Esq., 1866.

2865. Pelvic bone of male.

From Tasmania.

Presented by W. L. Crowther, Esq., 1865.

2866. Pelvic bone of male.

From Tasmania.

Presented by W. L. Crowther, Esq., 1871.

2867. Pelvic bone of male.

From Tasmania.

Presented by W. L. Crowther, Esq., 1866.

2868. Pelvic bone of smaller size and different form. O. C. . 2460.

Perhaps from a female Cachalot.

Presented by the Very Rev. Dean Buckland.

2869. A tooth from which the summit has been removed by a transverse section, to show its internal structure. O. C. 2461.

Hunterian.

2870. A tooth, longitudinally bisected. O. C. 2465.

One of the cut surfaces is polished. This specimen is described and figured in Owen's 'Odontography,' pp. 355-357.

Presented by Sir Everard Home.

2871. One half of a longitudinally bisected tooth. O. C. 2462.

The cut surface has been polished.

Hunterian.

- 2872. One half of a longitudinally bisected tooth. O. C. 2463.

 Hunterian.
- 2873. A longitudinally bisected tooth showing ossification of the pulp.

 Presented by J. T. Quekett, Esq.
- 2874. Two teeth of very large size.

A female head surrounded by a circlet of leaves is engraved upon each.

From Tasmania.

Presented by Dr. E. L. Crowther, 1876.

2875. Fifteen teeth of various sizes, forms, and conditions of wear. O. C. 2466, 2467, and 2475.

Hunterian.

2876. Thirteen teeth. O. C. 2464, 2468, 2469, 2472, and 2474.

British Museum. Purchased, 1809.

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Physeter macrocephalus.

2877. A tooth. O. C. 2470.

Purchased.

2878. Two teeth. O. C. 2471.

Presented by Okey Belfour, Esq.

2879. Two teeth.

Presented by W. Wyatt, Esq.

2880. A tooth.

Presented by Dr. George Bennett, 1859.

2881. A tooth worn down very obliquely to the base of the crown.

Purchased, 1883.

2882. A posterior tooth, with the root much expanded in the antero-posterior direction.

Presented by A. S. Flower, Esq., 1867.

2883. A malformed tooth.

It is constricted longitudinally on each side by a deep groove, which divides it into nearly equal lobes, and may have originated from the coalescence of two dental papillæ.

From Tasmania.

Presented by Dr. E. L. Crowther, 1876.

2884. Two stalactitic masses of osteodentine, found loose in the sockets of the lower jaw of a Cachalot, the result of irregular ossifications of the remnants of the dentinal pulp after the formation of the ordinary body of the tooth. O. C. 2478.

Presented by Dr. George Bennett.

2885. Two teeth from the upper jaw of a female. O. C. 2476 and 2477.

One has been longitudinally bisected: the other is curved in the form of a semicircle, and obtusely pointed at both ends, one of which is polished on the convex side, probably by abrasion against the larger teeth of the lower jaw. In two mature

Cachalots which Mr. Bennett examined he found on each side eight of these teeth embedded in the thick callous gum which covers the alveolar borders of the upper jaw.

Presented by F. D. Bennett, Esq.

2886. Three teeth.

Brought from North America and marked "Supposed to have been found in Martha's Vineyard, Mass."

Presented by Sir Charles Lyell, 1868.

2887. A tooth which has lost most of its animal matter, and is partly decomposed in successive layers. O. C. F. 1445.

Said to be from the newer pliocene strata of South America.

Presented by Charles Darwin, Esq.

Genus KOGIA.

Kogia, Gray, Zoology of Erebus and Terror, p. 22 (1846).Euphysetes, Wall, Hist. & Descrip. New Sperm-Whale (Sydney, 1851).

Kogia breviceps.

Physeter breviceps, De Blainville, Ann. franç. et étr. d'Anat. et de Physiol. ii. p. 337 (1838).

THE SHORT-HEADED CACHALOT.

Hab. Tropical and temperate seas of both hemispheres.

2888. Skull of young.

The mandible is imperfect.
From Port Stephens, New South Wales.

Purchased, 1875.

2889. Cranium of young.

Taken at the same time and place as the last, both animals having been stranded together. They present, however, indi-

Kogia breviceps.

vidual differences in the arrangement and relations of the bones, especially in the temporal fossæ, as great as those which some zoologists consider to indicate specific distinction.

Purchased, 1875.

2890. Dentary portion of mandible with the teeth.

Said to be from the South Seas. It is figured in the 'Ostéo-graphie des Cétacés' by Van Beneden and Gervais, pl. xx. fig. 3.

Purchased, 1866.

2891. Cast of hyoid bones.

From the original in the Sydney Museum.

Presented by Gerard Krefft, Esq., 1869.

Genus HYPEROODON.

Lacépède, Hist. Nat. des Cétacés, Tab. des Ordres &c. p. xliv (1804).

Hyperoodon rostratus.

Balæna rostrata, O. F. Müller, Zool. Dan. Prod. p. 7 (1776); Chemniz, Beschäft. der Gesellsch. Naturf. Berlin, iv. p. 183 (1779).

Delphinus bidentatus and Delphinus butskopf, Bonnaterre, Cétologie, Tab. Encycl. et Méthod. des trois Règnes de la Nature, p. 25 (1789).

Delphinus diodon, Lacépède, Hist. Nat. des Cétacés, p. 309 (1804). Hyperoodon butskopf, id. ibid. p. 319.

THE HYPEROODON OF COMMON BOTTLE-NOSED WHALE.

Hab. North Atlantic.

2892. Articulated skeleton of female. O. C. 2479.

Vertebræ: C. 7, D. 9, L. 10, C. 19. Length 20 feet 10 inches (6:350 m.).

From an animal taken in the river Thames above London Bridge, in the year 1783, and described and figured by John

Hunter in the 'Philosophical Transactions' for the year 1787, pl. xix. Numerous preparations of the viscera are preserved in the series of Comparativo Anatomy in the galleries.

Hunterian.

2893. Skull and imperfect skeleton of a young male.

Many of the boncs are mounted in the Separate Series.

From an animal taken off the coast of Devenshire in September 1846.

Purchased, 1846.

2894. Skull of adult male.

The great development of the maxillary crests in animals of this sex and age caused them to be regarded by Dr. Gray as a distinct species, *Hyperoodon latifrons*, and subsequently as belonging to another genus, *Lagenocetus*. For an account of the changes which take place in the development of the cranium, well illustrated in this and the following specimens, see Proc. Zool. Soc. 1882, p. 722.

From the North Atlantic, between Iceland and Jan Mayen Island.

Presented by Captain David Gray, 1881.

2895. Skull of young male.

Supposed by the donor to be about one year old. It measured 19 feet 6 inches in length, by 11 feet in circumference, and was caught 9th July 1883, in 71° 19′ N. lat., 6° 5′ W. long.

Presented by Captain David Gray, 1883.

2896. Skull of a younger male.

From an animal taken by the side of its mother, and which had only milk in its stomach. It measured 16 feet in length by 10 feet 6 inches in circumference.

Presented by Captain David Gray, 1883.

2897. Skull of a male fœtus.

Takon from the uterus of its mother, caught in May 1883 in

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Hyperoodon rostratus.

68° 43′ N. lat., 11° W. long. It measured 10 feet 11 inches long, by 5 feet 8 inches in eifeumference*.

Presented by Captain David Gray, 1883.

2898. Symphysial portion of the mandible with the two teeth.
O. C. 2480.

The teeth are almost entirely embedded in the alveolar eavity and can seareely have projected beyond the level of the fibrous gum. They have acute, conical apices and bulbous roots, completely closed at the base, showing that the animal to which they belonged must have been of mature age. This is probably the only portion preserved of the specimen alluded to by Hunter, when, after describing the female, of which the skeleton is now No. 2892, he says "I have a skull of the same kind, nearly three times as large, which must have belonged to an animal thirty or forty feet long" ("On the Structure and Œconomy of Whales," Phil. Trans. vol. lxxvii. p. 373, 1787).

Hunterian.

2899. Right and left tympanic and periotic bones.

Purchased, 1875.

Genus ZIPHIUS.

Cuvier, Ossemens Fossiles, 2e édit. v. p. 352 (1823).

Ziphius cavirostris.

Cuvier, loc. cit.

2900. Cast of the rostrum and lower jaw.

From the original from the Indian Ocean, in the Louvain University Museum, described by Prof. Van Beneden under the name of *Ziphius indicus* (Mém. de l'Acad. Roy. de Belgique, 8vo, xvi. 1863).

Presented by Prof. Van Beneden, 1866.

^{*} In a letter accompanying these specimens, Captain Gray says that Whales of this species bring forth their young towards the end of June and in July.

Genus MESOPLODON.

Gervais, Ann. Sciences Nat. 3e sér. xiv. p. 16 (1850).

Mesoplodon bidens.

Physeter bidens, Sowerby, British Miscellany, p. 1 (1840).

Delphinus (Heterodon) sowerbiensis, Blainville, Nouv. Diet. d'Hist.

Nat. ix. p. 177 (1817).

Delphinus sowerbyi, Desmarest, Mammalogie, p. 521 (1822).

SOWERBY'S WHALE.

Hab. North Atlantic.

2901. Cast of skull, mutilated posteriorly.

From the type specimen, taken off the coast of Elgin, Scotland, in 1800, now in the Museum of the University of Oxford.

Presented by Professor Acland, M.D.

2902. Cast of the skull of young female.

From the original, stranded at Ostend in 1835, now in the Brussels Museum, described by Dumortier (Mém. Acad. Roy. Bruxelles, xii. 1839) under the name of *Delphinorhynchus micropterus*, and subsequently by Van Beneden (Mém. Acad. Belgique, 8vo, xvi. 1863).

Presented by Professor Van Beneden, 1866.

Mesoplodon grayi.

Mesoplodon grayi, Haast, Proc. Zool. Soc. 1876, p. 9. Oulodon grayi, Haast, Proc. Zool. Soc. 1876, p. 457.

2903. Articulated skeleton of young male.

Vertebræ: C. 7, D. 10, L. 12, C. 19. Length 12 feet 11 inches (3.940 m.).

The rudimentary teeth attached to the gum of the upper jaw are preserved.

From one of several individuals stranded togethor near Saltwater Creek, about 30 miles north of Banks Peninsula, New Zealand (see Proc. Zool. Soc. 1876, p. 457, and Trans. Zool. Soc. vol. x.).

Presented by Dr. Julius von Haast, 1877.

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Mesoplodon grayi.

2904. Four teeth from the upper jaw of a female.

These are figured and described in the 'Proceedings of the Zoological Society,' 1876, p. 10.

Presented by Dr. Julius von Haast, 1877.

Mesoplodon haasti.

Flower, Trans. Zool. Soc. vol. x. p. 419 (1877).

2905. Rostrum and part of the mandible with the two teeth.

From an animal stranded on the east coast of the Northern Island, New Zealand, Dec. 1875. The specimen is described and figured in the 'Transactions of the Zoological Society,' x. plates lxxi. & lxxii.

Presented by Dr. Julius von Haast, 1877.

Mesoplodon layardi.

Ziphius layardii, Gray, Proc. Zool. Soc. 1865, p. 358.

2906. A left mandibular tooth.

In this species the small, conical, enamelled erown of the tooth is raised upon a large, flattened, strap-like pedestal of osteodentine, which grows from its base, gradually elongating and curving inwards until it meets its fellow of the opposite side above the rostrum. The point of contact in the present specimen is distinguishable as a small flattened surface near tho apex.

From St. Helena Bay, South Africa.

Presented by Edgar L. Layard, Esq.

Mesoplodon europæus.

Diophodon europæus, Gervais, Zool. et Paléont. franç. 1° édit. t. ii. Explie. no. 40 (1850).

2907. Cast of left mandibular tooth.

The original is in the Museum at Caen.

Presented by Professor Gervais.

Mesoplodon densirostris.

Delphinus (Heterodon) densirostris, De Blainville, Nouv. Diet. d'Hist. Nat. ix. p. 178 (1817).

Ziphius densirostris, De Blainville, Ann. des Sciences Nat. 3° sér. xv. p. 58 (1851).

Ziphius sechellensis, Gray, Zool. Erobus and Terror, p. 28 (1846).

2908. The densely ossified rostrum.

This specimen, which was found in its present condition on the shore near Algea Bay, South Africa, shows how this portion of the cranium resists longer than the remainder of the skeleton the destructive effects of rolling upon the beach, to which it has been subjected, and thus illustrates the frequency with which restra of allied species are preserved in the Suffolk Crag, after all other remains of the animals to which they have belonged have perished or have been reduced to undistinguishable fragments.

Presented by C. Westendorp, Esq., 1872.

Genus BERARDIUS.

Duvernoy, Ann. des Sciences Nat. 3° sér. Zoologie, xv. p. 41 (1851).

Berardius arnuxii.

Duvernoy, loc. cit. p. 52.

Hab. New-Zealand Seas.

2909. Articulated skeleton.

Vertebræ: C. 7, D. 10, L. 12, C. 19: total 48.

Length 29 feet (8.840 m.).

From an animal stranded near New Brighton, Canterbury, New Zealand, December 1868. The skeleton is fully described and figured in the 'Transactions of the Zoolegical Society,' vol. viii. pp. 203–234, plates xxvii., xxviii., and xxix. The right tympanic and periotic bones, and the two teeth of the right side of the mandible, which have been divided longitudinally, are removed from the skeleton, and exhibited in the floor case.

Presented by Sir Erasmus Wilson, 1871.

Uncertain Species.

The following specimens of water-worn fragments of Physeteroid and Ziphioid Cetaceans are from the "Coprolite" beds at the base of the Red Crag of Suffolk. Their specific determination is in most cases a matter of great uncertainty.

2910. The water-worn rostrum of a Ziphioid Cetacean, probably of the genus *Mesoplodon*, and resembling Zíphíus angustus of Owen ("Brit. Fossil Cetacea from the Red Crag," Palæontograph. Soc. xxiii. pl. iii., 1870).

From near Woodbridge, Suffolk. Formerly in the collection of Mr. Acten.

Purchased, 1873.

2911. Terminal portion of the rostrum of a Ziphioid Cetacean.

From the same locality and collection as the last.

Purchased, 1873.

2912. The basal portion of the rostrum of a Ziphioid Cetacean.

A vertical transverse section has been made through it, and the cut surfaces polished.

Purchased, 1883.

2913. Three polished transverse sections of a rostrum.

Purchased, 1875.

2914. Cast of a rostrum.

The original is in the Reed Collection in the York Museum.

Purchased, 1875.

2915. Cast of a rostrum.

The original, new in the Canham Collection in the Ipswich Museum, was found at Trimley, and is described in the MS. Catalegue of the Collection, by the Rev. H. Canham, under the name of Mesoplodon floweri.

Purchased, 1878.

2916. Tooth of a Physeteroid Cetacean, longitudinally bisected and polished.

Formerly in the collection of Mr. Baker.

Purchased, 1875.

2917. Tooth, longitudinally bisected and polished.

Purchased, 1875.

2918. A longitudinally bisected tooth.

Presented by E. Packard, Esq., 1873.

2919. The apical portion of a tooth, with the cut surface polished.

Purchased, 1874.

2920. The apical portion of a tooth.

In Museum before 1883.

2921. Ten specimens of teeth of Physeteroid or Ziphioid Cetaceans, varying considerably in size and amount of wear.

From the neighbourhood of Felixstow.

Presented by Prof. Flower, 1873.

2922. Portion of the atlas of a Cetacean.

From Falkenham.

Presented by Prof. Flower, 1873.

2923. Body of a dorsal vertebra.

Presented by E. Packard, Esq., 1873.

2924. Five caudal vertebra.

Presented by E. Packard, Esq.

2925. Portions of ribs and other bones of Cetaceans, showing the fragmentary and water-worn condition in which they are found abundantly in the coprolite or bone bed at the base of the Suffolk Red Crag. O. C. F. 1455 to 1459.

Hunterian, with some later additions.

Uncertain Species.

Fossil Bones from other Localities.

2926. A vertically bisected anterior caudal vertebra, probably of *Hyperoodon*. O. C. F. 1440 and 1441.

Hunterian.

2927. Lumbar vertebra of a Ziphioid Cetacean, allied to Hyperoodon. O. C. F. 1443.

From the Tertiary deposits of the State of Alabama. Formerly attributed to Zeuglodon cetoides.

Purchased.

2928. A smaller lumbar vertebra of similar character. O. C. F. 1444.

From the same locality.

Purchased.

2929. A dorsal and two caudal vertebræ of a *Hyperoodon*. From Martha's Vineyard, Mass., U. S. A.

Presented by Sir Charles Lyell, 1868.

2930. Caudal vertebra of a Cetacean. O. C. F. 1447.

Locality unknown.

Hunterian.

Family PLATANISTIDÆ.

Genus PLATANISTA.

Wagler, Nat. Syst. Amphibien &c. p. 35 (1830)*.

Platanista gangetica.

Delphinus gangeticus, Lebeck, Neue Schrift. d. Gesell. Naturforsch. Freunde zu Berlin, iii. p. 280 (1801).

THE PLATANISTA OF SOUSOU.

Hab. The rivers Ganges and Indus and their tributaries.

* "De tous les dauphins à bec, le plus extraordinaire, celui qui mériteroit peut-être le plus de faire un genre à part, c'est le dauphin du Gange, c'est probablement le platanista de Pline." (Cuvier, Ossemens Fossiles, 2° éd. v. p. 279, 1823.)

2931. Articulated skeleton.

Vertebræ: C. 7, D. 10, L. 9, C. 26: total 52.

Length 7 feet $11\frac{1}{2}$ inches (2·420 m.).

From a perfectly adult animal taken in the Ganges.

This speeimen is described and figured in Dr. Anderson's 'Anatomieal and Zoological Researches, comprising an Account of the Zoological Results of the two Expeditions to Western Yunnan' (1878).

Presented by Dr. J. Anderson, 1876.

2932. Articulated skeleton of young.

Vertebræ: C. 7, D. 10, L. 9, C. 20 (incomplete).

From an animal eaught in the Ganges, 200 miles above Caleutta, by T. P. Griffiths, Esq.

Received in exchange from the Oxford University Museum, 1873.

2933. Skull, intermediate between the two last in age.

From Monghyr on the Ganges.

Purchased, 1868.

2934. Upper and lower jaws of an aged animal. O. C. 2482.

This is the specimen described and figured by Dr. Roxburgh in the 'Asiatic Researches,' vol. vii. p. 170 (1801), and which was presented by him to Sir Joseph Banks. It is also figured by Sir Everard Home in the 'Phil. Trans.' for 1818, p. 417, pl. xxi., and by Van Beneden and Gervais in the 'Ostéographio des Cétaeés,' pl. xxxi. fig. 1. In conjunction with the preceding specimens it illustrates very well the romarkable changes in the teeth of this species during their development and wear.

Presented by Sir Joseph Banks, P.R.S.

2935. Nearly complete skeleton of young.

Presented by Dr. George Wallich, 1853.

2936. Skull of young. O. C. 2481.

From the Indus. The specimens from this rivor have been described by Blyth as a distinct species under the name of Plata-

566 CETACEA.

Platanista gangetica.

nista indi; but Anderson, after the examination of a considerable number of specimens, was unable to find any distinctive characters by which to separate them from the Gangetic Dolphins.

Presented by Dr. David Wallich, 1852.

Family SQUALODONTIDÆ.

Genus SQUALODON.

Grateloup, Aetes de l'Acad. de Bordeaux, 1840, p. 208.

2937. Casts of three molar teeth of Squalodon (sp.?).

The originals, in the Canham Collection in the Ipswich Museum, are from the bone-bed at the base of the Suffolk Red Crag, near Woodbridge.

Presented by the Rev. H. Canham.

Family DELPHINIDÆ.

Genus MONODON.

Linnæus, Syst. Nat. ed. 12, i. p. 105 (1766).

Monodon monoceros.

Linnæus, loc. cit.

THE NARWHAL.

Hab. Arctic Seas.

2938. Articulated skeleton of male.

Vertebræ: C. 7, D. 11, L. 6, C. 26: total 50.

Length of the skeleton 12 feet $2\frac{1}{2}$ inches (3.710 m.); of the exserted portion of the tusk 6 feet (1.830 m.).

From an animal captured at Omenak, Greenland.

Received in exchange from the Copenhagen Museum, 1867.

2939. Skeleton, nearly complete, of male.

Vertebræ: C. 7, D. 11, L. 7, C. 23 (about 2 wanting).

Hunterian.

2940. Skeleton of female. O. C. 2521.

Vertebræ: C. 7, D. 12, L. 7, C. 24: total 50.

Brookes Collection. Purchased, 1828.

2941. Cranium of male. O. C. 2523.

The abortive right tusk and the inserted part of the left developed tusk are displayed in situ by removal of the alvcolar wall.

Hunterian.

2942. Cranium of male. O. C. 2524.

Hunterian.

2943. Cranium of male. O. C. 2525.

Of this specimen it is stated in the Old Catalogue that the left tusk is abortive. It, however, does not depart from the usual condition.

Hunterian.

2944. Skull of female. O. C. 2522.

The rudimentary tusks are exposed in their formative cavities.

Hunterian.

2945. Mandible. O. C. 2526.

British Museum. Purchased, 1809.

2946. A tusk. O. C. 2529.

Hunterian.

2947. A tusk. O. C. 2535.

Hunterian.

2948. A tusk. O. C. 2540.

Monodon monoceros.

2949. A tusk, with a portion of the alveolus in which it was embedded. O. C. 2531.

Hunterian.

2950. A tusk. O. C. 2533.

Hunterian.

2951. A longitudinally bisected tusk. O. C. 2532 and 2534.

The distal extremity has been broken off.

Hunterian.

2952. A longitudinally bisected tusk. O. C. 2530.

Hunterian.

2953. The tusk of a young male. O. C. 2538.

Hunterian.

2954. The proximal portion of the tusk of a young male. O. C. 2537.

Hunterian.

2955. The undeveloped growing tusk of a young animal.

The pulp-cavity is open at the base.

Hunterian.

2956. An abortive tusk, the growth of which is completed, as shown by the closure of the pulp-cavity. O. C. 2541.It either belongs to a female or is the right tusk of a male.

Hunterian.

2957. An abortive tusk. O. C. 2542.

Presented by Henry Cline, Esq.

Genus DELPHINAPTERUS.

Delphinapterus, Lacépèdo, Hist. Nat. des Cétacés, p. xli (1804)*. Beluga, Gray, Spicilegia Zoologica, i. p. 2 (1828).

Delphinapterus leucas.

Delphinus leucas, Pallas, Reisc &c. iii. p. 85 (1776).

Balæna albicans, O. F. Müller, Zool. Danicæ Prodr. p. 7 (1776). Delphinapterus beluga, Lacépède, Hist. Nat. des Cétacés, p. 243

(1804).

Beluga catodon (Physeter catodon, Linn.), Gray, Zool. Erebus aud Terror, p. 29 (1846).

THE BELUGA OF WHITE WHALE.

Hab. Arctic Seas.

2958. Articulated skeleton.

Vertebræ: C. 7, D. 11, L. 9, C. 22: total 49.

Length 12 feet (3.660 m.).

A rudimentary cervical rib is present on the right side.

Purchased, 1870.

A second articulated skeleton, prepared from an animal taken near Dunrobin Castle, and presented by the Duke of Sutherland in 1879, is No. 2935 A of the Pathological Series. It affords a remarkable example of recovery from lateral dislocation of the atlas from the occipital condyles with subsequent bony union. The circumstances of its capture and the condition of the injured parts are described in Proc. Zool. Soc. 1879, p. 667. Its length is 12 feet 2 inches (3.700 m.), and its vertebral formula C. 7, D. 11, L. 9, C. 23: total 50.

2959. Skeleton (not quite complete).

Vertebræ: C. 7, D. 11, L. 9, C. 19 (imporfect).

In Museum before 1862. Hunterian?

* The Beluga being first mentioned and the type of this genus, in fact the only species of those now recognized known to Lacépède, should remain as its representative; although by some zoologists it has been removed to a new genus, and Delphinapterus transferred to species unknown to its founder.

Delphinapterus leucas.

2960. Imperfect skeleton.

In Museum before 1862.

2961. Skull. O. C. 2505.

Brookes Collection. Purchased, 1828.

2962. Bisected cranium. O. C. 2506.

Hunterian.

2963. Lower jaw. O. C. 2507.

The outer alveolar wall has been removed on the right side, to show the mode of implantation of the teeth.

Hunterian.

2964. Skull of fœtus.

Purchased, 1877.

Genus PHOCÆNA.

Cuvier, Règne Animal, i. p. 279 (1817).

Phocæna communis.

Delphinus phocana, Linnæus, Syst. Nat. ed. 12, i. p. 108 (1766). Phocana communis, Lesson, Manuel de Mammologie, p. 413 (1827).

THE COMMON PORPOISE.

Hab. Atlantic Ocean.

2965. Articulated skeleton of female.

Vertebræ: C. 7, D. 13, L. 14, C. 32: total 66.

Length 5 feet 3 inches (1.600 m.).

It has been prepared with very great care, the exact relation which the bones held to each other in the recent animal having been preserved throughout.

From a specimen taken off Brighton, which lived for a short time in the Gardens of the Zoological Society. The dorsal fin, which has a series of horny tubercles developed upon the anterior edge, is preserved in spirit in the Gallery. This was one of the animals upon which Dr. Gray founded his *Phocana tuberculifera* (Ann. & Mag. Nat. Hist. ser. 3, xvi. p. 138, 1865).

Purchased, 1866.

2966. Articulated skeleton. O. C. 2509.

South Collection. Purchased, 1835.

2967. Complete skeleton of adult female, not articulated.

Vertebræ: C. 7, D. 13, L. 14, C. 31: total 65.

The animal, which was eaught in the English Channel,
20 Nov. 1879, contained a fœtus about 6 inches long.

Purchased, 1879.

2968. Skeleton, not quite adult.

Vertebræ: C. 7, D. 12, L. 14, C. 30: total 63.

Parker Collection. Purchased, 1858.

2969. Imperfect skeleton. O. C. 2512.

Presented by William Clift, Esq.

2970. Skull.

In Museum before 1862.

2971. Left moiety of vertically bisected cranium. O.C. 2511.

Hunterian.

2972. Disarticulated skull of young.

In Museum before 1862.

2973. Bones of skeleton, wanting the cranium.

In Museum before 1862.

2974. Portion of vertebral column of male (not quite adult), with pelvic bones mounted in their exact natural position.

Prepared in 1865.

2975. Right and left pelvic bones of adult female.

Purchased, 1881.

2976. Cranium of Porpoise from Eastport, Maine, presented as "Phocæna americana, S. F. Baird," but which differs in no appreciable character from Phocæna communis.

Presented by the Smithsonian Institution, 1872.

Genus ORCA.

Gray, Zool. Erebus and Terror, p. 33 (1846).

The specific determination and geographical distribution of the animals of this genus present many difficulties. In the absence of distinctive osteological characters, all the specimens in the Museum are provisionally included under the name of the best known species.

Orca gladiator.

Delphinus orca, Linnœus, Syst. Nat. ed. 12, i. p. 108 (1766).

Delphinus orca and D. gladiator, Bonnaterre, Cétologio, pp. 22 & 23 (1789).

Orca gladiator, Gray, Zool. Erebus and Terror, p. 33 (1846).

THE KILLER OF GRAMPUS.

2977. Articulated skeleton of malc. O. C. 2515.

Vertebræ: C. 7, D. 11, L. 10, C. 23 (incomplete).

Length 21 feet 6 inches (6.550 m.). The bones of the manus being absent, those of the left side have been modelled from a perfect specimen in the Cambridge University Museum.

From an animal, said to have been 24 feet long, caught in the mouth of the Thames in 1759, and figured by Hunter in the 'Philosophical Transactions' for 1787, plate xvi. The original coloured drawing from which the engraving is taken is among the Hunterian drawings in the possession of the College.

Hunterian.

2978. Skull. O. C. 2517.

From the Cape of Good Hopo.

Purchased, 1828.

2979. Skull, bones of the anterior extremities, four cervical and some of the posterior caudal vertebræ, and hyoid bones.

From Tasmania.

Presented by W. L. Crowther, Esq., 1865.

2980. Dentary portion of the cranium and lower jaw.

From Tasmania.

Presented by W. L. Crowther, Esq., 1863.

2981. Lower jaw.

From Tasmania.

Presented by W. L. Crowther, Esq., 1862.

2982. Right tympanic and periotic bones. O. C. 2516.

Hunterian.

Genus PSEUDORCA.

Reinhardt, Oversigt Kong. Danske Vidensk. Selsk. Forhandl. 1862, p. 151.

Pseudorca crassidens.

Phocena crassidens, Owen, Brit. Fossil Mammals and Birds, p. 516 (1846).

Pseudorca crassidens, Reinhardt, loc. cit.

Orca meridionalis, Flower, Proc. Zool. Soc. 1864, p. 420*.

2983. Articulated skeleton.

Vertebræ: C. 7, D. 10, L. 9, C. 23: total 49.

Length 17 feet 4 inches (5.290 m.).

This and the next specimen are from a herd of animals stranded together in Adventure Bay, Tasmania, the skeletons of four of which were prepared by direction of Mr. Crowther. The others are in the British Museum and in the Cambridge University Museum.

Presented by W. L. Crowther, Esq., 1866.

* The widely separated habitat and slight differences in the skulls first examined induced me to refer the Southern specimens provisionally to a distinct species under this name; but comparison of a larger series of skulls and skeletons from the North Sea and from the coast of Tasmania has shown that no constant distinguishing characters can be pointed out between them; they are therefore now all included under the original specific designation, the type of which, belonging to the Stamford Museum, has unfortunately been lost.

Pseudorca crassidens.

2984. Skeleton.

From a younger animal of the same herd.

Vertebræ: C. 7, D. 10, L. 11, C. 21: total 49.

Presented by W. L. Crowther, Esq., 1866.

2985. Skull.

From an old animal from Tasmania.

Presented by W. L. Crowther, Esq., 1874.

2986. Skull.

From Tasmania. This is the type of *Orca meridionalis*, and is described and figured as such in the 'Proceedings of the Zoological Society,' 1864, p. 420. In the woodcut of the upper surface (p. 421) the artist has neglected to reverse the drawing on the block.

Presented by W. L. Crowther, Esq., 1863.

2987. Skull.

From a younger animal; received with the last.

Presented by W. L. Crowther, Esq., 1863.

Genus GLOBICEPS.

Globicephala, Lesson, Nouv. Tab. du Règne Animal, Mammifères, p. 200 (1842).

Globiocephalus, Gray, Zool. Erebus and Terror, p. 32 (1846).

Globiceps melas.

Delphinus melas, Traill, Nicholson's Journ. xxii. p. 81 (1809).
Delphinus globiceps, Cuvier, Ann. du Mus. xix. p. 14 (1812).
Globiocephalus svineval (Lacép.), Gray, Zool. Erebus and Terror, p. 32 (1846).

THE PILOT-WHALE, CA'ING WHALE, OF BLACK-FISH.

Hab. Apparently cosmopolitan.

A. Specimens from the Northern Hemisphere.

2988. Articulated skeleton of male.

Vertebræ: C. 7, D. 11, L. 13, C. 28: total 59. Length 19 feet (5.780 m.).

From the Faroe Islands.

Received in exchange from the Copenhagen Museum, 1865.

2989. Cranium. O. C. 2520.

Presented by Lieut. Colquhoun, 1823.

2990. Mandible.

"From an animal shot by the keeper of the Rev. M. F. Townsend in the harbour of Castlo Townsend, County Cork, Ireland, Feb. 1854. About eighty others were killed on the same day, just before a hoavy gale. Many of the teeth were broken by the champing of the animal when wounded."—MS. label.

Presented by Lieut. Townsend, 2nd Life Guards.

2991. Skull of young.

This specimen is figured in Flower's 'Osteology of the Mammalia,' ed. 1876, p. 187.

From an animal stranded, with several others, in the Firth of Forth, in April 1867. See Murie, Trans. Zool. Soc. vol. viii. p. 235, for an account of the external characters and anatomy of one of the same herd.

Purchased.

2992. Skull and many of the bones of a fœtus.

The animal from which the fœtus was taken was east ashoro dead near Brighton in the early part of the year 1864.

Presented by Dr. E. L. Ormerod, 1864.

B. Specimens from the Southern Hemisphere*.

2993. Articulated skeleton.

Vertebræ: C. 7, D. 11, L. 13, C. 29: total 60. Length 17 feet 6 inches (5·330 m.). From Tasmania.

Presented by W. L. Crowther, Esq., 1865.

* No differences of specific value, either in external or osteological characters, have as yet been indicated between these and the Northern specimens. Until such differences can be shown they must be included under the same specific designation.

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Globiceps melas.

2994. Skeleton of male.

Vertebræ: C. 7, D. 11, L. 13, C. 28: total 59. From Tasmania.

Presented by W. L. Crowther, Esq., 1865.

2995. Skeleton of female.

Vertebræ: C. 7, D. 11, L. 14, C. 27: total 59. From the same herd as the last.

Presented by W. L. Crowther, Esq., 1871.

2996. Skeleton of young.

Vertebræ: C. 7, D. 11, L. 13, C. 27: total 58.

Taken on the coast of Tasmania at the same time as the two last.

Presented by W. L. Crowther, Esq., 1871.

2997. Skeleton.

Vertebræ: C. 7, D. 11, L. 13, C. 28: total 59. From New Zealand.

Presented by the Colonial Museum of New Zealand, Wellington, 1878.

2998. Skeleton.

Vertebræ: C. 7, D. 11, L. 14, C. 21 (incomplete). From New Zealand.

Presented by the Colonial Museum of New Zealand, Wellington, 1878.

2999. Skull. O. C. 2518.

The locality from which this specimen was derived is unknown. It presents some slight differences from the others, and has been described by Dr. Gray under the names of Globiocephalus affinis (Zool. Erebus and Terror, p. 32, 1846; Cat. Seals and Whales in Brit. Mus. 2nd edit. p. 317, 1866) and Grampus affinis (Cat. Seals and Whales, 2nd edit. p. 300), of both of which supposed species it is the type.

Globiceps macrorhynchus.

Globiocephalus macrorhynchus, Gray, Zool. Erebus and Terror, p. 33 (1846).

THE LARGE-HEADED PILOT-WHALE.

3000. Skull. O. C. 2519.

This is the type skull. It differs from G. melas in the præmaxillæ expanding in the anterior half of the rostrum so as completely to cover the maxillæ.

Skulls of exactly the same form have been figured by Cope (Proc. Acad. Nat. Sc. Philadelphia, 1876, p. 129) under the name of G. brachypterus, and by Gervais ('Ostéographie des Cétacés,' tab. lii. fig. 3) as G. intermedius.

Presented by F. D. Bennett, Esq.

Genus TURSIOPS.

Tursio, Gray, Zool. Erebus and Terror, p. 37 (1846). Tursiops, Gervais, Hist. Nat. des Mammifères, ii. p. 323 (1855).

Tursiops tursio.

? Delphinus tursio, Fabricius, Fauna Grænlandica, p. 49 (1780).

D. tursio, Bounaterre, Cétologic, p. 21 (1789).

D. truncatus, Montagu, Mem. Wern. Soc. iii. p. 75 (1821).

Tursio truncatus, Gray, Cat. Seals and Whales Brit. Mus. p. 258 (1866).

Tursiops tursio, Van Beneden & Gervais, Ostéographie des Cétacés, p. 589 (1880).

THE TURSIO.

Hab. Atlantic Ocean.

3001. Articulated skeleton of female. O. C. 2483.

Vertebræ: C. 7, D. 13, L. 16, C. 27: total 63.

Length 10 feet 7 inches (3.220 m.).

Prepared from an animal taken in the mouth of the Thames below the Nore, in June 1828.

Presented by John Howship, Esq.

ZX

Tursiops tursio.

3002. Skeleton, &. O. C. 2485 and 2488.

Vertebræ: C. 7, D. 12, L. 17, C. 10 (imperfect).

The teeth have been lost, and the sockets obliterated except at the anterior extremity of the jaws, which have been the subject of inflammatory disease.

Hunterian.

3003. Incomplete skeleton, ?.

Dentition: $\frac{24-23}{26-25} = 98$.

Hunterian.

3004. Skeleton of young.

This and the last are probably the skeletons of the animals (mother and young) taken near Berkeley, Gloucester, and sent by Dr. Jenner to Hunter, as described in the 'Philosophical Transactions' for 1787, p. 447, under the name of "Bottle-nose Whale."

Hunterian.

3005. Skull, ♀.

Dentition: $\frac{24-24}{20-20} = 88$.

From an animal taken near Margate in the autumn of 1872.

Presented by Sir Erasmus Wilson, 1872.

3006. Mutilated skull, with the bones of the pectoral extremities and the tail, of a young animal.

Taken at Herne Bay in the summer of 1868.

Presented by Francis T. Buckland, Esq., 1868.

3007. Cranium, with the cervical and two dorsal vertebræ, ♀. O. C. 2484.

Brookes Collection. Purchased, 1828.

3008. Tympanic and periotic bones. O.C. 2487.

3009. Calvarium, through which a longitudinal section has been made to display the cerebral cavity. O. C. 2501.

Hunterian.

3010. Mandible.

Dentition: 21-21. It presents no distinguishing characters from the British specimens.

From Tasmania.

Presented by W. L. Crowther, Esq., 1871.

3011. Skull, ♂. O. C. 2486.

Dentition: $\frac{22-22}{21-19}$.

In the narrowness of the rostrum it resembles the specimen named *Delphinus metis* by Gray (figured in the 'Voyage of the Erebus and Terror,' pl. 18); but this is probably only a sexual character.

Hunterian.

Tursiops catalania.

Delphinus catalania, Gray, Proe. Zool. Soc. 1862, p. 143.

3012. Skull.

Dentition: $\frac{25-26}{22-22}$

In Museum before 1862.

Genus STENO.

Gray, Zool. Erebus and Terror, p. 43 (1846).

Steno rostratus.

Delphinus rostratus (Cuv.), Desmarest, Nouv. Diet. d'Hist. Nat. ix. p. 160 (1817); Mammalogie, p. 515 (1822).

D. frontatus (in part), Cuvier, Ossemens Fossiles, 2^e édit. t. v. pt. 1, p. 278, also p. 400, pl. xxi. figs. 7, 8 (1823).

D. rostratus, Fréd. Cuvier, Cétacés, p. 156 (1836); Cuvier, Oss. Foss. 4° édit. viii. p. 121, pl. cexxii. figs. 7, 8.

Steno frontatus, Gray, Cat. Cetaeca Brit. Mus. p. 233 (1866).

Steno (Glyphidelphis) rostratus, Gervais, Ostéographie des Cétaeés, p. 594, pl. xxxvii. figs. 8-11 (1880).

3013. Skull.

Dentition: $\frac{21-21}{22-23}$

Purchased, 1867.

Steno rostratus.

3014. Skull.

Dentition: $\frac{21-20}{20-20}$.

Purchased, 1872.

3015. Mutilated skull. O. C. 2497 and 2498.

Dentition : $\frac{22-24}{22-21}$.

Hunterian.

3016. Skull.

Dentition: $\frac{24-23}{25-23}$.

In Museum before 1862.

3017. Dentary portion of rostrum. O. C. 2496.

The alveolar wall has been removed from the right side to show the teeth, which are 20 in number, in situ.

Hunterian.

3018. Mandible. O. C. 2499.

Hunterian.

3019. Skull.

Dentition: $\frac{27-26}{25-24}$

This specimen differs from the foregoing in having a more compressed rostrum, and corresponds to the species or variety called *Delphinus reinwardtii* by Schlegel (Abhandl. Geb. Zool. &c. p. 27, 1841) and *Steno compressus* by Gray (Zool. Erebus and Terror, 1846).

In Museum before 1862.

3020. Mutilated cranium of a Dolphin, apparently belonging to this group. O. C. 2500.

The tentorium is strongly ossified.

Hunterian.

Genus SOTALIA.

Gray, Cat. Seals and Whales Brit. Mus. pp. 393, 401 (1866).

Sotalia sinensis.

Delphinus sinensis, Desmarest, Mammalogie, p. 514 (1822).

THE CHINESE WHITE DOLPHIN.

3021. Articulated skeleton.

Vertebræ: C. 7, D. 12, L. 9, C. 23: total 51.

Length 7 feet 5 inches (2.260 m.).

Dentition: $\frac{3-32}{32-31}$.

Prepared from an animal taken in the harbour at Amoy, China. The skeleton is described and figured in the 'Transactions of the Zoological Society,' vol. vii. p. 151 (1869).

Presented by Robert Swinhoe, Esq., 1866.

3022. Portions of skeleton, consisting of hinder part of the cranium, the mandible with teeth complete, one lumbar vertebra, two ribs, and the two scapulæ.

From Amoy.

Presented by Robert Swinhoe, Esq., 1868.

3023. Cranium of a Dolphin.

Found upon the beach at Aripo, on the north-west coast of Ceylon, in 1866. It is very nearly allied to *S. sinensis*, from which it is only distinguished by its smaller size. It also resembles *Delphinus lentiginosus*, Owen (Trans. Zool. Soc. vol. vi. p. 20), from which it differs, however, in the larger size of the brain-case compared with that of the rostrum.

Presented by E. W. H. Holdsworth, Esq., 1872.

Genus LAGENORHYNCHUS.

Gray, Zool. Erebus and Terror, p. 34 (1846).

Lagenorhynchus electra.

Gray, Zool. Erebus and Torror, p. 35 (1846).

3024. Skull.

Dentition: $\frac{22-23}{24-24}$.

This specimen, of which the original locality is unknown, corresponds closely with the type of Gray's *L. electra* in the British Museum.

Purchased, 1876.

Lagenorhynchus acutus.

Delphinus acutus, Gray, Spicilegia Zoologica, i. p. 2 (1828).

D. eschrichtii, Schlegel, Abhandl. Gebieto Zool. &c. p. 23 (1841).

D. leucopleurus, Rasch, Nova Spec. Descript. &c. (1843).

THE WHITE-SIDED DOLPHIN.

Hab. The North Atlantic.

3025. Articulated skeleton.

Vertebræ: C. 7, D. 15, L. 20, C. 35 (several wanting): total 77 or more.

Length 8 feet 9 inches (2.660 m.). This probably exceeds the real length of the animal, as the vertebræ are too far apart. From the coast of Norway.

Purchased, 1875.

3026. Skull.

Dentition: $\frac{37-38}{38-37}$.

From one of the hord which came ashore at Dröbak, in Norway, in June 1842, and formed the subject of Rasch's Memoir on *Delphinus leucopleurus* (Christiania, 1843).

Received in exchange from the Christiania Museum, 1873.

Lagenorhynchus clanculus.

Gray, Proc. Zool. Soc. 1849, p. 2.

3027. Skull.

Dentition: $\frac{29-29}{27-26}$.

From the Pacific coast of North America.

Received in exchange, 1880.

Lagenorhynchus albirostris.

Gray, Ann. & Mag. Nat. Hist. xvii. p. 84 (1846); Zool. Erebus and Terror, p. 35 (1846).

3028. Articulated skeleton.

Vertebræ: C. 7, D. 14, L. & C. 67; total 88.

Length 7 feet 5 inches (2.260 m.), the intervortobral substances being greatly shrunken.

Received in exchange from the Cambridge University

Museum, 1882.

Genus CLYMENIA.

Clymene, Gray, Proc. Zool. Soc. 1864, p. 237. Clymenia, Gray, Synopsis Whales and Dolphins, p. 6 (1868). Prodelphinus, Gervais, Ostéograph. des Cétacés, p. 604 (1880).

Clymenia leucorhamphus.

Delphinus leucorhamphus, Péron, in Lacépède's Cétacés, p. 316 (1804).

D. peronii, Lacépède, ibid. p. 316.

Leucorhamphus peronii (Lacép.), Lilljeborg, Upsala Univ. Arsskrift, 1861, Mat. & Naturvet. p. 5.

PÉRON'S DOLPHIN.

3029. Skull.

Dentition: $\frac{39-42}{42-40}$.

From Tasmania, where the species goes by the name of "Right-Whale Porpoise," on account of the absence of dorsal fin.

Presented by W. L. Crowther, Esq., 1871.

Clymenia obscura.

Delphinus (Grampus) obscurus, Gray, Spicilegia Zoologica, i. p. 2 (1828).

3030. Skull.

Dentition: $\frac{31-32}{32-31}$.

From near the south coast of New Zealand.

Presented by Captain T. M. Almond, 1875.

3031. Skull.

Dentition: $\frac{32-32}{28-29}$.

Purchased, 1879.

Clymenia dubia.

Delphinus dubius, Cuvier, Annales du Muséum, xix. p. 14 (1812); Ossemens Fossiles, 2° édit. v. pt. i. pp. 289, 295 (1823).

Under this insufficiently described species are provisionally placed a series of skulls presenting so many individual variations that they have been referred by Gray to several different species and even genera, but which pass by intermediate forms into each other, and the differences between which it is impossible to characterize in the absence of all knowledge of the remainder of the skeleton or of the external characters.

3032. Skull. O. C. 2494.

Dentition: $\frac{39-40}{38-39}$.

This specimen is referred to in Gray's 'Zoology of the Erebus and Terror,' p. 40, under the name of *Delphinus euphrosyne*. It corresponds, however, more closely with *Steno attenuatus* of the same work.

Sir Ashton Lever's Collection. Purchased, 1806.

3033. Skull.

Dentition: $\frac{31-40}{**-36}$

Resembles Gray's Steno attenuatus.

Purchased, 1867.

3034. Skull.

Dentition: $\frac{37-39}{38-37}$.

Corresponds to Gray's Steno attenuatus.

From Dr. Blundell's Museum.

Presented by Dr. S. A. F. Wilks, 1878.

3035. Skull.

Dentition: $\frac{37-40}{41-40}$.

Corresponds to Gray's Steno attenuatus,

Purchased, 1867.

3036. Skull.

Dentition: $\frac{33-35}{35-34}$.

Corresponds closely with the type of Gray's Clymenia doris.

Purchased, 1867.

3037. Anterior portion of skull.

Dentition: $\frac{35-36}{38-39}$.

Resembles Gray's Clymenia doris.

Purchased, 1868.

3038. Skull.

Dentition: $\frac{35-33}{36-34}$.

It closely resembles the last two, but is of rather larger size.

Presented by F. Hutchinson, Esq., 1881.

Clymenia longirostris.

Delphinus longirostris, Gray, Spieilegia Zoologica, i. p. 1 (1828).

3039. Skull.

Dentition: $\frac{50-50}{51-51}$.

It resembles the type of this species which is in the Leyden Museum, and also *Clymenia microps* of Gray (Zool. Erebus and Terror, pl. 25).

Locality unknown.

Purchased, 1867.

3040. Skull. O. C. 2495.

Evidently closely allied to the last, but of smaller size.

Hunterian.

Genus DELPHINUS.

Linnæus, Syst. Nat. ed. 12, i. p. 108 (1766).

The skulls of the members of this genus are distinguished from all the foregoing by the deep longitudinal grooves on each side of the palate. The various specimens in the collection, though from different localities, present no characters by which they can be distinguished from *Delphinus delphis* of our coasts.

586 CETACEA.

Delphinus delphis.

Linnæus, Syst. Nat. ed. 12, i. p. 108 (1766).

THE COMMON DOLPHIN.

Hab. Cosmopolitan?

3041. Articulated skeleton of nearly adult. O. C. 2489.

Dentition: \(\frac{45-45}{43-45}\). Vertebræ: C. 7, D. 14, L. 21, C. 29 (incomplete). Length 6 feet 1 inch (1.860 m.). Taken near Worthing, Sussex.

Presented by Sir Everard Home.

3042. Articulated skeleton of young female.

Dentition: $\frac{46-46}{48-47}$. Vertebræ: C. 7, D. 15, L. 21, C. 32: total 75. Length 4 feet $8\frac{1}{2}$ inches (1.430 m.).

From an animal taken at Mevagissey, Cornwall, the external characters of which are described and figured in the 'Transactions of the Zoological Society,' vol. xi. p. 1, pl. 1 (1880).

Presented by Matthias Dunn, Esq., 1879.

3043. Articulated skeleton of adult.

Dentition: $\frac{**-44}{39-38}$. Vertebræ: C. 7, D. 14, L. 21, C. 32: total 74. Length 6 feet $4\frac{1}{2}$ inches (1.950 m.). From Tasmania.

Presented by W. L. Crowther, Esq., 1868.

3044. Skeleton of male.

Dentition: $\frac{45-47}{44-44}$. Vertebrae: C. 7, D. 15, L. 20, C. 34: total 76.

From Tasmania.

Presented by W. L. Crowther, Esq., 1870.

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3045. Skeleton of female.

Dentition: $\frac{45-46}{45-43}$. Vertebræ: C. 7, D. 14, L. 20, C. 34: total 75.

Received from Tasmania with the last.

Presented by W. L. Crowther, Esq., 1870.

3046. Skeleton of male.

Dentition: $\frac{43-43}{45-43}$. Vertebræ: C. 7, D. 14, L. 21, C. 32: total 74.

From Tasmania.

Presented by W. L. Crowther, Esq., 1871.

3047. Skeleton of young.

Dentition: $\frac{50-50}{48-48}$. Vertebræ: C. 7, D. 15, L. 19, C. 33: total 74.

From Tasmania.

Presented by W. L. Crowther, Esq., 1871.

3048. Skull.

Dentition: $\frac{45-45}{44-44}$ From Tasmania.

Presented by W. L. Crowther, Esq., 1871.

3049. Skull.

Dentition : $\frac{43-42}{41-43}$

From an animal harpooned by the donor in lat. 33° 37′ S. and long. 15° 59′ E.

Presented by Captain Robert Studdart, 1869.

3050. Skull.

Purchased, 1867.

3051. Skull.

Purchased.

3052. Skull. O. C. 2493.

Dentition: $\frac{48-48}{45-45}$

Delphinus delphis.

3053. Skull. O. C. 2491.

Dentition: $\frac{41-42}{44-44}$.

Hunterian.

3054. Skull.

Purchased, 1872.

3055. Skull.

Dentition: $\frac{42-46}{45-44}$.

Purchased.

3056. Skull.

Dentition: $\frac{43-43}{43-43}$.

Purchased, 1867.

3057. Skull.

Dentition: $\frac{45-46}{44-43}$.

Purchased, 1874.

3058. Skull.

Dentition: $\frac{46-44}{50-50}$.

Purchased, 1867.

3059. Skull.

Dentition: $\frac{44-45}{43-43}$.

Purchased, 1867.

3060. Skull.

Dentition: $\frac{49-46}{45-45}$.

Purchased, 1874.

3061. Skull.

Dentition: $\frac{44-45}{51-49}$.

Purchased, 1872.

3062. Cranium. O. C. 2492.

Dentition: $\frac{49-51}{2}$.

3063. Anterior portion of rostrum. O. C. 2490.

The external alveolar wall has been removed, and a vertical section though the roots of the teeth has been made, exposing their pulp-cavities.

Hunterian.

3064. Mandible. O. C. 2504.

Dentition: 40-39

Order RODENTIA.

The arrangement and limits of the families and genera of this order adopted in this Catalogue are taken, with some slight modifications, from the memoir "On the Classification of the Order Glires," by Edward R. Alston, Proc. Zool. Soc. 1876, p. 62.

Suborder RODENTIA SIMPLICIDENTATA.

Family ANOMALURIDÆ.

Dentition:—i. $\frac{1}{1}$, c. $\frac{9}{0}$, p. $\frac{1}{1}$, m. $\frac{3}{3}$, $=\frac{5}{5}$: total 20.

Genus ANOMALURUS.

Waterhouse, Proc. Zool. Soc. 1842, p. 124.

Anomalurus fraseri.

Anomalurus fraseri, Waterhouse, loc. cit. Pteromys derbianus, Gray, Ann. & Mag. Nat. Hist. x. p. 262 (1842).

3065. Skull.

Taken from a skin brought from the West Coast of Africa.

Presented by Captain R. Burton, 1865.

Family SCIURIDÆ.

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{1}$ or $\frac{2}{1}$, m. $\frac{3}{3}$, = $\frac{5 \text{ or } 6}{5}$: total 20 or 22.

Genus PTEROMYS.

Cuvier, Leçons d'Anatomie comparée, i. tabl. 1 (1800).

Pteromys nitidus.

Geoffroy, Cat. des Mammifères du Muséum (1803).

3066. Skull.

From Borneo.

Purchased, 1871.

Gonus SCIUROPTERUS.

"Sciuroptère," Fréd. Cuvier, Mém. du Muséum, x. p. 116 (1823).

Sciuropterus volucella.

Sciurus volucella, Pallas, Novæ Species Quadrupedum e Glirium Ordine, p. 353 (1778).

THE AMERICAN FLYING SQUIRREL.

Hab. North America.

3067. Imperfect skeleton. O. C. 2263.

The accessory cartilages projecting from the ulnar side of the carpus are preserved.

Brookes Collection. Purchased, 1828.

3068. Skeleton of male.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 16 (incomplete).

Prepared from a specimen which lived for some time in England in the possession of the donor.

Presented by Miss E. N. Paget, 1875.

Genus SCIURUS.

Linnœus, Syst. Nat. ed. 12, i. p. 86 (1766).

Sciurus vulgaris.

Linnæus, loc. cit.

THE COMMON SQUIRREL.

Hab. Europe and Northern Asia.

3069. Articulated skeleton. O. C. 2268.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 21.

South Collection. Purchased, 1835.

Sciurus vulgaris.

3070. Articulated skeleton.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 22.

In Museum before 1862.

3071. Skeleton of young.

The permanent teeth have been acquired.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 18 (incomplete).

Presented by Mr. P. Wright, 1870.

3072. Skeleton of young.

The crowns of the molar teeth are but just appearing above the alveolar margin.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 20.

Purchased, 1870.

Sciurus bicolor.

Sparrman, Götheb. Wetenskaps Handl. i. p. 70 (1778).

THE JELERANG SQUIRREL.

Hab. Malay Peninsula, Sumatra, Java.

3073. Skull. O. C. 2266.

From Java.

Hunterian.

Sciurus indicus.

Erxleben, Systema Reg. Animal. p. 420 (1777).

THE MALABAR SQUIRREL.

Hab. India.

3074. Articulated skeleton. O. C. 2264.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 24.

South Collection. Purchased, 1835.

3075. Skeleton of male.

Vortebræ: C. 7, D. 12, L. 7, S. 3, C. 25.

Presented by Captain Gideon, 1864.

3076. Skull. O. C. 2265.

British Museum. Purchased, 1809.

Sciurus stangeri.

Waterhouse, Proc. Zool. Soc. 1842, p. 127.

STANGER'S SQUIRREL.

Hab. West Africa.

3077. Mutilated skull.

Taken from a skin brought from the West Coast of Africa.

Presented by Captain R. Burton, 1865.

3078. Mutilated skull.

From a skin from the West Coast of Africa.

Presented by Captain R. Burton, 1865.

3079. Skull.

From a skin.

In Museum before 1862.

Sciurus rufo-brachiatus.

Waterhouse, Proc. Zool. Soc. 1842, p. 128.

Hab. West Africa.

3080. Skull.

From a skin from the West Coast of Africa.

Presented by Captain R. Burton, 1865.

PART II.

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Sciurus pyrrhopus.

Fréd. Cuvier, Mammifères, iv. (1833).

Hab. West Africa.

3081. Skull.

Taken from a skin sent from the Gold Coast.

Presented by Staff-Surgeon J. R. Thomas, 1868.

Sciurus carolinensis.

Gmelin, Syst. Nat. i. p. 148 (1788).

THE AMERICAN GREY SQUIRREL.

Hab. North and Central America.

3082. Incomplete skeleton. O. C. 2273–2289.

The skull has been longitudinally and vertically bisected. The teeth have been lost,

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 19 (incomplete).

Hunterian.

3083. Skull.

Presented by the Smithsonian Institution, 1871.

Sciurus hudsonius.

Pallas, Nov. Spee. Glirium, p. 376 (1778).

THE CHICKAREE SQUIRREL.

Hab. North America.

3084. Skull. O. C. 2267.

The teeth have been removed from the left maxilla and ramus of mandible and are displayed separately.

Genus XERUS.

Hemprieh and Ehrenberg, Symbol. Phys. Mamm. i. gg (1832).

Xerus rutilus.

Sciurus rutilus, Cretzsehmar, Atlas zu der Reise in nördl. Afrika, i. p. 59 (1826).

Hab. Africa.

3085. Mutilated skull.

Purchased, 1871.

Xerus capensis.

Sciurus capensis, Kerr, Animal Kingdom, p. 266 (1792). Sciurus setosus, Smuts, Enum. Mammal. Capens. p. 33 (1832).

Hab. South and West Africa.

3086. Skull.

All the molar teeth have been lost and their sockets obliterated. From the West Coast of Africa.

Purchased.

Xerus erythropus.

Sciurus crythropus, Geoffroy, Cat. des Mammifères du Muséum, p. 178 (1803).

Hab. Africa.

3087. Skull.

Taken from a skin.

In Museum before 1862.

Genus TAMIAS.

Illiger, Prod. Syst. Mamm. p. 83 (1811).

Tamias asiaticus.

Sciurus striatus, a. asiaticus, Gmelin, Syst. Nat. i. p. 150 (1788). Tamias asiaticus, Allen, Monogr. N. American Rodentia, p. 793 (1877).

Hab. Northern Europe, Asia, and America.

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Tamias asiaticus.

3088. Partially articulated skeleton, ♀.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 20. From Mezen, North Russia.

Presented by E. R. Alston, Esq., 1874.

Genus SPERMOPHILUS.

"Spermophile," Fréd. Cuvier, Mém. du Muséum, ix. p. 293 (1822).

Spermophilus citillus.

Mus citellus, Linnæus, Syst. Nat. ed. 12, i. p. 80 (1766).

THE EUROPEAN SOUSLIK.

Hab. Europe and North Asia.

3089. Cranium. O. C. 2262.

Hunterian.

3090. Cranium.

This specimen is smaller than the previous one, but resembles it very closely in other respects.

Presented by the Zoological Society, 1867.

Spermophilus mongolicus.

A. Milne Edwards, Ann. des Sci. Nat. Zool. 5e série, vii. 1867, p. 376.

THE MONGOLIAN SOUSLIK.

Hab. China.

3091. Partially articulated skeleton.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 17. From Chefoo, China.

Presented by R. Swinhoe, Esq., 1873.

3092. Skeleton, wanting the cranium.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 17. From Chefoo, China.

Presented by R. Swinhoe, Esq., 1873.

Genus CYNOMYS.

Rafinesque, Amer. Monthly Mag. ii. p. 45 (1817).

Cynomys ludovicianus.

Arctomys ludovicianus, Ord, Guthrie's Geography, 2nd Amer. ed. ii. pp. 292-302, 1815 (fide Baird).

THE PRAIRIE-MARMOT.

Hab. North America.

3093. Skeleton of female.

Vertebræ: C. 7, D. 13, L. 7, S. 4, C. 16.

From an animal which died in the Gardens of the Zoological Society of London.

Presented by the Zoological Society, 1874.

Genus ARCTOMYS.

Schreber, Säugthiere, iv. p. 721 (1792).

Dentition :—i. $\frac{1}{7}$, c. $\frac{0}{0}$, p. $\frac{2}{1}$, m. $\frac{3}{3}$, $=\frac{6}{5}$: total 22.

Arctomys marmotta.

Mus marmota, Linnæus, Syst. Nat. ed. 12, i. p. 81 (1766).

THE ALPINE MARMOT.

Hab. Europe.

3094. Articulated skeleton. O. C. 2254.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 24.

South Collection. Purchased, 1835.

3095. Imperfect skeleton of old female.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 9 (incomplete).

Prepared from an animal which died in the Gardens of the Zoological Society.

Presented by the Zoological Society, 1872.

3096. Skull.

Presented by Mrs. J. Toynbee, 1866.

Arctomys monax.

Mus monax, Linnæus, Syst. Nat. ed. 12, i. p. 81 (1766).

THE WOODCHUCK.

Hab. North America.

3097. Skull.

Presented by the Smithsonian Institution, 1871.

3098. Skull.

Presented by the Smithsonian Institution, 1871.

3099. Mutilated skull. O. C. 2256.

Hunterian.

3100. Mutilated skull, ♀. O. C. 2255.

Brookes Collection. Purchased, 1828.

3101. Cranium.

Presented by the Zoological Society, 1867.

Family CASTORIDÆ.

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{1}$, m. $\frac{3}{3}$, $=\frac{5}{5}$: total 20.

Genus CASTOR.

Linnæus, Syst. Nat. ed. 12, i. p. 78 (1766).

Castor fiber.

Linnæus, Syst. Nat. ed. 12, i. p. 78 (1766).

THE EUROPEAN BEAVER.

Hab. Europe.

3102. Cranium.

From an animal taken in Lapland about the year 1830.

Presented by John Wolley, Esq.

3103. Anterior part of cranium. O. C. 2162 and O. C. F. 211.

Discovered in a moss-pit in Berkshire.

Hunterian.

3104. Cranium.

This specimen is figured in Owen's 'British Fossil Mammals and Birds,' p. 190 (1846).

From the Fens of Cambridgeshire.

In Museum before 1862.

The following specimens were in the Museum before 1862, uncatalogued and without history:—

3105. Cranium.

3106. Fragment of eranium, with molar teeth.

3107. Right ramus of mandible.

3108. Left ramus of mandible.

3109. Left ramus of mandible.

3110. Right ramus of mandible.

3111. Right ramus of mandible.

3112. Right and left innominate bones.

3113. Right femur.

Castor canadensis.

Kuhl, Beitr. z. Zoologie, p. 64 (1820).

THE AMERICAN BEAVER*.

Hab. North America.

3114. Articulated skeleton of adult female.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 24.

Prepared from an animal which died in the Gardens of the Zoological Society.

Purchased, 1862.

3115. Articulated skeleton, young. O. C. 2157.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 20 (incomplete).

Brookes Collection. Purchased, 1828.

3116. Imperfect skeleton. O. C. 2160.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 20 (incomplete).

Presented by Henry Cline, Esq.

3117. Imperfect skeleton. O. C. 2161.

Hunterian.

3118. Imperfect skeleton. O. C. 2165.

The eranium is longitudinally and vertically bisected. The inner alveolar wall has been removed to show the teeth in situ. The mandible is wanting.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 22 (incomplete).

Hunterian.

3119. Imperfect skeleton. O. C. 2166.

The eranium has been divided into three transverse sections, and many of the bones have been longitudinally bisected.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 8 (incomplete).

^{*} Zoologists are not yet of accord as to whether the American and European Beavers should be regarded as specifically distinct or as local varieties. A full account of the various opinions on the subject, and the grounds upon which they have been formed, is given by J. A. Allen ("Monogr. of the North-American Rodentia," U.S. Geol. Survey of the Territories, Washington, 1877), with the conclusion that they are well-marked subspecies.

3120. Skull, longitudinally and vertically bisected. O. C. 2158.

Presented by Henry Cline, Esq.

3121. Skull. O.C. 2159.

Presented by Sir John Richardson, M.D.

3122. Mutilated skull. O. C. 2164.

The alveolar wall has been removed to display the teeth in situ.

Hunterian.

3123. Skull.

The upper molars are wanting. From Alaska.

Presented by the Smithsonian Institution, 1871.

3124. Skull.

From Newfoundland. The animal was killed in a stream running into the "Great Pond," near the northern part of the island.

Presented by T. G. B. Lloyd, Esq., 1875.

3125. Mutilated skull of a young animal. O. C. 2163.

Hunterian.

3126. Mandible. O. C. 2167.

Hunterian.

3127. Mandible. O. C. 2168.

Hunterian.

3128. The right ramus of a mandible, in which the incisor, by want of opposition from that in the upper jaw, has continued to grow until its point has again penetrated the mouth between the coronoid and condyloid processes, as far as the base of its own socket, having described a complete circle, but a little obliquely. The atrophied condition of the articular process and ascending ramus of the jaw indicates the impediment to its movements which this anomalous growth of the incisor has occasioned. O. C. 2203.

Genus DIOBROTICUS.

Pomel, Arch. Bibl. Univ. Genève, ix. p. 167.

Biobroticus schmerlingii.

Pomel, loc. cit. (fide Gervais, Zool. et Paléont. Générales, p. 81, 1867-69).

3129. Right lower incisor tooth. O. C. F. 213.

This specimen is No. 21 of the Hunterian Catalogue, where it is mentioned as "a long eutter of the Scalpris dentata, or Glires genus," without locality. It was described by Owen (O. C. F. p. 35, 1845, and 'Brit. Foss. Mammals and Birds,' p. 184, 1846), with other more complete specimens from Norfolk, under the name of Trogontherium cuvieri; but, according to Pomel and Gervais, it does not belong to that species or genus.

Hunterian.

Family MYOXIDÆ.

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{1}$, m. $\frac{3}{3}$, $=\frac{5}{5}$: total 20.

Genus MYOXUS.

Schreber, Säugthiere, iv. p. 824 (1792).

Myoxus glis.

Sciurus glis, Linnæus, Syst. Nat. ed. 12, i. p. 87 (1766).

THE FAT DORMOUSE.

Hab. Europe.

3130. Skull.

From South Germany.

Purchased, 1875.

Genus MUSCARDINUS.

Kaup, Entw. Europ. Thierw. p. 139 (1829).

Muscardinus avellanarius.

Mus avellanarius, Linnœus, Syst. Nat. ed. 12, i. p. 83 (1766).

THE DORMOUSE.

Hab. Europe.

3131. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 22.

From Kent.

Presented by Miss V. J. Flower, 1871.

Family MURIDÆ.

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{0}{0}$, m. $\frac{3}{3}$ *, $=\frac{4}{4}$: total 16.

Genus HYDROMYS.

Hydromis, Geoffroy, Ann. du Muséum, vi. p. 81 (1805).

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{0}{0}$, m. $\frac{2}{2}$, $=\frac{3}{3}$: total 12.

Hydromys chrysogaster.

Geoffroy, loc. cit. p. 90.

THE GOLDEN-BELLIED RAT.

Hab. Australia.

3132. Articulated skeleton. O. C. 2243.

Vertebræ: C. 7, D. 14, L. 7, S. 4, C. 27.

From Australia.

Gould Collection. Purchased, 1840.

Hunterian Substitute, 1846.

3133. Skeleton.

Vertebræ: C. 7, D. 14, L. 7, S. 4, C. 30.

Gould Collection. Purchased, 1840.

* Except in Hydromys.

Hydromys chrysogaster.

3134. Skull. O. C. 2244. Gould Collection. Purchased, 1840.

3135. Skull, 2. O.C. 2245.

Presented by the Nat. Hist. Society of Calcutta.

Genus GERBILLUS.

Desmarest, Nouv. Dict. d'Hist. Nat. xxiv. p. 22 (1804).

Gerbillus indicus.

Dipus indicus, Hardwicke, Trans. Linnean Soc. viii. p. 279 (1804–1807).

THE INDIAN GERBILLE.

Hab. India.

3136. Skull.

Presented by R. C. Bevan, Esq., 1867.

Genus NESOKIA.

Gray, Ann. & Mag. Nat. Hist. x. p. 264 (1842).

Nesokia kok.

Mus kok, Gray, Mag. Nat. Hist. new ser. i. p. 585 (1837). Hab. India.

3137. Skull.

Presented by R. C. Bevan, Esq., 1867.

Genus CRICETUS.

Cuvier, Règne Animal, ed. 1, i. p. 198 (1817).

Cricetus frumentarius.

Cricetus frumentarius, Pallas, Zoogr. Rosso-Asiat. i. p. 161 (1811).
Mus cricetus, Linnæus, Syst. Nat. ed. 12, i. p. 82 (1766).
Cricetus vulgaris, Desmarest, Nouv. Dict. d'Hist. Nat. 2º édit. xiv. p. 168 (1817).

THE COMMON HAMSTER.

Hab. Europe and North Asia.

3138. Naturally articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 17.

From an animal which died in the Gardens of the Zoological Society.

Presented by the Zoological Society, 1872.

Genus CRICETOMYS.

Waterhouse, Proc. Zool. Soc. 1840, p. 2.

Cricetomys gambianus.

Waterhouse, loc. cit.

THE GAMBIAN POUCHED RAT.

Hab. West Africa.

3139. Mutilated skull.

Taken from a skin brought from the West Coast of Africa.

Presented by Captain R. Burton, 1865.

3140. Mutilated skull.

Taken from a skin brought from the West Coast of Africa.

Presented by Captain R. Burton, 1865.

Genus MUS.

Linnæus, Syst. Nat. ed. 12, i. p. 79 (1766).

Mus rattus.

Linnæus, Syst. Nat. ed. 12, i. p. 83 (1766).

THE BLACK RAT.

Hab. Europe.

3141. Articulated skeleton. O. C. 2223.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 29.

Brookes Collection. Purchased, 1828.

Mus rattus.

3142. Partially articulated skeleton, ♀. O. C. 2224.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 32.

South Collection. Purchased, 1835.

Mus decumanus.

Pallas, Nov. Spec. Glirium, p. 91 (1778).

THE BROWN RAT.

Hab. Europe.

3143. Articulated skeleton. O. C. 2225.

Vertebræ: C. 7, D. 13, L. 7, S. 4, C. 20 (incomplete).

Presented by Dr. Robert Willis.

3144. Articulated skeleton, ♀. O. C. 2226.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 27.

Presented by Henry Cline, Esq.

3145. Partially articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 27.

Yarrell Collection. Purchased, 1856.

3146. Partially articulated skeleton.

Prepared in the College, 1877.

3147. Skull, longitudinally and vertically bisected. O. C. 2230.

Presented by Professor Owen.

3148. Skull. Prepared in the College, 1871.

3149. Skull. O. C. 2228. Presented by W. Clift, Esq.

3150. Skull. O. C. 2227. Presented by W. Clift, Esq.

3151. Skull. O. C. 2229.

Presented by W. Clift, Esq.

3152. Skull. O. C. 2234.

The teeth of the left side are displayed separately.

Hunterian.

3153. Cranium.

3154. Skull of young.

Prepared from an animal caught in the College, 1867.

3155. Teeth, displayed separately. O. C. 2235.

Hunterian.

3156. Mutilated skull. O. C. 2232.

The incisors are of unusual length, in consequence of want of mutual apposition.

Presented by Dr. Leach.

Mus malabaricus.

Mus malabaricus, Shaw, Gen. Zool. ii. pt. 1, p. 54 (1801). Mus giganteus, Hardwicke, Trans. Linn. Soc. vii. p. 306 (1804).

THE BANDICOOT RAT.

Hab. India.

3157. Skull. O. C. 2236.

Presented by Dr. Patrick Russell.

3158. Skull.

From India.

Presented by W. Crozier, Esq., 1848.

Mus fuscipes.

Waterhouse, Zool. Voy. Beagle, Mammalia, p. 66 (1840).

THE DUSKY-FOOTED RAT.

Hab. Australia.

3159. Articulated skeleton. O. C. 2241.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 26.

Gould Collection. Purchased, 1846.

Mus musculus.

Linnæus, Syst. Nat. ed. 12, i. p. 83 (1766).

THE COMMON MOUSE.

Hab. Europe.

3160. Articulated skeleton. O.C. 2239.

Vertebræ: C. 7, D. 13, L. 5, S. 4, C. 13 (incomplete).

Presented by Henry Cline, Esq.

3161. Articulated skeleton of white variety.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 20 (incomplete).

Mus minutus.

Mus minutus, Pallas, Reise, i. Append. p. 454; Nov. Spec. Glirium, p. 345 (1778).

Mus messorius, Shaw, Gen. Zoology, ii. pt. 1, p. 62 (1801).

THE HARVEST-MOUSE.

Hab. Europe.

3162. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 30 (complete).

In Museum before 1862.

3163. Skull.

In Museum before 1862.

Of uncertain Species.

3164. Skull.

Called "Jerboa Rat, Umballa."

Presented by W. Crozier, Esq., 1848.

3165. Cranium.

From India.

Presented by R. C. Bevan, Esq., 1867.

Genus HAPALOTIS.

Lichtenstein, Darst. neuer Säugeth. Th. iv. pl. 29 (1829).

Hapalotis albipes.

Lichtenstein, loc. cit.

Hab. Australia.

3166. Articulated skeleton. O. C. 2242.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 20 (incomplete).

From Australia.

Gould Collection. Purchased, 1846. Hunterian Substitute, 1846.

Genus FIBER.

Cuvier, Leçons d'Anatomie comparée, i. tab. 1 (1800).

Fiber zibethicus.

Castor zibethicus, Linnæus, Syst. Nat. ed. 12, i. p. 79 (1766).

THE MUSQUASH OF MUSK-RAT.

Hab. North America.

3167. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 25 (incomplete).

In Museum before 1862.

3168. Skull. O. C. 2205.

Presented by Henry Cline, Esq., 1824.

3169. Skull.

Presented by the Smithsonian Institution, 1871.

3170. Skull. O. C. 2206.

The teeth have been removed from the right side of both jaws, and are displayed separately.

Hunterian.

3171. Cranium.

Presented by the Smithsonian Institution, 1871.

PART II.

Fiber zibethicus.

3172. Upper and lower jaws. O. C. 2207.

The teeth of the left side are displayed separately.

Hunterian.

Genus ARVICOLA.

Lacépède, Mém. de l'Institut, iii. p. 495 (1801).

Arvicola amphibia.

Mus amphibius, Linnœus, Syst. Nat. ed. 12, i. p. 82 (1766).

THE WATER-VOLE.

Hab. Europe and North Asia.

3173. Imperfect skeleton. O. C. 2211-2220.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 20 (incomplete).

Hunterian.

3174. Skull. O. C. 2208.

Presented by W. Clift, Esq.

3175. Skull.

Parker Collection. Purchased, 1858.

3176. Skull.

In Museum before 1862.

3177. An upper jaw in which, from some accident to the lower jaw, the incisors have not been opposed, and have consequently grown to an unusual length and are curved and pointed. O. C. 2210.

Presented by Sir Joseph Banks, P.R.S.

Arvicola agrestis.

Mus agrestis, Linnæus, Fauna Suecica, ed. alt. p. 11 (1761).

Mus gregarius, Linnæus, Syst. Nat. ed. 12, i. p. 84 (1766).

Arvicola agrestis, De Selys, Blasius, Bell (Brit. Quad. 2nd edit. p. 323, 1874), and others.

THE FIELD-VOLE.

Hab. Europe.

3178. Articulated skeleton. O. C. 2221.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 12 (incomplete).

Presented by Sir Joseph Banks, P.R.S., 1830.

Genus MYODES.

Pallas, Zoogr. Rosso-Asiatica, i. p. 173 (1811).

Myodes lemmus.

Mus lemmus, Linnæus, Syst. Nat. ed. 12, i. p. 80 (1766).

THE NORWEGIAN LEMMING.

Hab. Northern Europe.

3179. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 10 (incomplete).

Prepared in 1875 from a specimen in the Spirit Stores.

Genus ELLOBIUS.

Fischer de Waldheim, Zoognosia, iii. p. 72 (1814).

Ellobius talpinus.

Mus talpinus, Pallas, Nov. Com. Petrop. xiv. p. 568 (1770). Hab. Russia.

3180. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 10.

From the Volga.

Presented by Professor Peters, 1871.

Family SPALACIDÆ.

Genus SPALAX.

Güldenstädt, Nov. Com. Petrop. xiv. 1, p. 409 (1770).

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{0}{0}$, m. $\frac{3}{3}$, $=\frac{4}{4}$: total 16.

Spalax typhlus.

Mus typhlus, Pallas, Nov. Spec Glirium, p. 76 (1778). Hab. Eastern Europe and Western Asia.

2 R 2

Spalax typhlus.

3181. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 6. From the Volga.

Purchased, 1871.

Genus RHIZOMYS.

Gray, Proc. Zool. Soc. 1831, p. 95.

Dentition :—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{0}{0}$, m. $\frac{3}{3}$, $=\frac{4}{4}$: total 16.

Rhizomys pruinosus.

Blyth, Journ. Asiat. Soc. Bengal, xx. p. 519 (1851).

Hab. Eastern Asia.

3182. Skeleton of male.

Vertebræ: C. 7, D. 15, L. 5, S. 5, C. 18.

The last dorsal vertebra has transitional characters between a truo dorsal and a lumbar vertebra.

From the Kakhyen Hills, east of Tsithan. Collected in the Expedition from Burma to Western China, Feb. 1875.

Presented by Dr. John Anderson, 1875.

Rhizomys sumatrensis.

Mus sumatrensis, Raffles, Trans. Linn. Soc. xiii. p. 258 (1820-1822).

Hab. Sumatra.

3183. Mutilated skull.

Presented by Sir T. Stamford Raffles.

Rhizomys badius.

Hodgson, Calcutta Journ. Nat. Hist. ii. p. 60.

THE BAY BAMBOO-RAT.

Hab. India.

3184. Skull.

From India.

Purchased, 1868.

Genus BATHYERGUS.

Illiger, Prodr. Syst. Mamm. et Av. p. 86 (1811).

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{1}$, m. $\frac{3}{3}$, $=\frac{5}{5}$: total 20.

Bathyergus maritimus.

Mus maritimus, Gmelin, Syst. Nat. i. p. 140 (1788).

THE COAST RAT OF SAND-MOLE.

Hab. South Africa.

3185. Articulated skeleton. O. C. 2246.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 12 (incomplete).

South Collection. Purchased, 1835.

3186. Skeleton, ♂. O. C. 2247.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 13 (one or two wanting).

Presented by Thomas Keate, Esq.

3187. Articulated skeleton.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 7 (incomplete).

In Museum before 1862.

3188. Articulated skeleton. O. C. 2248.

Somewhat smaller than the previous specimens.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 8 (incomplete).

Langstaff Collection. Purchased, 1835.

3189. The anterior portion of the jaws with the dried skin covering them, showing the contracted aperture of the mouth, and the mode in which the large inferior incisors perforate the skin and protrude below that aperture. O. C. 2250.

British Museum. Purchased, 1809.

3190. Mandible. O. C. 2249.

Presented by Sir Everard Home.

Genus GEORYCHUS.

Illiger, Prod. Syst. Mamm. et Av. p. 87 (1811).

Georychus capensis.

Mus capensis, Pallas, Nov. Spec. Glirium, p. 76 (1778).

THE SILKY GROUND-RAT.

Hab. South Africa.

3191. Articulated skeleton. O. C. 2251.

Vertebræ: C. 7, D. 12, L. 5, S. 4, C. 5 (incomplete).

Brookes Collection. Purchased, 1828.

Family GEOMYIDÆ.

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{1}$, m. $\frac{3}{3}$, $=\frac{5}{5}$: total 20.

Genus GEOMYS.

Rafinesque, Amer. Monthly Mag. ii. p. 45 (1817).

Geomys bursarius.

Mus bursarius, Shaw, Trans. Linn. Soc. v. p. 227 (1800).

THE POUCHED RAT.

Hab. North America.

3192. Articulated skeleton of male.

The skin of the head, with the pouches, is mounted in the Comparative Anatomy Series in the Gallery.

Vertebræ: C. 7, D. 12, L. 7, S. 5, C. 17.

Prepared from a specimen, from Indiana, preserved in spirit.

Presented by the Smithsonian Institution, 1873.

Family ZAPODIDÆ.

The characters of the family and the reasons for separating it from the *Dipodidæ*, and also for adopting the generic name *Zapus*, are discussed in the Monograph on this family by E. Coues, published in the U.S. Geological Survey of the Territories, vol. xi. pp. 461-479 (1877).

Genus ZAPUS.

Jaculus, Wagler, Syst. Amphib. &c. p. 23 (1830).

Zapus, Coues, Bull. U.S. Geol. Surv. Terr. 2nd ser. no. 5, p. 253 (1875).

Zapus hudsonius.

Dipus hudsonius, Zimmermann, Geogr. Geschichte, ii. p. 358 (1780).

THE AMERICAN JUMPING MOUSE.

Hab. North America.

3193. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 35.

Prepared from a specimen received in spirit from Stuart Lake, British Columbia.

Presented by Dr. J. Rae, 1878.

Family DIPODIDÆ.

Genus DIPUS.

Gmelin, Syst. Nat. i. p. 157 (1788).

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1 \text{ or } 0}{0}$, m. $\frac{3}{3}$, $=\frac{5 \text{ or } 4}{4}$: total 18 or 16.

Dipus sagitta.

Mus sagitta, Pallas, Reise, ii. p. 706 (1773); Nov. Spec. Glirium, p. 306 (1778).

THE JERBOA.

Hab. North Africa and Syria.

3194. Articulated skeleton. O. C. 2253.

All the cervical vertebræ, with the exception of the atlas, are ankylosed together in this species.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 23.

Brookes Collection. Purchased, 1828.

3195. Articulated skeleton.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 23.

Prepared from a specimen in the Spirit Stores.

Dipus sagitta.

3196. Skeleton.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 27. Some of the bones are mounted in the Separate Series.

Purchased, 1869.

Genus ALACTAGA.

Alactaga, Fréd. Cuvier, Proc. Zool. Soc. 1836, p. 141. Scirtetes, J. A. Wagner, in Schreber, Supp. iii. p. 283 (1843).

Dentition :—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{0}$, m. $\frac{3}{3}$, $=\frac{5}{4}$: total 18.

Alactaga jaculus.

Mus jaculus, Pallas, Nov. Spec. Glirium, p. 275 (1778).

Hab. Russia.

3197. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 31. From Russia.

Purchased, 1873.

Alactaga acontion.

Dipus acontion, Pallas, Zoogr. Rosso-Asiatica, i. p. 182 (1811). Hab. Russia.

3198. Skeleton.

The right pes is mounted in the Separate Series. Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 25. From Russia.

Purchased, 1872.

Genus PEDETES.

Pedetes, Illiger, Prod. Syst. Mamm. et Av. p. 81 (1811). Helamys, Fréd. Cuvier in Cuvier's Règne Animal, i. p. 202 (1817).

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{1}$, m. $\frac{3}{3}$, $=\frac{5}{5}$: total 20.

Pedetes caffer.

Mus cafer, Pallas, Nov. Spec. Glirium, p. 87 (1778).

THE CAPE JUMPING HARE.

Hab. South Africa.

3199. Articulated skeleton. O. C. 2252.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 30.

Hunterian.

Family OCTODONTIDÆ.

Dentition :—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{1}$, m. $\frac{3}{3}$, $=\frac{5}{5}$: total 20.

Genus CTENOMYS.

De Blainville, Bull. Soc. Philomatique, 1826, p. 64 (1826).

Ctenomys magellanicus.

Bennett, Proc. Zool. Soc. 1836, p. 190.

3200. Mutilated skull. O. C. 2012.

Presented by Captain P. T. King, R.N.

3201. Facial portion of cranium and left ramus of mandible. O. C. 2013 & 2014.

Presented by Captain P. T. King, R.N.

Ctenomys brasiliensis.

De Blainville, Bull. Soc. Philomatique, 1826, p. 64.

3202. Facial portion of cranium. O.C. 2015.

Presented by Charles Darwin, Esq.

Genus OCTODON.

Bennett, Proc. Zool. Soc. 1832, p. 46.

Octodon cumingi.

Bennett, loc. cit. p. 47.

CUMING'S OCTODON.

Hab. Chile.

Octodon cumingi.

3203. Articulated skeleton of adult female.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 25.

From an animal bred in the Gardens of the Zoological Society of London.

Presented by Professor Flower, 1873.

3204. Skull.

From Chile.

Purchased, 1871.

3205. Skull of young, six weeks old.

Bred in eaptivity.

Presented by Professor Flower, 1873.

Genus MYOPOTAMUS.

Commerson, Ann. du Muséum, tom. vi. p. 82 (1805).

Myopotamus coypus.

Mus coypus, Molina, Saggio Storia Nat. del Chili, p. 287 (1782).

THE COYPU.

Hab. South America.

3206. Articulated skeleton. O. C. 2039.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 19 (incomplete).

Presented by Sir Everard Home.

3207. Skeleton.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 25.

In Museum before 1862.

3208. Mandible. O. C. 2040.

Prepared to show the dentition. The teeth in place are the milk-molar, and the first and second true molars. The erown of the third is just level with the alveolar border. The germ of the premolar is not yet calcified.

Presented by Captain P. T. King, R.N.

Genus CAPROMYS.

Desmarest, Mém. Soc. d'Hist. Nat. tom. i. p. 43 (1823).

Capromys pilorides.

Isodon pilorides, Say, Journ. Acad. Nat. Sci. Philadelphia, ii. p. 333 (1822).

FOURNIER'S CAPROMYS.

Hab. Cuba.

3209. Skeleton of male.

Vertebræ: C. 7, D. 16, L. 17, S. 4, C. 17 (incomplete). From an animal which died in the Gardens of the Zoological Society.

Purchased, 1868.

3210. Skull of young.

The last molar has not come into place, the crown only appearing.

From Cuba.

Purchased, 1868.

Capromys brachyurus.

Hill, Gosse's Naturalist's Sojourn in Jamaica, p. 471 (1851).

THE SHORT-TAILED CAPROMYS.

Hab. West Indies.

3211. Skull.

From Jamaica.

Presented by Lucas Barrett, Esq., 1868.

3212. A right inferior incisor of a Rodent, probably of this genus, which, from want of apposition, has continued to grow until it has formed a complete circle and a segment of a second. O. C. 2237.

The following is a translation of a letter in Spanish which accompanied the specimen:—

"I send it you that you may admire the extraordinary tooth

620 RODENTIA.

Capromys brachyurus.

of this little animal. Believe me, it is true, it was found in the Nazareth Garden (to which Order I belong), near the Bar (entrance to the port), and when it was killed I took the tooth: I know not its virtues, nor have the natives ever discovered them."

Presented by Sir Joseph Banks, P.R.S.

Genus AULACODUS.

Temminck, Monogr. de Mamm. tom. i. p. 245 (1827).

Aulacodus swindernianus.

Temminck, op. cit. p. 248.

THE GROUND-RAT.

Hab. Africa.

3213. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 6 (incomplete).

The acromion processes of the scapulæ are free, and are connected to the spine only by fibrous tissue.

From an animal which died in the Zoological Gardens.

Purchased, 1873.

3214. Cranium.

From St. John's River, Amaponda Land, S. Africa.

Presented by R. J. Garden, Esq., 1854.

Family HYSTRICIDÆ.

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{1}$, m. $\frac{3}{3}$, $=\frac{5}{5}$: total 20.

Genus SYNETHERES.

"Sinéthère" and "Sphiggure," Fréd. Cuvier, Mém. du Muséum, ix. p. 413 (1822).

Cercolabes, Brandt, Mém. de l'Acad. de St. Pétersb. 6° sér. iii. p. 391 (1835).

Synetheres mexicanus.

Hystrix mexicana, Kerr, Linn. An. Kingdom, p. 214 (1792).

THE MEXICAN TREE-PORCUPINE.

Hab. Central America.

3215. Imperfect skeleton, wanting the skull.

Vertebræ: C. 7, D. 15, L. 6, S. 4, C. 3 (imperfect). From an animal captured in Honduras, which died in the Gardens of the Zoological Society, 9 March, 1871.

Presented by P. L. Sclater, Esq., 1871.

Synetheres insidiosus.

Hystrix insidiosa, Lichtenstein, in Kuhl, Beitr. z. Zool. p. 71 (1820).

Hab. South America.

3216. Articulated skeleton.

Vertebræ: C. 7, D. 17, L. 5, S. 3, C. 36.

Parker Collection. Purchased, 1858.

Genus ERETHIZON.

Fréd. Cuvier, Mém. du Muséum, ix. p. 413 (1822).

Erethizon dorsatus.

Hystrix dorsata, Linnæus, Syst. Nat. ed. 12, i. p. 76 (1766).

THE CANADIAN PORCUPINE.

Hab. North America.

3217. Imperfect skeleton of young. O. C. 2114–2134.

The milk-molars are still in place, and the epiphyses are not united to the shafts of the long bones.

Hunterian.

3218. Skull of adult. O. C. 2135.

Labelled "Franklin's Northern Land Expedition."

Presented by Sir John Richardson.

Genus ATHERURA.

"Atherure," Cuvier, Règne Anim. 2º édit. tom. i. p. 215 (1829).

Atherura fasciculata.

Hystrix fasciculata, Shaw, Gen. Zoology, ii. p. 124 (1801).

THE INDIAN BRUSH-TAILED PORCUPINE.

Hab. Siam and Malay Peninsula.

3219. Imperfect skelcton of young. O. C. 2136–2156.

The last true molar is not in place, and the milk-molar has not been shed.

Presented by Sir T. Stamford Raffles.

Genus HYSTRIX.

Linnæus, Syst. Nat. ed. 12, i. p. 76 (1766).

Hystrix cristata.

Linnæus, op. cit. p. 76.

THE CRESTED OF COMMON PORCUPINE.

Hab. Southern Europe; Africa.

3220. Articulated skeleton of female. O. C. 2075.

The milk-molars are still in place, and the epiphyses not completely united.

Vertebræ: C. 7, D. 15, L. 4, S. 4, C. 12.

South Collection. Purchased, 1835.

3221. Skull.

From an animal killed in the Campagna of Rome, 1859.

Presented by Lord Arthur Russell, M.P., 1873.

3222. Skull. O. C. 2088.

Presented by W. Clift, Esq.

3223. Skull, longitudinally and vertically bisected. O. C. 2087.

The teeth have been removed from the right side and are displayed separately.

Hunterian.

3224. Skull of young.

The last upper molar has not been acquired, and the basilar suture is still open.

In Museum before 1862.

3225. Left ramus of mandible of "an old European Porcupine."
O. C. 2089.

Hunterian.

The three following specimens are from the Cape of Good Hope, and are obviously different from the preceding:—

3226. Skeleton. O. C. 2076-2086.

Vertebræ: C. 7, D. 15, L. 4, S. 4, C. 12.

Hunterian.

3227. Skull of a "female Cape Porcupine." O. C. 2090.

Purchased.

3228. Skull of a "male Cape Porcupine." O. C. 2091.

Purchased.

Hystrix hirsutirostris.

Brandt, Mamm. Exot. Nov. &c. p. 39 (1835).

THE HAIRY-NOSED PORCUPINE.

Hab. India.

3229. Incomplete skeleton. O. C. 2093–2110.

The skull has been divided transversely and vertically into three portions. The teeth of the right side have been removed, and are exhibited separately. Those of the left side are displayed in situ by the removal of the external alveolar walls.

Vertebræ: C. 7, D. 15, L. 4, S. 4, C. 11.

Presented by Dr. N. Wallich.

3230. Skull. O. C. 2092.

Hunterian.

Hystrix javanica.

Acanthion javanicum, Fréd. Cuvier, Mém. du Muséum, ix. p. 431 (1822).

THE JAVAN PORCUPINE.

Hab. Java, Sumatra, and Borneo.

3231. Skeleton.

The skull is edentulous, and the mandible is diseased. Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 10 (incomplete). Several preparations of the viscera of this animal, which died

in the Zoological Society's Gardens, are preserved in the galleries.

Presented by the Zoological Society, 1871.

3232. Cranium. O. C. 2111.

Presented by Sir T. Stamford Raffles.

3233. Mutilated skull of young. O. C. 2112.

Presented by Sir T. Stamford Raffles.

3234. Separated bones of skull.

In Museum before 1862.

Hystrix alophus.

Hodgson, Journ. Asiat. Soc. Bengal, Aug. 1847, pt. 2, p. 771.

THE CRESTLESS PORCUPINE.

Hab. Nepal.

3235. Articulated skeleton of young. O. C. 2113.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 10 (incomplete).

Purchased.

Family CHINCHILLIDÆ.

Dentition:—i. $\frac{1}{1}$, c. $\frac{9}{9}$, p. $\frac{1}{7}$, m. $\frac{3}{3}$, = $\frac{5}{5}$: total 20.

Genus CHINCHILLA.

Bennett, Gardens &c. Zool. Soc. pt. i. p. 1 (1830).

Chinchilla lanigera.

Mus laniger, Molina, Saggio Storia Nat. del Chili, p. 301 (1782).

Chinchilla lanigera, Bennett, loc. cit. (1830).

THE CHINCHILLA.

Hab. Chile and Bolivia.

3236. Articulated skeleton. O. C. 2008.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 21 (incomplete).

Purchased.

3237. Skull.

From an animal which died in the Zoological Society's Gardens.

Presented by the Zoological Society, 1875.

Genus LAGIDIUM.

Meyer, Nov. Act. Acad. Cæs. Leop. xvi. p. 576 (1833).

Lagidium cuvieri.

Lagotis cuvieri, Bennett, Proc. Zool. Soc. 1833, p. 59.

CUVIER'S CHINCHILLA.

Hab. Western South America.

3238. Imperfect skeleton. O. C. 2016-2038.

Presented by J. B. Pentland, Esq., H.B.M. Consul-General in Bolivia.

PART II.

Genus LAGOSTOMUS.

Brookes, Trans. Linn. Soc. vol. xvi. p. 102 (1828).

Lagostomus trichodactylus.

Brookes, loc. cit.

THE VISCACHA.

Hab. La Plata.

3239. Articulated skeleton of male.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 20.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1868.

Family DASYPROCTIDÆ.

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{1}$, m. $\frac{3}{3}$, = $\frac{5}{5}$: total 20.

Genus DASYPROCTA.

Illiger, Prod. Syst. Mammal. et Av. p. 93 (1811).

Dasyprocta acouchy.

Cavia acouchy, Erxleben, Syst. Reg. Anim. p. 354 (1777).

THE ACOUCHY.

Hab. Guiana.

3240. Articulated skeleton. O. C. 2046.

Vertebræ: C. 7, D. 13, L. 7, S. 4, C. 10 (incomplete).

Hunterian.

Dasyprocta aguti.

Mus aguti, Linnæus, Syst. Nat. ed. 12, i. p. 80 (1766).

THE GOLDEN AGOUTI.

Hab. South America.

3241. Skeleton. O. C. 2052–2073.

Hunterian.

3242. Skull, longitudinally and vertically bisected. O. C. 2050.

Presented by Captain P. T. King, R.N.

3243. Skull, longitudinally and vertically bisected.

3244. Skull.

In Museum before 1862.

3245. Skull. O. C. 2047.

Hunterian.

3246. Skull. O. C. 2049.

The teeth of the left side have been removed and are displayed separately.

Hunterian.

3247. Skull of young. O. C. 2048.

Hunterian.

3248. Cranium, transversely and vertically divided into three parts. O. C. 2051.

Presented by Professor Owen.

3249. Separate bones of cranium. O. C. 2074.

Presented by Professor Owen.

Dasyprocta fuliginosa.

Wagler, Isis, 1832, p. 1220.

THE SOOTY AGOUTI.

Hab. Brazil.

3250. Mutilated skull.

Taken from a skin.

In Museum before 1862.

Genus CŒLOGENYS.

Cælogenus, F. Cuvier, Ann. du Muséum, x. p. 203 (1807). Cælogenys, Illiger, Prod. Syst. Mamm. et Av. p. 92 (1811).

Cœlogenys paca.

Mus paca, Linnæus, Syst. Nat. ed. 12, i. p. 81 (1766).

THE SPOTTED CAVY.

Hab. South America.

Cœlogenys paca.

3251. Articulated skeleton. O. C. 2041.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 7 (incomplete).

Hunterian.

3252. Skeleton, partially articulated.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 7 (incomplete).

In Museum before 1862.

3253. Natural skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 5 (incomplete).

In Museum before 1862.

3254. Skull. O. C. 2042.

The teeth of the left side have been removed and are displayed separately.

Hunterian.

3255. Skull, longitudinally and vertically bisected. O. C. 2043.

Presented by Charles Stokes, Esq.

3256. Skull, wanting the right ramus of the mandible, divided transversely and vertically into three portions. O. C. 2044.

Presented by W. J. Broderip, Esq.

Family CAVIIDÆ.

Dentition:—i. $\frac{1}{1}$, c. $\frac{0}{0}$, p. $\frac{1}{1}$, m. $\frac{3}{3}$, = $\frac{5}{5}$: total 20.

Genus CAVIA.

Pallas, Miscell. Zool. fasc. 2, p. 16 (ex Klein, 1751), (1767).

Cavia porcellus.

Mus porcellus, Linnæus, Syst. Nat. ed. 12, i. p. 79 (1766). Cavia porcellus, Erxleben, Syst. Reg. An. p. 349 (1777). ? Cavia aperea, Gmelin, Syst. Nat. i. p. 122 (1788).

THE RESTLESS CAVY OF GUINEA-PIG.

Hab. South America. Domesticated in Europe.

3257. Articulated skeleton. O. C. 2001.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 4 (imperfect).

Purchased.

3258. Skeleton, naturally articulated. O. C. 2002.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 4 (imperfect).

South Collection. Purchased, 1835.

3259. Skeleton, naturally articulated, of young. O. C. 2003.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 2 (imperfect).

Purchased.

3260. Skeleton, naturally articulated, of young.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 7.

Purchased, 1875.

3261. Skull. O. C. 2004.

Hunterian.

3262. Skull. O. C. 2006.

Hunterian.

3263. Skull. O. C. 2005. Presented by Henry Cline, Esq.

3264. Skull, longitudinally and vertically bisected. O. C. 2007.

Purchased.

3265. Skull.

Parker Collection. Purchased, 1858.

3266. Skull.

Parker Collection. Purchased, 1858.

3267. Three skulls, young.

Parker Collection. Purchased, 1858.

Genus DOLICHOTIS.

Desmarest, Mammalogie, p. 360 (1822).

Dolichotis patachonica.

Cavia patachonica, Shaw, Gen. Zoology, ii. p. 226 (1801).

THE PATAGONIAN CAVY.

Hab. Patagonia.

Dolichotis patachonica.

3268. Articulated skeleton of female.

Vertebræ: C. 7, D. 12, L. 8, S. 3, C. 9 (incomplete). From an animal which died in the Gardens of the Zoological Society.

Purchased, 1871.

3269. Mutilated skull. O. C. 1972.

The roots of the teeth are exposed in the left maxilla and in the right ramus of the mandible by the removal of the alveolar wall.

Presented by Sir Everard Home.

Genus HYDROCHŒRUS.

Erxleben (ex Brisson), Syst. Reg. Animal. p. 191 (1777).

Hydrochærus capybara.

Sus hydrochæris, Linnæus, Syst. Nat. ed. 12, i. p. 103 (1766). Hydrochærus capybara, Erxleben, Syst. Reg. Animal. p. 193 (1777).

THE CAPYBARA.

Hab. South America.

3270. Articulated skeleton of male.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 8.

From an animal which died in the Zoological Society's Gardens.

Purchased, 1869.

3271. Skeleton. O. C. 1977–2000.

The teeth of the right side have been removed and are displayed separately; those of the left side are exposed in situ by the removal of the external alveolar walls.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 6.

From an animal which died in the Surrey Zoological Gardens.

Purchased, 1837.

3272. Skull, longitudinally and vertically bisected. O. C. 1976.

Presented by Professor Owen.

3273. Skull. O. C. 1974.

Purchased.

3274. Skull. O. C. 1975.

Hunterian.

3275. Articulated skeleton of young. O. C. 1973.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 7 (incompleto).

South Collection. Purchased, 1835.

3276. Skull of young, eight days old.

The complete set of permanent teeth have been acquired; but as they represent only the apical portions of the over-growing dental organs, they are of much smaller size than in the adult animal.

From an animal born 30 Nov. and died 8 Dec., 1874, in the Gardens of the Zoological Society of London.

Purchased, 1875.

Suborder DUPLICIDENTATI.

Family LEPORIDÆ.

Dentition:—i. $\frac{2}{1}$, c. $\frac{0}{0}$, p. $\frac{3}{2}$, m. $\frac{3}{3}$, = $\frac{8}{6}$: total 28.

At birth there are three incisors in each side of the upper jaw, but the outer one is soon lost.

Genus LEPUS.

Linnæus, Syst. Nat. ed. 12, i. p. 77 (1766).

Lepus timidus.

Lepus timidus, Linnæus, Syst. Nat. ed. 12, i. p. 77 (1766). Lepus europæus, Pallas, Nov. Spec. Glirium, p. 30 (1778).

THE COMMON HARE.

Hab. Europe.

3277. Articulated skeleton of female. O. C. 1914.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 10.

Purchased.

3278. Partially articulated skeleton of young. O. C. 1915.

Vortebræ: C. 7, D. 12, L. 7, S. 4, C. 13.

Purchased.

Lepus timidus.

3279. Skeleton of adult female.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. (incomplete). Many of the bones are mounted in the Separate Series.

Purchased, 1875.

3280. Skull and some bones. O. C. 1916–1928. *Hunterian*.

3281. Skull.

The bones have been separated, and articulated together at a slight distance apart.

Parker Collection. Purchased, 1858.

Lepus variabilis.

Pallas, Nov. Spee. Glirium, p. 1 (1778).

THE VARYING HARE.

Hab. Europe.

3282. Skull and some bones. O. C. 1929–1945.

Presented by Sir Philip de M. Grey Egerton.

3283. Skeleton of female.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 13. From Perthshire.

Presented by A. Basil Brooke, Esq., 1876.

3284. Imperfect skeleton.

Some of the bones are mounted in the Separate Series.

Hunterian.

3285. Skull.

From Lochiel, Argyleshire.

Presented by Edgar Flower, Esq., 1873.

Lepus sinensis.

Gray, Illustrations of Indian Zoology (1830-32).

THE CHINESE HARE.

Hab. China.

3286. Skeleton.

From Shanghai.

Presented by R. Swinhoe, Esq., 1873.

Lepus ruficaudatus.

Is. Geoffroy, Dict. Class. d'Hist. Nat. ix. p. 381 (1826).

THE RED-TAILED HARE.

Hab. India.

3287. Skull.

From Mauubhoom, Bengal.

Presented by R. C. Beavan, Esq., 1867.

3288. Skull, probably of this species.

From India.

Presented by R. C. Beavan, Esq., 1867.

Lepus americanus.

Erxleben, Syst. Reg. Animal. p. 330 (1777).

THE AMERICAN HARE.

Hab. North America.

3289. Skeleton.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 11.

From Nova Scotia.

Presented by T. G. B. Lloyd, Esq., 1875.

3290. Skeleton, imperfect.

From Nova Scotia.

Presented by T. G. B. Lloyd, Esq., 1875.

Lepus campestris.

Bachman, Journ. Acad. Nat. Sci. Philadelphia, vii. p. 349 (1837).

THE PRAIRIE-HARE.

Hab. North America.

3291. Skeleton.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 13.

Presented by the Smithsonian Institution, 1871.

Lepus sylvaticus.

Bachman, Journ. Acad. Nat. Sci. Philadelphia, vii. p. 403 (1837).

THE WOOD-HARE.

Hab. North America.

3292. Skull.

Presented by the Smithsonian Institution, 1871.

Lepus cuniculus.

Linnæus, Syst. Nat. ed. 12, i. p. 77 (1766).

THE RABBIT.

Hab. Europe.

3293. Articulated skeleton of the domestic variety called "Belgian Giant."

When alive the animal weighed 16 lbs. =7.23 kilos.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 15.

The bones are slightly discased, and the joints affected with rheumatic arthritis.

Presented by J. A. Salter, Esq., 1874.

3294. Articulated skeleton.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. (incomplete).

In Museum before 1862.

3295. Skull and other bones. O. C. 1950–1960.

The long bones have been longitudinally bisected.

Hunterian.

3296. Skull. O. C. 1961.

Hunterian.

3297. Skull. O. C. 1964.

Hunterian.

3298. Skull of long-eared variety. O. C. 1962.

Presented by W. Clift, Esq.

3299. Skull. O. C. 1965.

Presented by Henry Cline, Esq.

3300. Skull. O. C. 1963.

Presented by Henry Cline, Esq.

3301. Skeleton of young (13 weeks old), domestic variety.

The permanent teeth are in place. The outer alveolar wall has been removed on the right side to show the teeth in situ.

Vertebræ: C. 7, D. 12, L. 7, S. 4, C. 16.

Presented by Mr. J. Marle, 1877.

3302. Skeleton of animal four months old.

The permanent teeth are in place. Vertebræ: C. 7, D. 13, L. 7, S. 4, C. 11.

Purchased, 1874.

3303. Skull of a younger animal than the last.

Purchased.

3304. Skeleton of still younger animal.

The milk-teeth are coming into place.

Vertebræ: C. 7, D. 12, L. 7, Sacro-caudal 20.

Purchased, 1872.

636 RODENTIA.

Lepus cuniculus.

3305. A series of preparations showing the early dentition in the upper jaw up to the fall of the milk-teeth.

The three-rooted milk-molars are well seen in the first preparation, as is also the deciduous incisor.

The figures on the skulls indicate the ages of the animals in days.

Presented by Caleb B. Rose, Esq., 1856.

3306. A series of corresponding preparations showing the development of the teeth in the mandible.

Presented by Caleb B. Rose, Esq., 1856.

3307. Skull, in which the incisor teeth have acquired an abnormal development, the growth at their bases not being compensated for by abrasion of their cutting-edges, owing to want of apposition, the result of an injury to the left incisor of the lower jaw. O. C. 1966.

Presented by William Pretty, Esq., 1822.

3308. Skull of a wild Rabbit, with incisors singularly elongated in consequence of their want of apposition. O. C. 1967.

Presented by Roger Wilbraham, Esq.

3309. Skull, with incisors in a similar state. O. C. 1968.

Hunterian.

3310. Skull, with incisors in a similar state. O. C. 1969.

Presented by Dr. Leach.

3311. Skull, with incisors in a similar state. O. C. 1970.

Presented by Hampton Weekes, Esq.

3312. Skull, with incisors in a similar state.

In Museum before 1862.

3313. Skull, with incisors in a similar state.

In Museum before 1862.

3314. Cranium, with elongated and greatly curved incisors.
O. C. 1971.

Presented by Robert Keate, Esq.

3315. Facial portion of cranium, with abnormally elongated incisors.

Presented by Joseph Swan, Esq., 1874.

3316. Hyoid bones of domestic variety.

Prepared in 1869.

Order INSECTIVORA.

Suborder INSECTIVORA VERA*.

Family CHRYSOCHLORIDÆ.

Genus CHRYSOCHLORIS.

Lacépède, Mém. de l'Institut, iii. p. 493 (read 1799, publ. 1801); Cuvier, Leçons d'Anat. Comp. tab. i. Classif. des Mammifères (1800).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{10}{10}$: total 40.

Chrysochloris aurea.

Talpa asiatica, Linnæus, Syst. Nat. ed. 12, i. p. 73 (1766).

Talpa aurea, Pallas, in Schreber's Säugthiere, iii. p. 562 (1778).

Talpa inaurata, Pallas, ibid. tab. elvii.

Talpa aurea (Pallas), Zimmermann, Geogr. Gesch. ii. p. 391(1780).

Sorex auratus, Cuvier, Tab. Elément. d'Hist. Nat. des Animaux, p. 110 (1798).

Chrysochloris capensis, Lacépède, loc. cit.; Desmarest, Mammalogie, p. 156 (1820).

THE CAPE GOLDEN MOLE.

Hab. South Africa.

3317. Naturally articulated skeleton.

Vertebræ: C. 7, D. 19, L. 3, S. 5, C. 8.

Purchased, 1865.

3318. Skull. O. C. 2401.

Hunterian.

Chrysochloris trevelyani.

Günther, Proc. Zool. Soc. 1875, p. 311.

Hab. South Africa.

3319. Mutilated skull.

From the Pirie Forest, near King William's Town, Caffraria.

Presented by H. Trevelyan, Esq., 1876.

* The arrangement of the families and genera of this order is that adopted by Mr. G. E. Dobson in the article "Mammalia," 'Encyclopædia Britannica,' 9th edition, vol. xv. (1883).

Family CENTETIDÆ.

Subfamily CENTETINÆ.

Genus CENTETES.

Centetes, Illiger, Prodromus Syst. Mamm. et Av. p. 124 (1811).

Dentition:—i. $\frac{2}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{9}{10}$: total 38.

Centetes ecaudatus.

Erinaceus ecaudatus, Schreber, Säugthiere, iii. p. 590 (1778).

THE TENREC.

Hab. Madagascar and Mauritius.

3320. Articulated skeleton of male.

Vertebræ: C. 7, D. 19, L. 5, S. 3, C. 8.

Prepared from a spirit-specimen in 1863.

3321. Skull of young, with imperfect dentition.

Genus HEMICENTETES.

Mivart, Proc. Zool. Soc. 1871, p. 72.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{10}{10}$: total 40.

Hemicentetes semispinosus.

Erinaceus semispinosus, Cuvier, Tab. Elément. d'Hist. Nat. p. 108 (1798).

Erinaceus madagascariensis, Shaw, Gen. Zoology, i. 2, p. 548 (1800).

Hemicentetes madagascariensis, Mivart, Proc. Zool. Soc. 1871, p. 58.

Hab. Madagascar.

3322. Articulated skeleton.

Vertebræ: C. 7, D. 16, L. 5, S. 3, C. 9.

From Vohema, north of Tamatave, on the east coast of Madagascar.

Purchased, 1869.

Genus ERICULUS.

Isidore Geoffroy St.-Hilaire, Ann. des Sciences Nat. sér. 2, viii. p. 60 (1837).

Dentition: $-i.\frac{2}{2}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, $=\frac{9}{9}$: total 36.

Ericulus setosus.

Erinaceus setosus, Schreber, Säugthiere, iii. p. 590 (1778). Ericulus nigrescens, Is. Geoffroy, Guérin's Mag. de Zoologie, 1839, p. 29.

Hab. Madagascar.

3323. Articulated skeleton.

Vertebræ: C. 7, D. 17, L. 6, S. 4, C. 9. From Vohema, north of Tamatave, east coast of Madagascar.

Purchased, 1869.

3324. Skull.

Purchased, 1877.

Subfamily ORYZORIOTINÆ.

Genus MICROGALE.

Oldfield Thomas, Journ. Linn. Soc., Zool. xvi. p. 319 (1882). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{10}{10}$: total 40.

Microgale longicaudata.

Oldfield Thomas, loc. cit.

Hab. Madagascar.

3325. Skeleton.

Vertebræ: C. 7, D. 14, L. 7, S. 2, C. 43.

From the Ankáfana forest, Eastern Betsileo, March 1880 (Rev. W. D. Cowan).

Purchased, 1882.

Family SOLENODONTIDÆ.

Genus SOLENODON.

Brandt, Mém. de l'Acad. de St. Pétersbourg, 1833, ii. p. 459.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{10}{10}$: total 40.

Solenodon cubanus.

Peters, Monatsb. K. Preuss. Akad. d. Wiss. zu Berlin, 1861, p. 169; Abhandlungen, 1863, p. 1, Taf. i.-iii.

Hab. Cuba.

3326. Articulated skeleton of male.

Vertebræ: C. 7, D. 15, L. 4, S. 5, C. 23.

Prepared from a specimen obtained by Dr. Gundlach in Cuba. The animal corresponded in colour with the type specimen (a female) described by Dr. Peters, but, although perfectly adult, is somewhat smaller, and the tail is considerably shorter, though it has the same number of vertebræ. The dimensions were—length from nose to anus, in a straight line, 265 mm.; length of tail 160 mm.

Received in exchange from the Smithsonian Institution, 1872.

Family TALPIDÆ.

Subfamily TALPINÆ.

Genus TALPA.

Linnæus, Syst. Nat. ed. 12, i. p. 73 (1766).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, = $\frac{11}{11}$: total 44.

Talpa europæa.

Linnæus, op. cit.

THE COMMON MOLE.

Hab. Europe.

3327. Articulated skeleton. O. C. 2402.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. (incomplete).

Presented by Henry Cline, Esq., 1824.

2

Talpa europæa.

3328. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 11.

3329. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 11.

Presented by G. W. Mackmurdo, Esq., 1867.

3330. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 11.

Presented by Joseph Swan, Esq., 1874.

3331. Partially articulated skeleton. O. C. 2404.

South Collection. Purchased, 1835.

3332. Skeleton. O.C. 2403.

Presented by Thomas Bull, Esq., 1822.

3333. Anterior portion of articulated skeleton.

3334. Incomplete skeleton. O. C. 2407 to 2415.

The cranium is longitudinally and vertically divided.

Hunterian.

3335. Skull. O. C. 2405.

Hunterian.

3336. Mutilated skull, with the teeth of both upper and lower jaws displayed separately. O. C. 2406. Hunterian.

3337. Mutilated skull.

Subfamily MYOGALINA.

Genus MYOGALE.

Desman, Lacépède, Mém. de l'Institut, iii. p. 493 (read 1799, publ. 1801)*.

Mygale, Cuvier, Tab. de Classification, appended to Leçons d'Anat. Comp. i. (1800).

Myogalea, Fischer, Synopsis Mammalium, p. 250 (1829).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, = $\frac{11}{11}$: total 44.

Myogale moschata.

Castor moschatus, Linnæus, Syst. Nat. ed. 12, i. p. 79 (1766). Mygale muscovitica, Geoffroy, Ann. Mus. xvii. p. 192 (1811).

THE RUSSIAN DESMAN.

Hab. South-eastern Russia.

3338. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 27.

From near Sarepta, on the Volga, Province of Astrakhan.

Received from Prof. Peters in exchange, 1871.

Myogale pyrenaica.

Mygale pyrenaica, Geoffroy, Ann. Muséum, xvii. p. 193 (1811).

THE PYRENEAN DESMAN.

Hab. South of France.

3339. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 30. From Bagnères de Bigorre.

Presented by E. F. Flower, Esq., 1870.

* If Lacepède's names take priority from the date of reading of the memoir (1799), and not from publication (1801), this name preceded Cuvier's; nevertheless the latter has been universally adopted. Fischer's modification of the spelling distinguishes it from the Aranean genus Mygale, Latreille, which, though slightly posterior (1802) to Cuvier's, is generally received by soologists.

Family SORICIDÆ.

Genus CROCIDURA.

Wagler, Isis, 1832, p. 275.

Dentition:—i. $\frac{3}{1}$, c. $\frac{1}{1}$, p. $\frac{2}{1}$, m. $\frac{3}{3}$, = $\frac{9}{6}$: total 30.

Crocidura cærulescens.

Sorex cærulescens, Shaw, Gen. Zool. i. pt. 2, p. 533 (1800). S. indicus, Geoffroy, Ann. du Muséum, xvii. p. 183 (1811). S. giganteus, Is. Geoffroy, Mém. du Muséum, xv. p. 137 (1827).

THE MUSK-SHREW.

Hab. India.

3340. Naturally articulated skeleton of male.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 17 (incomplete). The lateral cutaneous musk-glands of this specimen are mounted in the Physiological Series in the Gallery.

Purchased, 1878.

3341. Skull, probably of this species.

Genus SOREX.

Linnæus, Syst. Nat. ed. 12, i. p. 73 (1766).

Sorex vulgaris.

Sorex vulyaris, Linnæus, Mus. Adolp. Frid. p. 10 (1754); Nathusius, Wiegmann's Arch. i. p. 46 (1838).

Sorex tetragonurus, Hermann, Obs. Zool. p. 48 (1780).

Hab. Europe.

3342. Articulated skeleton. O. C. 2398.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 15.

Purchased.

3343. Articulated skeleton.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 14.

In Museum before 1862.

3344. Articulated skeleton.

Vertebræ: C.7, D. 14, L. 6, S. 4, C. 15.

In Museum before 1862.

3345. Skull.

3346. Skull. O. C. 2400.

Hunterian.

Genus CROSSOPUS.

Wagler, Isis, 1832, p. 275.

Crossopus fodiens.

Sorex fodiens, Pallas in Schreber's Säugthiere, iii. p. 571 (1778).

THE WATER-SHREW.

Hab. Europe.

3347. Skull. O. C. 2399.

Hunterian.

Family ERINACEIDÆ.

Subfamily ERINACEINÆ.

Genus ERINACEUS.

Linnæus, Syst. Nat. ed. 12, i. p. 75 (1766). Dentition:—i. $\frac{3}{2}$, c. $\frac{1}{1}$, p. $\frac{3}{2}$, m. $\frac{3}{3}$, = $\frac{10}{8}$: total 36.

Erinaceus europæus.

Linnæus, loc. cit.

THE COMMON HEDGEHOG.

Hab. Europe and Asia.

3348. Articulated skeleton. O. C. 2388.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 11.

Brookes Collection. Purchased, 1828.

Erinaceus europæus.

3349. Articulated skeleton. O. C. 2389.

Vertebræ: C. 7, D. 15, L. 6, S. 3, C. 10 (not quite complete).

South Collection. Purchased, 1835.

3350. Skeleton.

Vertebræ: C. 7, D. 16, L. 6, S. 3, C. 9 (incomplete).

Purchased, 1873.

3351. Naturally articulated skeleton, vertically and longitudinally bisected. O. C. 2391.

Vertebræ: C. 7, D. 15, L. 6, S. 4, C. 12.

Presented by Prof. Owen.

3352. Articulated skeleton, wanting the extremities. O. C. 2390.

Vertebræ: C. 7, D. 15, L. 6, S. 4, C. 11.

Hunterian.

3353. Skull. O. C. 2392.

Presented by Henry Cline, Esq., 1824.

3354. Skull.

Purchased, 1872.

3355. Skull.

3356. Skull, longitudinally and vertically bisected.

3357. Cranium. O. C. 2393.

British Museum, Purchased, 1809.

3358. Basal portion of the cranium, with the hyoid arch. O. C. 2394.

Hunterian.

3359. Skull of young.

The dentition is in a transitional state.

Purchased, 1868.

3360. The bones of the left forearm and fore foot. O. C. 2395.

Hunterian.

3361. The bones of the left hind foot. O. C. 2396.

Hunterian.

The two following specimens belong to the variety described by the donor (Proc. Zool. Soc. 1870, p. 450) as *Erinaceus dealbatus*:—

3362. Skeleton.

Vertebræ: C. 7, D. 15, L. 6 (5th wanting), S. 4, C. 12. From Chefoo, China.

Presented by Robert Swinhoe, Esq., 1873.

3363. Skeleton.

Vertebræ: C. 7, D. 15, L. 6, S. 4, C. 11. Foom Chefoo, China.

Presented by Robert Swinhoe, Esq., 1873.

Subfamily GYMNURINÆ.

Genus GYMNURA.

Horsfield & Vigors, Zool. Journ. iii. p. 246 (1828). Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{4}{4}$, m. $\frac{3}{3}$, = $\frac{11}{11}$: total 44.

Gymnura rafflesi.

Viverra gymnura, Raffles, Trans. Linn. Soc. xiii. p. 272 (1822). Gymnura rafflesii, Horsfield and Vigors, loc. cit.

Hab. Tenasserim, Malay Peninsula, Sumatra, Borneo.

3364. Articulated skeleton.

Vertebræ: C. 7, D. 15, L. 5, S. 3, C. 28. The clavicles are wanting. From the north of Borneo.

Purchased, 1874.

Gymnura rafflesi.

3365. Skull.

From the north of Borneo.

Purchased, 1871.

3366. Cranium. O. C. 2397.

From Sumatra.

Presented by Sir T. Stamford Raffles.

Family MACROSCELIDÆ.

Genus MACROSCELIDES.

Andrew Smith, S. African Quarterly Journal, ii. no. 1, p. 64 (1833).

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, $=\frac{10}{10}$: total 40.

Macroscelides intufi.

- A. Smith, Rep. Exped. Explor. Central Africa, 1834: Appendix, p. 42 (1836).
- 3367. Skull of young, wanting the right ramus of the mandible.

 The milk-dentition is in place, with the first permanent molars of both jaws.

Presented by the Zoological Society, 1867.

Genus PETRODROMUS.

Peters, Berieht der Königl. Preuss. Akad. der Wisseusch. zu Berlin, 1846, p. 257.

Dentition:—i. $\frac{3}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, $=\frac{10}{10}$: total 40.

Petrodromus tetradactylus.

Peters, loc. cit. p. 258.

Hab. South Africa.

3368. Skeleton.

Prepared from a specimen from Cape Colony.

Presented by Sir Thomas Maclear, 1864.

3369. Skull and bones of feet.

Purchased, 1881.

Genus RHYNCHOCYON.

Peters, Bericht der Königl. Preuss. Akad. der Wissensch. zu Berlin, 1847, p. 36.

Dentition:—i. $\frac{1}{3}$ or $\frac{0}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{8 \text{ or } 7}{10}$: total 36 or 34.

Rhynchocyon cernei.

Peters, loc. cit.; and Reise nach Mossambique, p. 106 (1852).

Hab. South-east Africa.

3370. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 8, S. 3, C. 28.

Purchased, 1868.

Family TUPAIIDÆ.

Genus TUPAIA.

Tupaia, Raffles, Trans. Linn. Soc. xiii. p. 256 (1822, read 1820). Cladobates, Fréd. Cuvier, Dents des Mammifères, p. 60 (1825).

Dentition:—i. $\frac{2}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{9}{10}$: total 38.

Tupaia javanica.

Horsfield, Zoological Researches in Java, no. iii. (1822). Hab. Java, Sumatra, and Borneo.

3371. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 5, S. 4, C. 26.

Purchased, 1868.

Tupaia tana.

Raffles, Trans. Linn. Soc. vol. xiii. p. 257 (1822).

Hab. Sumatra and Borneo.

3372. Skull.

From Sumatra, being from one of the type specimens described by the donor.

Presented by Sir T. Stamford Raffles.

3373. Mutilated skull of a younger specimen.

The permanent dentition has been acquired; but the posterior molars are not fully in place.

From Sumatra.

Presented by Sir T. Stamford Raffles.

Suborder DERMOPTERA.

Family GALEOPITHECIDÆ.

Genus GALEOPITHECUS.

Pallas, Acta Acad. Scient. Imp. Petropol. iv. 1, p. 208 (1780). Dentition:—i. $\frac{2}{3}$, c. $\frac{1}{1}$, p. $\frac{2}{2}$, m. $\frac{3}{3}$, $=\frac{8}{9}$: total 34.

Galeopithecus volans.

Lemur volans, Linnæus, Syst. Nat. ed. 12, i. p. 45 (1766). Galeopithecus volans, Pallas, loc.cit. p. 215 (skull, tab. viii. figs. 2-5). Galeopithecus temminckii, Waterhouse, Trans. Zool. Soc. ii. p. 336 (1838, publ. 1841).

Hab. Siam, Malay Peninsula and Archipelago, including the Philippines.

3374. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 5, C. 14 (incomplete). From Sumatra.

Presented by Sir T. Stamford Raffles.

3375. Skull, longitudinally and vertically bisected.

Brought from the Philippino Islands by Mr. Hugh Cuming, and described by Mr. Waterhouse in the Transactions of the Zoological Society, vol. ii. p. 342, under the name of G. temminckii.

The comb-like character of the four central incisors of the lower jaw is well illustrated in this specimen.

Purchased from the Zoological Society, 1862.

3376. Left ramus of the mandible, with the teeth complete.

Presented by the Zoological Society, 1867.

3377. Articulated bones of the hands and feet.

Presented by the Zoological Society, 1867.

3378. Naturally articulated skeleton of young.

The posterior molars are not yet in place. Vertebræ: C. 7, D. 13, L. 5, S. 5, C. 15. Obtained in Java by Dr. Ploem.

Presented by the Zoological Society, 1872.

Galeopithecus philippinensis.

Waterhouse, Trans. Zool. Soc. vol. ii. p. 339 (1838, publ. 1841), pl. lviii. fig. 2 (skull).

Hab. Philippine Islands.

3379. Almost complete skeleton. O. C. 4618 to 4630 A.

Vertebræ: C. 7, D. 14, L. 6, S. 4, C. 17 (incomplete). From the Philippine Islands.

Presented by Hugh Cuming, Esq.

Order CHIROPTERA*.

Suborder MEGACHIROPTERA.

Family PTEROPODIDÆ.

Genus EPOMOPHORUS.

Bennett, Trans. Zool. Soc. 1835, ii. p. 33.

Dentition:—i. $\frac{2}{2}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{1}{2}$, $=\frac{7}{8}$: total 30.

Epomophorus franqueti.

Tomes, Proc. Zool. Soc. 1860, p. 54.

Hab. West Africa.

3380. Naturally articulated skeleton of female.

Vertebræ: C. 7, D. 13, L. 5, S. & C. coalesced. From Cape Coast Castle.

Prepared from a specimen presented by G. E. Dobson, Esq., M.B., 1881.

Genus PTEROPUS.

Geoffroy (ex Brisson), Ann. du Muséum, xv. p. 90 (1810). Dentition:—i. $\frac{2}{2}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{2}{3}$, = $\frac{8}{9}$: total 34.

Pteropus rubricollis.

Geoffroy, loc. cit. p. 93.

Hab. Mauritius, Bourbon.

3381. Natural skeleton.

Vertebræ: C. 7, D. 12, L. 5, S. & C. coalesced.

^{*} The specimens belonging to this Order are arranged according to the 'Catalogue of Chiroptera in the Collection of the British Museum,' by G. E. Dobson, M.B., F.R.S. (1878).

Pteropus edulis.

Geoffroy, loc. cit. p. 90.

Hab. Indo-Malayan Archipelago.

3382. Skull and most of the bones of the extremities. O. C. 2422.

Hunterian.

Pteropus medius.

Temminck, Monogr. Mammal. i. p. 176 (1827).

Hab. India and Burma.

3383. Articulated skeleton. O. C. 2417.

Vertebræ: C. 7, D. 14, L. 5, S. & C. coalesced.

Presented by Dr. B. C. Henderson.

3384. Skull.

Purchased, 1873.

3385. Skull.

From India.

Presented by R. C. Beavan, Esq., 1867.

3386. Mutilated cranium. O. C. 2420.

The teeth are much worn.

Presented by Sir Everard Home.

Of uncertain Species.

3387. Skull. O. C. 2419.

Hunterian.

3388. Skull. O. C. 2418.

Hunterian.

3389. Skull.

3390. Cranium of a large species.

Purchased, 1881.

Uncertain Species.

3391. Three ribs of a *Pteropus* which are united together by ossification of the interesseous substances. O. C. 2423.

Hunterian.

3392. Two other ribs of the same *Pteropus*, similarly united.

**IIunterian.

- 3393. The lumbar vertebræ, pelvis, and femora of a *Pteropus*. O. C. 2424.

 Hunterian.
- 3394. The bones of the wing, or anterior extremity, of a Pteropus, with the interdigital membranes dried and preserved. O. C. 2426.
- **3395.** The left humerus and ulna of a *Pteropus*, longitudinally bisected. O. C. 2430 and 2431.

The walls are thin and compact; the medullary cavity is large, and filled with the dried remains of an oleaginous marrow.

Hunterian.

Genus CYNOPTERUS.

"Cynoptère," Fréd. Cuvier, Dents des Mammifères, p. 39 (1825). Dentition:—i. $\frac{2}{2 \text{ or } 1}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{1}{2}$, $=\frac{7}{8 \text{ or } 7}$: total 30 or 28.

Cynopterus marginatus.

Pteropus marginatus, Geoffroy, Ann. du Muséum, xv. p. 97 (1810).

Hab. India and Malay Archipelago.

3396. Naturally articulated skeleton of female.

Dentition: i. $\frac{2}{2}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{1}{2}$, = $\frac{7}{8}$: total 30. Vertebræ: C. 7, D. 14, L. 4, S. & C. 12. From Mangalore, Southern India.

Prepared from a specimen presented by G. E. Dobson, Esq., M.B., 1881.

Suborder MICROCHIROPTERA.

Family RHINOLOPHIDÆ.

Genus RHINOLOPHUS.

Geoffroy, Desm. Nouv. Dict. d'Hist. Nat. xix. p. 383 (1803).

Dentition:—i. $\frac{1}{2}$, c. $\frac{1}{1}$, p. $\frac{2}{3}$, m. $\frac{3}{3}$, = $\frac{7}{9}$: total 32.

Rhinolophus hipposideros.

Noctilio hipposideros, Bechstein, Naturg. Deutsch. i. p. 1194 (1801).

THE LESSER HORSESHOE BAT.

Hab. Europe, part of Asia, and N.E. Africa.

3397. Skeleton.

From a cave in Belgium.

Presented by George Busk, Esq., 1871.

Genus PHYLLORHINA.

Leach, Syst. Cat. Indig. Mammalia and Birds Brit. Mus. p. 5 (1816); Bonaparte, Saggio di una distrib. Anim. vertebr. p. 16 (1831).

Dentition:—i. $\frac{1}{2}$, c. $\frac{1}{1}$, p. $\frac{1 \text{ or } 2}{2}$, m. $\frac{3}{3}$, $=\frac{6 \text{ or } 7}{8}$: total 28 or 30.

Phyllorhina tridens.

Rhinolophus tridens, Geoffroy, Descr. de l'Egypte, ii. p. 130 (1812).

Asellia tridens, Gray, Proc. Zool. Soc. 1866, p. 82.

Hab. Eastern Africa.

3398. Naturally articulated skeleton of male.

Vertebræ: C. 7, D. 11, L. 7, S. & C. 16.

Prepared from a specimen taken by the donor in a tomb at Thebes, Egypt, February 1874.

Presented by Professor Flower, 1874.

Phyllorhina diadema.

Rhinolophus diadema, Geoffroy, Ann. du Muséum, xx. p. 263 (1813).

Rhinolophus nobilis, Horsfield, Zool. Researches in Java (1823).

Hab. India and Malaysia.

3399. Naturally articulated skeleton of male.

Vertebræ: C. 7, D. 11, L. 7, S. & C. 18.

Prepared from a specimen in the Spirit Stores, 1871.

Phyllorhina caffra.

Rhinolophus caffer, Sundevall, Œfvers. Akad. Förh. Stockholm, iii. p. 118 (1846).

Hab. Tropical Africa.

3400. Naturally articulated skeleton.

Vertebræ: C. 7, D. 12, L. 6, S. & C. 12. From Cape Coast Castle.

Prepared from a specimen presented by G. E. Dobson, Esq., M.B., 1881.

Family NYCTERIDÆ.

Genus MEGADERMA.

Geoffroy, Ann. du Muséum, xv. p. 197 (1810). Dentition:—i. $\frac{0}{2}$, c. $\frac{1}{1}$, p. $\frac{2 \text{ or } 1}{2}$, m. $\frac{3}{3}$, $=\frac{6 \text{ or } 5}{8}$: total 28 or 26.

Megaderma frons.

Geoffroy, loc. cit. p. 198.

Hab. Tropical Africa.

3401. Naturally articulated skeleton of male.

Vertebræ: C. 7, D. 12, L. 4, S. 3, C. 0. From Sierra Leone.

Prepared from a specimen presented by G. E. Dobson, Esq., M.B., 1881.

Family VESPERTILIONIDÆ.

Genus PLECOTUS.

Geoffroy, Descr. de l'Egypte, ii. p. 112 (1812).

Dentition:—i. $\frac{2}{3}$, c. $\frac{1}{1}$, p. $\frac{2}{3}$, m. $\frac{3}{3}$, = $\frac{8}{10}$: total 36.

Plecotus auritus.

Vespertilio auritus, Linnæus, Syst. Nat. ed. 12, i. p. 47 (1766).

THE LONG-EARED BAT.

Hab. Europe, Asia, and North Africa.

3402. Skull.

From Warwickshire.

Presented by Professor Flower, 1862.

Genus VESPERUGO.

Keyserling & Blasius, Wirbelthiere Europa's, i. pp. xiv & 45 (1840).

Dentition:—i. $\frac{2}{3}$, c. $\frac{1}{1}$, p. $\frac{2}{2}$, m. $\frac{2}{3}$, = $\frac{7}{9}$: total 32.

Vesperugo serotinus.

Vespertilio serotinus, Sehreber, Säugthiere, i. tab. liii. (1775).

Hab. Europe, Asia, Africa, and North and Central America.

3403. Naturally articulated skeleton of female.

Vertebræ: C. 7, D. 11, L. 5, S. 3, C. 11.

From Algiers. Belonging to the variety V. isabellinus, Temminck.

Prepared from a specimen presented by G. E. Dobson, Esq., M.B., 1881.

PART II. 2 U

Vesperugo noctula.

Vespertilio noctula, Schreber, Säugthiere, i. tab. lii. (1775). Scotophilus noctula, Gray, Mag. Zool. & Bot. ii. p. 497 (1838).

THE COMMON NOCTULE BAT.

Hab. Europe, Asia, and Africa.

3404. Naturally articulated skeleton of male.

Vertebræ: C. 7, D. 11, L. 5, S. 3, C. 11.

Prepared in 1863.

3405. Skull of female.

From Warwickshire.

Presented by Professor Flower, 1862.

Vesperugo pipistrellus.

Vespertilio pipistrellus, Schreber, Säugthiere, i. tab. liv. (1775).

THE PIPISTRELLE BAT.

IIab. Europe, Asia, North Africa.

3406. Skeleton.

Vertebræ: C. 7, D. 12, L. 4, S. 3, C. 11.

In Museum before 1862.

Vesperugo nanus.

Vespertilio nanus, Peters, Reise nach Mossambique, p. 63 (1852). Hab. Africa.

3407. Naturally articulated skeleton.

Vertebræ: C. 7, D. 11, L. 5, S. & C. 13. From Cape Coast Castle.

Prepared from a specimen presented by G. E. Dobson, Esq., M.B., 1881.

Genus VESPERTILIO.

Linnaus, Syst. Nat. ed. 12, i. p. 46 (1766).

Dentition:—i. $\frac{2}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{3}{3}$, = $\frac{9}{10}$: total 38.

Vespertilio daubentoni.

Leisler in Kuhl, Deutseh. Fledermäuse, Wetterau. Gesell. neue Annal. i. p. 195 (1819).

DAUBENTON'S BAT.

Hab. Europe and Asia.

3408. Skull of female.

From Warwiekshire.

Presented by Professor Flower, 1862.

Vespertilio nattereri.

Kuhl, Wetterau. Gesell. neue Annal. i. 1ste Abt. p. 33 (1818).

NATTERER'S BAT.

Hab. Europe.

3409. Skull.

From Warwiekshire.

Presented by Professor Flower, 1862.

3410. Skull.

From Warwiekshire.

Presented by Professor Flower, 1862.

Genus MINIOPTERUS.

Bonaparte, Fauna Italiea, fase. xxi. (1837).

Dentition:—i. $\frac{2}{3}$, c. $\frac{1}{1}$, p. $\frac{5}{3}$, m. $\frac{3}{3}$, = $\frac{8}{10}$: total 36.

 $2 \cup 2$

Miniopterus schreibersi.

Vespertilio schreibersii, Natterer, in Kuhl, Deutsch. Fledermäuse, Wetterau. Gesell. neue Annal. i. p. 185 (1819).

Hab. Southern Europe and Asia, Africa, and Australia.

3411. Naturally articulated skeleton.

Vertebræ: C. 7, D. 12, L. 5, S. & C. 15.

From France.

Prepared from a specimen presented by G. E. Dobson, Esq., M.B., 1881.

Family EMBALLONURIDÆ.

Genus MOLOSSUS.

Geoffroy, Ann. du Muséum, vi. p. 150 (1805).

Dentition:—i. $\frac{1}{1 \text{ or } 2}$, c. $\frac{1}{1}$, p. $\frac{1 \text{ or } 2}{2}$, m. $\frac{3}{3}$, $=\frac{6 \text{ or } 7}{7 \text{ or } 8}$: total 26 or 30.

Molossus obscurus.

Geoffroy, loc. cit. p. 155.

Hab. Tropical America.

3412. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 11.

Prepared from a specimen in the Spirit Stores, 1876.

3413. Cranium.

From Jamaica.

Presented by Lucas Barrett, Esq., Director of the West-Indian Geological Survey, 1862.

3414. Skull.

Family PHYLLOSTOMIDÆ.

Genus CHILONYCTERIS.

Gray, Ann. Nat. Hist. iv. p. 4 (1839).

Dentition:—i. $\frac{2}{5}$, c. $\frac{1}{1}$, p. $\frac{2}{3}$, m. $\frac{3}{3}$, = $\frac{8}{9}$: total 34.

Chilonycteris parnelli.

Phyllodia parnellii, Gray, Proc. Zool. Soc. 1843, p. 50. Hab. West Indies.

3415. Skull.

From Jamaica.

Presented by Lucas Barrett, Esq., 1862.

Genus MORMOPS.

Mormoops, Leach, Trans. Linn. Soc. xiii. p. 74 (1820-22). Mormops, Peters, Abhandl. Akad. Berlin, 1856, p. 287.

Dentition:—i. $\frac{2}{2}$, c. $\frac{1}{1}$, p. $\frac{2}{3}$, m. $\frac{3}{3}$, = $\frac{8}{9}$: total 34.

Mormops blainvillei.

Leach, loc. cit. p. 77.

Hab. West Indies.

3416. Skull.

From Jamaica.

Presented by Lucas Barrett, Esq., 1862.

Genus ARTIBEUS.

Leach, Trans. Linn. Soc. xiii. p. 74 (1822).

Dentition:—i. $\frac{2}{2}$, c. $\frac{1}{1}$, p. $\frac{2}{2}$, m. $\frac{2 \text{ or } 3}{2 \text{ or } 3}$, $=\frac{7 \text{ or } 8}{7 \text{ or } 8}$: total 28 or 32.

Artibeus perspicillatus.

Vespertilio perspicillatus, Linnæus, Syst. Nat. ed. 12, i. p. 47 (1766).

Hab. West Indies, Central and South America.

Artibeus perspicillatus.

3417. Skull.

From Jamaica.

Presented by Lucas Barrett, Esq., 1862.

3418. Skull.

Genus **DESMODUS**.

Wied, Beitr. zur Naturgesch. Brasil. ii. p. 231 (1826). Dentition:—i. $\frac{1}{2}$, c. $\frac{1}{1}$, p. $\frac{2}{3}$, m. $\frac{0}{0}$, $=\frac{4}{6}$: total 20.

Desmodus rufus.

Wied, loc. cit. p. 233.

Hab. Central and South America.

3419. Naturally articulated skeleton of female.

Vertebræ: C. 7, D. 11, L. 6, S. & C. coalesced.

Prepared from a specimen presented by Professor Huxley, 1865.

3420. Dried feetus.

Taken from the last specimen.

Presented by Professor Huxley, 1865.

3421. Skull of fœtus.

Order EDENTATA.

Family BRADYPODIDÆ.

Dentition:—m. $\frac{5}{4}$, total 18.

Genus BRADYPUS.

Linnæus, Syst. Nat. ed. 12, i. p. 50 (1766).

Bradypus tridactylus.

Linnæus, Syst. Nat. ed. 12, i. p. 50 (1766).

THE THREE-TOED SLOTH.

Hab. South and Central America.

It is probable that more than one species are included under this name; but the distinctive characters of the members of this family are not yet satisfactorily determined.

3422. Articulated skeleton. O. C. 2367.

Vertebræ: C. 7, D. 16, L. 3, S. 6, C. 11.

Presented by Samuel Stutchbury, Esq.

3423. Skull of male.

From an animal received from the Zoological Society's Gardens in May 1863. It had a bright orange patch, with black median stripe, between the shoulders, and appears to belong to the species or variety called *Arctopithecus gularis* by Gray. The greater part of the animal is mounted in the Physiological Series in the Gallery, to show the vascular plexuses, reproductivo organs, &c.

Purchased, 1863.

3424. Skull, vertically and longitudinally bisected. O. C. 2370.

The teeth of the left side of both jaws are separately displayed.

Langstaff Collection. Purchased, 1835.

3425. Skull.

In Museum before 1862.

Bradypus tridactylus.

3426. Bones of the limbs, longitudinally bisected, showing the shaft almost wholly occupied by a fine cancellous structure instead of a medullary cavity. O. C. 2378-2386.

Presented by Sir Everard Home.

3427. Articulated skeleton of young. O. C. 2368.

Vertebræ: C. 9, D. 15, L. 4, S. 6, C. 8.

Brookes Collection. Purchased, 1828.

3428. Imperfect skeleton, wanting the skull, of young.

Vertebræ: C. 9, D. 14, L. 4, S. 5, C. 11.

The rudimentary ribs on the ninth cervical vertebra are particularly well developed.

In Museum before 1862.

3429. Imperfect skeleton of a somewhat older individual, wanting the skull. O. C. 2371-2377.

Langstaff Collection. Purchased, 1835.

- 3430. The bones of the limbs.
- 3431. The bones of the limbs of a young animal.

Langstaff Collection. Purchased, 1835.

3432. Skull of young. O. C. 2369.

Hunterian.

3433. Skull of young.

Genus CHOLŒPUS.

Illiger, Prodromus Syst. Mamm. et Av. p. 108 (1811).

Cholæpus didactylus.

Bradypus didactylus, Linnœus, Syst. Nat. ed. 12, i. p. 51 (1766).

THE TWO-TOED SLOTH.

Hab. Brazil.

3434. Articulated skeleton of male.

Vertebræ: C. 7, D. 24, L. 3, S. 7, C. 6.

Prepared from an animal which lived in the Zoological Society's Gardens from February 1851 to November 1862.

Purchased, 1862.

3435. Articulated skeleton of young. O. C. 2387.

Vertebræ: C. 7, D. 23, L. 3, S. 8, C. 4.

Prepared from a specimen presented by the Zoological Society.

3436. Skull of an old animal, vertically and longitudinally bisected, and wanting the teeth.

In Museum before 1862.

3437. The vertebræ, lower jaw, hyoid, pelvis, and ribs.

Vertebræ: C. 7, D. 23, L. 4, S. 5, C. (incomplote).

In Museum before 1862.

3438. The bones of the fore and hind feet.

The right pes is mounted in the Separate Series.

In Museum before 1862.

Cholæpus hoffmanni.

Peters, Monatsbericht Akad. Berlin, 1858, p. 128.

HOFFMANN'S TWO-TOED SLOTH.

Hab. Costa Rica, Panama, and Ecuador.

3439. Articulated skeleton.

Vertebræ: C. 6, D. 22, L. 3, S. 7, C. 5.

Prepared from an animal which died in the Gardens of the Zoological Society, September 1874.

Purchased, 1874.

Cholæpus hoffmanni.

3440. Natural skeleton, wanting the skull.

Vertebræ: C. 7, D. 23, L. 3, S. 8, C. 4.

Received in exchange from the Berlin Museum, 1865.

Family MEGATHERIIDÆ.

Dentition:—m. $\frac{5}{4}$, total 18.

Genus MEGATHERIUM.

Cuvier, Tabl. Elém. de l'Hist. Nat. des Animaux, p. 146 (1798).

Megatherium americanum.

Megatherium americanum, Cuvier. (Quoted in Shaw's General Zoology, i. p. 165 (1800), and Blumenbach's Handbuch der Naturgeschichte*.)

M. cuvieri, Desmarest, Mammalogie, p. 365 (1822).

3441. Articulated skeleton, partly composed of the actual bones, and partly of easts from specimens in the British Museum. The bones are Nos. 234 to 345 in O. C. F.

Vertebræ: C. 7, D. 16, L. 3, S. 5, C. 17.

From the bed of the Rio Salado, one of the tributaries of the Rio Plata, situated to the south of the city of Buenos Ayres.

Presented by Sir Woodbine Parish, 1832.

3442. The facial portion of a eranium. O. C. F. 218. From the same locality.

Presented by Sir Woodbine Parish.

3443. The middle part of a eranium. O. C. F. 219 and 220.

A vertical section has been made through the teeth on the right side.

From Punta Alta, Bahia Blanca, Patagonia.

Presented by Charles Darwin, Esq.

* See note to p. 428.

3444. The dentary portion of a cranium containing the five teeth of the left side, and the four anterior teeth of the right side.

Locality unknown.

In Museum before 1862.

3445. The posterior portion of a eranium. O. C. F. 221. From Punta Alta, Bahia Blanca, Patagonia.

Presented by Charles Darwin, Esq.

3446. Portion of the left maxillary bone, with the second and third left upper molars, through which a horizontal section has been made. O. C. F. 227.

From Punta Alta, Bahia Blanca, Patagonia.

Presented by Charles Darwin, Esq.

3447. A right first molar tooth of the upper jaw. O. C. F. 222. From the Rio Salado, Buenos Ayres.

Presented by Sir Woodbine Parish.

- 3448. A right first molar of the upper jaw of a larger specimen.
- 3449. A right second lower molar. O. C. F. 224. From Buonos Ayres.

Purchased.

3450. A left third upper molar. O. C. F. 226.

From the Rio Salado.

Presented by Sir Woodbine Parish.

- 3451. A left fourth upper molar.
- 3452. A right second lower molar. O. C. F. 223.

 From the Rio Salado.

 Presented by Sir Woodbine Parish.

Megatherium americanum.

3453. A left lower molar, most probably the first. O. C. F. 229. From the Rio Salado.

Presented by Sir Woodbine Parish.

3454. A left second lower molar. O. C. F. 225.

From the Rio Salado.

Presented by Sir Woodbine Parish.

3455. A left third lower molar. O. C. F. 231.

From the Rio Salado.

Presented by Sir Woodbine Parish.

3456. The basal portion of a tooth. O. C. F. 230.

From the Rio Salado.

Presented by Sir Woodbine Parish.

3457. Portion of the left temporal bone. O. C. F. 346.

From the cliffs of Bahia Blanca, Patagonia.

Presented by Charles Darwin, Esq.

3458. A cast of the anterior portion of the left ramus of the mandible.

The original was found in Brunswick Canal, Georgia, U.S. America.

Presented by Dr. Harlan.

3459. The right stylo-hyal bone. O. C. F. 511.

From the Tertiary deposits of Buenos Ayres.

Purchased.

3460. The last thirteen caudal vertebræ with the chevron bones.

From the banks of the Rio Salado, close to the spot where the Glyptodon (No. 3585), presented by the same donor, was found.

Presented by Maximo Terrero, Esq., 1865.

3461. A left os calcis.

3462. A left os calcis.

These two specimens were in the Museum before 1861, without history.

Genus MYLODON.

Owen, Fossil Mammalia of the Voyage of the 'Beagle,' p. 63 (1839).

Mylodon robustus.

Owen, Description of the Skeleton of an Extinct Gigantic Sloth (1842).

3463. Articulated skeleton. O. C. F. 377.

Discovered in 1841 by M. Pedro de Angelis, seven leagues north of the city of Buenos Ayres, in the fluviatile deposits constituting the extensive plain intersected by the great Rio Plata and its tributaries. All the bones are genuinc.

Vertebræ: C. 7, D. 15, Lumbo-sacral 10, C. 21.

The lumbar and sacral vertebræ being ankylosed, it is impossible to determine the precise number of each.

A detailed and illustrated account of this specimen is given by Professor Owen in his monograph entitled 'Description of the Skeleton of an Extinct Gigantic Sloth' (4to, 1842), published by the College.

Purchased, 1841.

- 3464. A portion of the right ramus of the mandible, including the two posterior molar teeth, and part of the socket of the second molar.

 Purchased.
- 3465. The symphysis of the lower jaw. O. C. F. 391.

Purchased.

3466. Several teeth of the molar series. O.C. F. 378-389.

Purchased.

Mylodon robustus.

3467. A portion of the right malar bone. O. C. F. 392.

Purchased.

- 3468. The basi-hyal and ankylosed left thyro-hyal. O. C. F. 393.
- 3469. Two portions of dorsal vertebræ. O. C. F. 396 and 397.

Purchased.

- **3470.** A portion of the ankylosed lumbo-sacral vertebræ. O. C. F. 398.

 Purchased.
- 3471. Five portions of sternal ribs, more or less complete. O. C. F. 402-410. Purchased.
- 3472. A portion of a vertebral rib. O. C. F. 399. Purchased.
- 3473. A portion of the sternum. O. C. F. 411. Purchased.
- 3474. The proximal ends of two clavicles. O. C. F. 512.

Purchased.

3475. The greater portions of the right humerus, radius, and ulna. O. C. F. 313, 316, 318, and 319.

Purchased.

3476. The greater portion of the left humerus, radius, and ulna. O. C. F. 314, 315, 317, 321, and 322.

The humerus and radius have been longitudinally bisected.

Purchased.

3477. The proximal end of the left humerus. O. C. F. 412.

Purchased.

- 3478. A fragment of the distal end of the left radius. O. C. F. 420.

 Purchased.
- 3479. The bones of a right manus from the same locality and stratum as the articulated skeleton. O. C. F. 423–440 A.

Mounted separately.

Purchased.

3480. The proximal half of a right femur. O.C. F. 441.

Purchased.

3481. The distal half of a right femur of a different individual. O. C. 513.

From the Tertiary deposits of Buenos Ayres.

Purchased.

3482. A right tibia of large size.

Purchased.

- **3483.** A right tibia. O. C. F. 442.
- 3484. The separate bones of the left pes, mounted separately. O. C. F. 443-452 inclusive.

Purchased.

- **3485.** A left astragalus. O. C. F. 454.
- **3486.** Five specimens of the external and middle cuneiform bones. O. C. F. 455-459.

 Purchased.
- 3487. Fragments of cranial bones, including the left squamosal, the left periotic, portion of parietal bone, of supraoccipital plate, and of the right and left exoccipitals. O. C. F. 460-465 and 469.

 Purchased.
- 3488. Fragments of the right and left scapulæ. O. C. F. 466 and 467.

 Purchased.

Mylodon robustus.

3489. The proximal extremity of the left ulna. O. C. F. 468.

From the Pampas of Buenos Ayres.

Purchased.

Mylodon darwini.

Owen, Fossil Mammalia of the Voyage of the 'Beaglo,' p. 68 (1839).

3490. Mandible. O. C. F. 472.

From the cliffs at Bahia Blanea, Patagonia.

This is the type specimen described and figured in the 'Zoology of the Voyage of the Beagle,' part i. p. 69, and pl. xvii. fig. 5, pl. xviii. and pl. xix.

Presented by Charles Darwin, Esq.

3491. Portion of cranium. O. C. F. 470.

From the bed of the Sarandis river, a small stream entering the Rio Negro about 129 miles to the N.W. of Monte Video, Banda Criental. It was described by Prof. Owen in 'The Zoology of the Voyage of the Beagle,' vol. i. p. 57, under the name of Glossotherium, of which it is the type specimen. In the same work it is also figured in pl. xvi. Prof. Owen subsequently came to the conclusion that this specimen is most probably identical with "Mylodon darwini, with which the term Glossotherium may be regarded synonymous" ('Memoir on the Mylodon,' 1842, p. 154).

Presented by Charles Darwin, Esq.

3492. Part of the left ramus of the lower jaw, from the upper border of which a portion has been removed, showing the forms of the transverse sections of the teeth, and the depth of their implantation in the alveoli. O. C. F. 473.

From the cliffs, Bahia Blanca, Patagonia.

Presented by Charles Darwin, Esq.

3493. Transverse section of a third molar tooth of the left side of the mandible. O. C. F. 474.

From the cliffs at Bahia Blanca, Patagonia.

Presented by Charles Darwin, Esq.

3494. Transverse section of a fourth and fifth molar from the left side of the mandible. O. C. F. 475.

Presented by Charles Darwin, Esq.

3495. Tibia, longitudinally and vertically bisected. O. C. F. 515. History unknown.

Mylodon harlani.

Owen, Fossil Mammalia of the Voyage of the 'Beagle,' p. 68 (1840).

3496. Cast of a portion of the right ramus of the lower jaw, with the three posterior molar teeth.

The original is described and figured by Harlan in his 'Medical and Physical Researches,' 1835, p. 334, pl. xv. figs. 1, 2, and 3, where it is assigned to Megalonyx laqueatus. It was redescribed and figured by Prof. Owen in the 'Zoology of the Voyage of the Beagle,' pt. i. p. 68, pl. xvii. figs. 3 and 4 (1840), as Mylodon harlani, being the type of both genus and species.

In Museum before 1862.

- 3497. Cast of the left ramus of the mandible of a smaller but allied animal.

 In Museum before 1862.
- 3498. The third molar tooth of the left side of the lower jaw. O. C. F. 476.

 Purchased.

The specific determination of the following specimens is uncertain, but they probably belong to Mylodon darwini.

3499. Portion of the atlas vertebra. O.C. F. 477.

Purchased.

3500. Basi- and thyro-hyals. O. C. F. 478.

Purchased.

3501. A stylo-hyal bone. O. C. F. 479.

3502. Distal portion of the stylo-hyal bone. O. C. F. 480. PART II.

Uncertain Species.

3503. Manubrium sterni. O. C. F. 481.

- 3504. The sternal end of the first pair of ribs, which were connected with the preceding manubrium sterni. O.C.F. 482.
- 3505. The shaft and distal extremity of a humerus, partly embedded in a mass of coarse limestone. O. C. F. 483.

The form of the distal articular surface corresponds with that of *Mylodon robustus*. The specimen was found at Bahia Blanca in the same stratum as the lower jaw of the *Mylodon darwini*.

Presented by Charles Darwin, Esq.

Genus SCELIDOTHERIUM.

Owen, Fossil Mammalia of the 'Beagle,' p. 73 (1840).

Scelidotherium leptocephalum.

Owen, loc. cit.

The following specimens (to No. 3520 inclusive) belong to the same skeleton. They were found in a bed of partly consolidated gravel at Punta Alta, Bahia Blanca, by Mr. Darwin, and have been described and figured by Prof. Owen in the 'Zoology of the Voyage of the Beagle,' pt. i. p. 73, pls. xx.-xxviii. They are the type specimens of both the species and the genus.

3506. Mutilated skull. O. C. F. 486.

A horizontal section has been removed from the lower part of the right ramus of the mandible, to show the character of the teeth. This portion was numbered 488 in O. C. F.

- 3507. An upper molar tooth. O. C. F. 487.
- 3508. The cervical and the first seven dorsal vertebræ united together in a mass of gravel, in their correct sequence. O. C. F. 489 and 490.

- 3509. The sacral vertebræ united together in a mass of gravel. O. C. F. 492.
- 3510. Four caudal vertebræ.
- **3511.** Portions of seven ribs. O. C. F. 493.
- 3512. A portion of the right scapula and proximal end of the right humerus attached together by a mass of gravel.

 O. C. F. 495 and 496.
- 3513. Left scapula. O. C. F. 494.
- 3514. Left humerus, nearly complete. O. C. F. 497.
- **3515**. Left radius. O. C. F. 499.
- **3516.** Upper part of left ulna. O. C. F. 498.
- 3517. Right femur, wanting the distal extremity. O. C. F. 500.
- 3518. Left femur. O. C. F. 501.
- 3519. Right astragalus, united by the calcareous matrix of the stratum to the distal end of the tibia. O. C. F. 503.
- **3520.** Left astragalus. O. C. F. 504.

Presented by Charles Darwin, Esq.

3521. Imperfect right ramus of the mandiblo, with three teeth and the socket of the fourth.

Presented by J. Baxter Langley, Esq., 1867. 2×2

Scelidotherium leptocephalum.

3522. An imperfect caudal vertebra.

This and the last were labelled "Hueso fosil encontrado a 20 vara de profundidad en la tierra cabando in poso frente a Sn. Francisco, Buenos Ayres."

Presented by J. Baxter Langley, Esq., 1867.

Genus MEGALONYX.

Jefferson, Trans. American Phil. Soc. 1799, iv. p. 248.

Megalonyr jeffersoni.

Megatherium jeffersonii, Desmarest, Mammalogie, p. 366 (1822).

The following specimens illustrative of the osteology of Megalonyx are mostly casts of fossil bones discovered in one of the limestone caverns called "White Cave," Kentucky, or "Big-bone Cave," Tennessee, both of which localities are assigned to them by Dr. Harlan, by whom the originals, now in the Museum of the Academy of Natural Sciences of Philadelphia, have been described and figured in his 'Medical and Physical Researches,' 8vo, 1835, p. 319, pl. xiii.

- 3523. Portion of molar tooth, including the termination of the pulp-cavity. O. C. F. 348.
- 3524. A vertebra and a neural arch of the dorsal series. O. C. F. 349 and 350.
- **3525**. A lumbar vertebra. O. C. F. 351.
- 3526. Cast of the left humerus of a full-grown animal. O. C. F. 353.

From Big-bone Cave, Tennessee.

3527. Casts of the right humerus and radius of a young animal, wanting the articular epiphyses. O. C. F. 354.

From Big-bone Cave, Tennessee.

3528. Casts of the right radius and ulna of an adult animal. O. C. F. 358 and 355.

From the cavern in Green-brian County, Virginia.

The original specimens from which the casts were taken are described and figured by Cuvier in the 'Annales du Muséum,' tom. v. (1804) p. 372, pl. xxiii. figs. 6 and 7.

3529. Casts of most of the bones of the left fore foot. O. C. F. 359 to 367.

From the originals described and figured by Cuvier in the 'Annales du Muséum,' tom. v. (1804), p. 362, pl. xxiii. figs. 1-9.

3530. Cast of the distal epiphysis of the right femur. O.C.F. 368.

From Big-bone Cave, Tennesseo. The original is described and figured by Dr. Harlan, 'Medical and Physical Researches,' p. 327, pl. xiv. fig. 19.

3531. Cast of the left tibia. O. C. F. 369.

From the same locality, and described and figured in the same work.

3532. Cast of the distal epiphysis of the right tibia. O. C. F. 370.

Described and figured in the same work.

3533. Cast of a right os calcis. O. C. F. 371.

From Big-bone Cave. Described and figured by Dr. Harlan as the "os ilium" (loc. cit. p. 336, pl. xvi.).

3534. Cast of the ungual phalanx of the middle digit. O. C. F. 373.

Megalonyr jeffersoni.

- 3535. Cast of a corresponding phalanx, probably of the adjoining toe. O. C. F. 374.
- 3536. Cast of the anterior half of an ungual phalanx of similar form, but intermediate in size between the two preceding specimens. O. C. F. 375.

The above casts of Megalonyx jeffersoni were presented by Dr. Harlan.

Megalonyp rodens.

Megalænus rodens, Leidy, Proc. Acad. Nat. Sc. Philadelphia, June 1868, p. 180.

Myomorphus cubensis, Pomel, Comptes Rendus de l'Acad. Paris, t. lxvii. p. 665 (Sept. 28, 1868).

3537. Cast of mandible.

The original was found at Ciego Montero, Cienfuegos, Cuba, and is now in the Paris Museum.

Presented by Professor Gervais, 1872.

The genera and species to which the following Megatherioid fossils belong cannot be determined.

3538. Body of a vertebra, probably the last cervical. O. C. F. 506.

From South America.

Presented by Charles Darwin, Esq.

- 3539. Two dorsal vertebræ from the Tertiary deposits of Buenos Ayres. O. C. F. 507 and 508. Purchased.
- 3540. The inferior bony arch of a caudal vertebra. O. C. F. 509.

From the Tertiary deposits of Buenos Ayres.

Purchased.

3541. A right astragalus. O. C. F. 514.

From the Tertiary deposits of Buenos Ayres.

Purchased.

Genus VALGIPES.

Gervais, Journal de Zoologie, iii. p. 162 (1874).

Walgipes deformis.

Gervais, loc. cit.

3542. Cast of a calcaneum.

The original, from a eavern in Brazil, is in the Paris Museum.

Presented by Prof. Gervais, 1877.

Family MYRMECOPHAGIDÆ.

Genus MYRMECOPHAGA.

Linnæus, Syst. Nat. ed. 12, i. p. 51 (1766).

Myrmecophaga jubata.

Linnæus, loc. cit. p. 52.

THE GREAT ANT-EATER.

Hab. Central and South America.

3543. Articulated skeleton. O. C. 2366.

Vertebræ: C. 7, D. 15, L. 3, S. 5, C. 29.

Purchased.

3544. Imperfect skeleton.

From an adult female which died in the Zoological Society's Gardens about 1854. Many of the bones are mounted in the Separate Series.

Vertobræ: C. 7, D. 15, L. 3, S. 5, C. 28, one or two terminal caudal vertebræ absent.

Presented by the Zoological Society.

3545. Disarticulated skull.

In Museum before 1862.

Genus TAMANDUA.

Gray, Annals of Philosophy, n. s. x. p. 343 (1825).

Tamandua tetradactyla.

Myrmecophaga tetradactyla, Linnæus, Syst. Nat. ed. 12, i. p. 52 (1766).

THE TAMANDUA ANT-EATER.

Hab. Central and South America, from Mexico to Paraguay.

3546. Articulated skeleton. O. C. 2365.

Vertebræ: C. 7, D. 17, L. 2, S. 5, C. 37.

Brookes Collection. Purchased, 1828.

3547. Skeleton.

Vertebræ: C. 7, D. 17, L. 3, S. 5, C. 24 (incomplete). Many of the bones are mounted in the Separate Series. From Rio Grande, South America.

Purchased, 1865.

3548. Skeleton of young male.

Prepared from a specimen received from the Zoological Society's Gardens, 8 Dec., 1871.

Most of the viscera are preserved in the Physiological Series in the Gallery, the mandible being mounted with the tongue and salivary glands.

Vertebræ: C. 7, D. 18, L. 2, S. 6, C. 34 (one missing).

Purchased, 1871.

3549. Natural skeleton of young.

Vertebræ: C. 7, D. 18, L. 2, S. 6, C. 35.

Presented by Prof. A. H. Garrod, 1877.

Genus CYCLOTURUS.

Cyclothurus, Gray, Annals of Philosophy, n. s. x. p. 343 (1825). Myrmedon, Wagler, Nat. Syst. Amphibion, p. 36 (1830).

Cycloturus didactylus.

Myrmecophaga didactyla, Linnæus, Syst. Nat. ed. 12, i. p. 51 (1766).

THE LITTLE ANT-EATER.

Hab. Central and South America.

3550. Articulated skeleton of female.

Prepared from a specimen sent to the donor from Panama by Mr. Charles Gilmore.

Vertebræ: C. 7, D. 16, L. 2, S. 4, C. 40.

Presented by P. L. Sclater, Esq., 1870.

3551. Imperfect skeleton.

In Museum before 1862.

3552. Cranium.

In Museum before 1862.

Family DASYPODIDÆ.

Genus TATUSIA.

"Tatusie," F. Cuvier, Hist. Nat. des Mammifères (1822)*.
Tatusia, Lesson, Man. de Mammalogie, p. 309 (1827).
Praopus, Burmeister, Syst. Uebersicht Thier. Brasiliens, p. 295 (1854).

Tatusia novemcincta.

Dasypus novemcinctus, Linnæus, Syst. Nat. ed. 12, i. p. 54 (1766). Dasypus peba, Desmarest, Mammalogie, p. 368 (1822).

THE NINE-BANDED OF PEBA ARMADILLO.

Hab. Central and South America.

* Under this name F. Cuvier placed all the Armadillos, excepting Priodon and those which have teeth in the premaxillæ, which he called Tatou. It has, however, become gradually restricted to the small but very natural and distinct group to which it is here confined.

Tatusia novemcincta.

3553. Articulated skeleton. O. C. 2296.

Vertebræ: C. 7, D. 10, L. 5, S. 9, C. 16 (incomplete).

Brookes Collection. Purchased, 1828.

3554. Articulated skeleton.

Vertebræ: C. 7, D. 11, L. 5, S. 9, C. 22.

In Museum before 1862.

- 3555. Separated bones of the skull.
- 3556. Ossified cephalic dermal shield.
- 3557. Complete exoskeleton of a young specimen.
- 3558. Carapace.
- 3559. Carapace.
- 3560. A large carapace, denuded of its horny epidermal plates.
- 3561. A still larger carapace, wanting the scapular shield, and denuded of its epidermal plates.

The specific identity of the last two with *Tatusia novemcincta* is very doubtful. They are referred to by H. N. Turner (Proc. Zool. Soc. 1851, p. 213) as probably belonging to *T. punctata* of Lund.

The above were in the Museum before 1862, without history.

Tatusia hybrida.

Dasypus hybridus, Desmarest, Nouv. Dict. d'Hist. Nat. édit. 2, xxxii. p. 492 (1819).

THE MULITA ARMADILLO.

Hab. The Argentine Republic.

3562. Articulated skeleton.

Vertebræ: C. 7, D. 9, L. 5, S. 8, C. 15 (wanting one or two vertebræ).

Teoth $\frac{6}{7}$. A rudimentary fifth digit consisting of three bones is present in both fore feet of this specimen.

From the vicinity of Buonos Ayres.

Presented by Maximo Terrero, Esq., 1861.

3563. Skeleton of young.

Vertebræ: C. 7, D. 9, L. 4, S. 8, C. 20.

A special preparation has been made of the jaws, to show the change of the teeth which was in progress at the time of the animal's death. This specimen has been described by Prof. Flower in the Proc. Zool. Soc. 1868, p. 378.

From the vicinity of Buenos Ayres.

Presented by Maximo Terrero, Esq., 1861.

3564. Skull and exoskeleton.

Teeth $\frac{7}{8}$. From Buenos Ayres.

Presented by George Wilks, Esq., M.D., 1869.

3565. Skull and exoskeleton.

Teeth $\frac{7}{8}$. From Buenos Ayres.

Presented by George Wilks, Esq., M.D., 1869.

Genus DASYPUS.

Dasypus, Linnæus, Syst. Nat. ed. 12, i. p. 53 (1766). Euphractus, Wagler, Syst. der Amphibien, p. 36 (1830).

Dasypus sexcinctus.

Dasypus sexcinctus, Linnæns, loc. cit. p. 54.

Dasypus encoubert, Desmarest, Mammalogie, p. 370 (1822).

THE SIX-BANDED OF WEASEL-HEADED ARMADILLO.

Hab. Brazil; Paraguay.

Teeth $_{10}^{9}$, of which the first of the upper jaw is implanted in the premaxillary bone.

Dasypus sexcinctus.

3566. Articulated skeleton. O. C. 2290.

Vertebræ: C. 7, D. 11, L. 3, S. 9, C. 16.

Brookes Collection. Purchased, 1828.

3567. Skull and ossified cephalic dermal shield. O. C. 2291.

The prominent part of the right frontal bone has been removed, to show the rhinencephalic and olfactory chambers.

Presented by the Zoological Society.

3568. Skull, longitudinally and vertically bisected. O. C. 2299.

The teeth have been removed from the left side of both upper and lower jaws, and are displayed separately.

Presented by Professor Owen.

3569. Disarticulated cranium.

In Museum before 1862.

3570. Bones of the hind feet, naturally articulated. O. C. 2294.

Presented by Professor Owen.

3571. Exoskeleton.

Purchased, 1858.

Dasypus villosus.

Desmarest, Nouv. Dict. d'Hist. Nat. édit. 2, xxxii. p. 489 (1819).

THE HAIRY ARMADILLO.

Hab. Argentine Republic and North Patagonia.

3572. Skeleton and exoskeleton.

Vertebræ: C. 7, D. 11, L. 3, S. 8, C. 19. From Buenos Ayres.

Presented by Maximo de Terrero, Esq., 1861.

3573. Skull.

From Buenos Ayres.

Presented by Maximo de Terrero, Esq., 1861.

3574. Carapace.

3575. Ossified cephalic shield or casque. O. C. 2295.

Presented by Professor Owen.

Dasypus minutus.

Desmarest, Mammalogie, p. 371 (1822).

THE LITTLE ARMADILLO.

Hab. La Plata.

Teeth \S , none of which are implanted in the premaxilla. On this account it is sometimes separated generically from Dasypus, to which in all other respects it is closely allied.

3576. Skeleton and carapace.

Vertebræ: C. 7, D. 11, L. 3, S. 8, C. 12 (incomplete).

Purchased, 1881.

3577. Imperfect skeleton. O. C. 2306 and 2316 to 2335.

Vertebræ: C. 7, D. 11, L. 3, S. 8, C. 10 (incomplete). The sixth cervical, second dorsal, and some of the caudal vertebræ are wanting.

Presented by Charles Darwin, Esq.

. Genus **XENURUS**.

Wagler, Syst. d. Amphibien, p. 36 (1830).

Xenurus unicinctus.

Dasypus unicinctus, Linnæus, Syst. Nat. ed. 12, i. p. 53 (1766). Dasypus tatouay, Desmarest, Mammalogie, p. 369 (1822).

THE BROAD-BANDED ARMADILLO.

Hab. Brazil.

3578. Skeleton.

Vertebræ: C. 7, D. 12, L. 3, S. 10, C. 12 (incomplete). From the Rio Grande.

Purchased, 1865.

Xenurus lugubris.

Ziphila lugubris, Gray, Hand-list of Edentate Mammals in Brit. Mus. p. 23 (1873).

3579. Skull.

Purchased, 1877.

Genus PRIODON.

" Priodontes," F. Cuvier, Hist. Nat. des Mammifères (1822)*.

Priodon giganteus.

Dasypus giganteus, Geoff. and Cuv. Cat. Mamm. Mus. d'Hist. Nat. p. 207 (1802).

Dasypus gigas, Cuvier, Règne Animal, i. p. 221 (1817).

THE GREAT ARMADILLO.

Hab. South America.

3580. Articulated skeleton, and skin and exoskeleton of the same individual.

Vertebræ: C. 7, D. 12, L. 2, S. 13, C. 23.

Teeth $\frac{20}{20}$.

From Surinam. One of the six specimens described by Prof. Krauss in Wiegmann's 'Archiv,' 1867.

Purchased, 1865.

Genus TOLYPEUTES.

Illiger, Prodromus Syst. Mamm. et Av. p. 111 (1811).

Tolypeutes conurus.

Is. Geoffroy, Comptes Rendus de l'Acad. Paris, t. xxiv. p. 575 (1847).

THE THREE-BANDED ARMADILLO.

Hab. La Plata.

* This was evidently not intended as a Latin form, as is often assumed, but as a French plural word. It has been Latinized into *Priodon* and *Prionodon*. As the latter has now been bestowed upon a genus of Carnivora, it will be most convenient to retain the former, though less correct, rendering for the present genus.

3581. A nearly complete skeleton and oxoskoleton of the same individual. O. C. 2297 to 2305, and 2307 to 2315.

Teeth §.

Vertebræ: C. 7, D. 11, L. 3, S. 13, C. 11.

Presented by Charles Darwin, Esq.

3582. Carapace.

Purchased, 1858.

Genus CHLAMYDOPHORUS.

Chlamyphorus, Harlan, Ann. New York Lyceum Nat. Hist. vol. i. p. 237 (1824).

Chlamydophorus of most later authors.

Chlamydophorus truncatus.

Chlamyphorus truncatus, Harlan, loc. cit.

Hab. Western provinces of the Argentine Republic.

3583. Articulated skeleton and stuffed skin of female.

Teeth §.

Vertebræ: C. 7, D. 11, L. 3, S. 10, C. 15.

Prepared from a specimen from Mendoza which formed the subject of Prof. Hyrtl's Monograph published in the 'Denkschriften der Kais. Akad. Wien,' Math.-naturw. Classe, ix. 1855, p. 1.

Purchased, 1862.

Family GLYPTODONTIDÆ.

Genus GLYPTODON.

Owen, Proc. Geological Society, iii. p. 108 (27 March, 1839).

Elpptodon clabipes.

Owen, loc. cit. p. 112.

3584. The carapace, portion of the cranium, and terminal portion of the tail. O. C. F. 541.

This specimen is the type of Owen's Glyptodon clavipes, and

Elyptodon clabipes.

has been described and figured in his catalogue of 'Fossil Mammalia and Aves,' pls. i., ii., iii., and pl. iv. figs. 1-5.

From the Tertiary deposits of the Pampas of Bucnos Ayres.

Purchased, 1841.

3585. An imperfect articulated skeleton and carapace.

The left fore limb is wanting. A considerable number of ossicles of the carapace which could not be fitted together are preserved in a cabinet in the fossil-room.

The skeleton has been described and figured by Prof. Huxley in the 'Medical Times and Gazette,' 1863, vol. i. pp. 205 and 232, and partially in the 'Philosophical Transactions' for 1865, p. 31.

Found in 1860 on the estate of Señor Don Juan N. Terrero on the banks of the river Salado, Partido de San Miguel del Monte, Province of Buenos Ayres, about 80 miles due south of the city of that name.

The margin of the carapace placed over the head in the specimen corresponds to that figured by Burmeister as situated above the tail ('Anales del Museo Publico de Buenos Aires,' ii. pl. xli. fig. 6). The portion of the tail resembles that of Glyptodon asper or G. elongatus of that work (loc. cit. pls. xxxvii. and xxxviii.).

Presented by Don Juan N. Terrero, 1861.

3586. Cast of a complete skull.

The original is in the Museum of Natural History, Paris.

Presented by the Professors of the Paris Museum, through Prof. Gervais, 1869.

The specimens of *Glyptodon* presented to the College by Sir Woodbine Parish, K.H., were obtained from a low marshy place, about five feet below the surface, in the bank of a rivulet near Rio Matanza, in the Partido of Canuelas, about 20 miles to the south of the city of Buenos Ayres.

3587. Fragment of the anterior part of the left ramus of the lower jaw, including portions of the sockets of the four anterior teeth. O. C. 517.

Presented by Sir Woodbine Parish.

3588. A fragment of jaw, with the inner surface grooved for the sockets of the teeth.

In Museum before 1862.

3589. Ten specimens of teeth. O.C. 516.

Presented by Sir Woodbine Parish.

3590. An imperfect left anterior extremity, consisting of the humerus wanting its proximal end, the radius, and the distal phalanx of a digit. O. C. 518, 519, 522.

Presented by Sir Woodbine Parish.

3591. An imperfect left posterior extremity, consisting of the femur wanting its proximal end, the ankylosed distal extremities of the tibia and fibula, the tarsal and metatarsal bones, and phalanges of the foot. O. C. 523-540.

Presented by Sir Woodbine Parish.

3592. Models of the distal ends of the tibia and fibula and of the bones of the right hind foot.

In Museum before 1862.

3593. Casts of the bones of the left forearm and of an imperfect manus.

In Museum before 1862.

3594. Casts of the boncs of an imperfect left hind foot.

In Museum before 1862.

3595. A fragment of a tail.

In Museum before 1862.

3596. Two portions of the carapace.

Figured in pl. iv. figs. 4 and 5 of the 'Catalogue of Fossil Mammalia and Aves.'

Purchased.

Aluptodon clabipes.

- 3597. Various detached marginal ossicles of the carapace. O. C. 542-545. Purchased.
- 3598. A marginal and eight contiguous ossicles of the carapace. O. C. 547.

Purchased.

- 3599. A portion of the carapace, including three marginal ossicles.
- 3600. Various detached portions of the carapace. O. C. 549.
 Purchased.
- 3601. Various detached ossicles of the carapace. O. C. 550.

Purchased.

3602. Several portions of the carapace, apparently of the same individual. O. C. 552.

From the Pleistocene deposits near Rio Matanza, about 20 miles to the south of the city of Buenos Ayres.

Presented by Sir Woodbine Parish.

Elyptodon ornatus.

Owen, Cat. Fossil Organic Remains of Mammalia and Aves in Mus. Roy. Coll. Surgeons, p. 119 (1845).

3603. A portion of the carapace. O. C. 554.

From the Pleistocene deposits near the Rio Matanza, about 20 miles to the south of the city of Buenos Ayres.

Presented by Sir Woodbine Parish.

3604. A smaller portion of the carapace.

Probably from the same locality.

Presented by Sir Woodbine Parish.

3605. A portion of the carapace, on one side of which is a row of the projecting angular ossicles of the margin. O. C. 555.From the same locality.

Presented by Sir Woodbine Parish.

Elyptodon reticulatus.

Owen, loc. cit. p. 119.

3608. A portion of the carapace. O.C. 557.

Figured in Owen's 'Catalogue of Fossil Mammalia and Aves,' pl. v. figs. 1 & 2.

From the Pleistocenc deposits near Rio Matanza, 20 miles south of Buenos Ayres.

Presented by Sir Woodbine Parish.

Elyptodon tuberculatus.

Owen, loc. cit. p. 120.

3607. A portion of the carapace. O. C. 558.

From the Pleistocene deposits of the Pampas of Buenos Ayres.

Purchased.

3608. Various portions of the carapace.

In Museum before 1862.

3609. A fragment of the carapace. O. C. 559.

Figured in Owen's 'Catalogue of Fossil Mammalia and Aves,' pl. v. figs. 3, 4, and 5.

From the Pleistocene deposits of the Pampas of Buenos Ayres.

Purchased.

3610. Various similar portions of carapace.

In Museum before 1862.

Of uncertain Species.

3611. A portion of the casquo or essified cephalic shield.

In Museum before 1862.

2 y 2

Family MANIDÆ.

Genus MANIS*.

Linnæus, Syst. Nat. ed. 12, i. p. 52 (1766).

Manis pentadactyla.

Manis pentadactyla, Linnæus, loc. cit. Manis brachyura, Erxleben, Syst. Reg. Animal. p. 98 (1777).

Indian Pangolin.

Hab. India and Ceylon.

3612. Articulated skeleton.

Vertebræ: C. 7, D. 14, L. 5, S. 5, C. 28. From an animal caught at Attock, Punjab, April 1851.

> Presented by W. Crozier, Esq., and Colonel T. C. Blagrave, 1852.

3613. Disarticulated skull.

In Museum before 1862.

Manis aurita.

Manis auritus, Hodgson, Journ. As. Soc. Beng. v. p. 234 (1836). Manis dalmanni, Sundevall, Kongl. Vetensk. Acad. Handl. Stockh. for 1842, p. 256.

CHINESE PANGOLIN.

Hab. Northern India; China and Formosa.

3614. Articulated skeleton of adult male.

Vertebræ: C. 7, D. 16, L. 5, S. 4, C. 26. From Amoy.

Presented by Robert Swinhoe, Esq., 1870.

* For the synonymy of the Asiatic species of *Manis*, see Anderson, 'Anatomical and Zoological Researches, and Zoological Results of the Yunnan Expedition,' p. 341 (1878).

3615. Imperfect skeleton of young.

Vertebræ: C. 7, D. 17, L. 5, S. 4, C. 13 (incomplete).

From Shanghai.

Presented by R. Swinhoe, Esq., 1873.

Manis javanica.

Desmarest, Mammalogie, p. 377 (1822).

JAVAN PANGOLIN.

Hab. Burmah, Malay Peninsula, Java, Sumatra, and Borneo.

3616. Articulated skeleton.

Vertebræ: C. 7, D. 15, L. 6, S. 4, C. 28.

Obtained in Java by Dr. Ploem.

Presented by the Council of the Zoological Society, 1870.

3617. Skeleton of young.

Vertebræ: C. 7, D. 15, L. 6, S. 3, C. 30.

Obtained in Java by Dr. Ploem.

Presented by the Council of the Zoological Society, 1870.

3618. Imperfect skeleton. O. C. 2363.

Howship Collection. Purchased, 1841.

Manis gigantea.

Illiger, Abhandl. d. Köng. Akad. d. Wissenschaft. zu Berlin, 1811, pp. 78 & 84 (1815).

THE GIANT PANGOLIN.

Hab. West coast of Africa.

3619. Articulated skeleton.

Vertebræ: C. 7, D. 14, L. 5, S. 4, C. 28.

Received in exchange, 1881.

Manis macrura.

? Manis tetradactyla, Linnæus, Syst. Nat. ed. 12, i. p. 53 (1766). Manis macroura, Erxleben, Syst. Regn. Animal. p. 101 (1777).

THE LONG-TAILED PANGOLIN.

Hab. West Africa.

3620. Skeleton of female.

Vertebræ: C. 7, D. 14, L. 6, S. 3, C. 49.

Prepared in 1882 from a specimen which had been for a long time in the Spirit Stores.

3621. Imperfect skeleton of young. O. C. 2364.

Brookes Collection. Purchased, 1828.

Family ORYCTEROPODIDÆ.

Genus ORYCTEROPUS.

Geoffroy, Décade Philosophique, 1795 (fide Agassiz).

Orycteropus capensis.

Myrmecophaga afra, Pallas, Miscell. Zool. p. 64 (1778). Myrmecophaga capensis, Gmelin, Syst. Nat. i. p. 53 (1788)*.

THE CAPE ANT-EATER OF AARD-VARK.

Hab. South Africa.

3622. Articulated skeleton. O. C. 2336.

Vertebræ: C. 7, D. 13, L. 8, S. 6, C. 26.

Purchased.

3623. Skeleton. O. C. 2337-2362.

Vertebræ: C. 7, D. 13, L. 8, S. 6, C. 24 (incomplete).

South Collection. Purchased, 1835.

3624. Bones of the right and left hind foot.

3625. Hyoid bones of female.

Presented by the Zoological Society, 1869.

* All subsequent authors have used this specific name.

Orycteropus æthiopicus.

Sundevall, Kongl. Vetensk. Acad. Handl. Stockh. for 1842, p. 236.

THE ETHIOPIAN ANT-EATER.

Ilab. East Africa.

3626. Skull of young.

From Sennaar.

Purchased, 1875.

Family MACROTHERIIDÆ.

Genus ANCYLOTHERIUM.

Gaudry, Animaux fossiles et Géologie de l'Attique, p. 129 (1862).

Ancylotherium priscum.

Gaudry, Journal de Zoologie, iv. p. 519 (1875).

3627. Casts of a proximal and an ungual phalanx.

The originals, from the "Phosphorites du Quercy," at Mouillac, Canton de Caylus (Tarn et Garonne), are in the Paris Museum. They are described and figured by Gaudry, *loc. cit.* pl. xviii. figs. 3 to 6.

Presented by the Museum of Nat. Hist. of Paris, per Prof. Gervais, 1878.

3628. Cast of a small ungual phalanx of some unknown animal, described and figured by Gaudry in the above memoir (pl. xviii. figs. 7 and 8).

The original, in the Paris Museum, is from the phosphoritic deposit at Cantayrac, Canton de Caylus.

Presented by the Museum of Nat. Hist. of Paris, per Prof. Gervais, 1878.

Order MARSUPIALIA.

A. Diprotodont Series.

Family PHASCOLOMYIDÆ.

Genus PHASCOLOMYS.

Phascolomis, Geoffroy, Ann. du Mus. d'Hist. Nat. ii. p. 365 (1803). Dentition:—i. $\frac{1}{4}$, c. $\frac{0}{0}$, p. $\frac{1}{4}$, m. $\frac{4}{4}$, $=\frac{6}{6}$: total 24.

Phascolomys wombat.

Péron et Lesueur, Voyage de Découvertes aux Terres Australes, vol. ii. pl. xxviii. (1807).

THE COMMON WOMBAT.

Hab. Tasmania and the Islands in Bass's Straits.

3629. Articulated skeleton. O. C. 1792.

Vertebræ: C. 7, D. 15, L. 4, S. 4, C. 11.

From an animal which lived for some time in the menagerie at Exeter Change.

Presented by Sir Everard Home.

3630. Skeleton. O. C. 1798–1840.

Presented by H. Everett, Esq.

3631. Incomplete skeleton.

The teeth are much worn.

Vertebræ: C. 7, D. 15, L. 4, S. 4, C. 8 (incomplete).

In Museum before 1862.

3632. Incomplete skeleton of young.

Vertebræ: C. 7, D. 15, L. 4, S. 4, C. 7 (incomplete).

In Museum before 1862.

3633. Naturally articulated skeleton of young.

Vertebræ: C. 7, D. 15, L. 4, S. 3, C. 14.

In Museum before 1862.

3634. Skull. O. C. 1795.

The cranium has been longitudinally and vertically bisected; several of the teeth have been lost.

3635. Skull, longitudinally and vertically bisected.

In Museum before 1862.

3636. Skull, longitudinally and vertically bisected.

In Museum before 1862.

3637. Skull, vertically and transversely divided into three sections.

In Museum before 1862.

3638. Imperfect skull. O. C. 1796 and 1797.

The teeth have been removed and are displayed separately.

Presented by Professor Owen.

3639. Facial portion of the cranium and mandible, prepared to exhibit the teeth. O. C. 1794.

Presented by Sir Everard Home, 1807.

3640. Cranium. O. C. 1793.

Presented by Sir Everard Home, 1807.

3641. Skull of a young animal, which measured 28 cm. in length.

It has been prepared to show the dentition, and has been described and figured in Prof. Flower's memoir "On the Devolopment and Succession of the Teeth in the Marsupialia," Phil. Trans. for 1867, pl. xxx. fig. 7. The teeth in position all belong to the permanent set.

From the Spirit Stores.

3642. Hyoid bones.

Purchased, 1870.

Phascolomys platyrhinus.

Owen, Cat. Osteol. Series Mus. Roy. Coll. Surg. vol. i. p. 334 (1853).

THE PLATYRHINE WOMBAT.

Hab. South Australia.

3643. Skeleton of female.

Vertebræ: C. 7, D. 15, L. 4, S. 5, C. 15.

The first sacral vertebra is intermediate in character between a lumbar and a sacral; it articulates with the ilium on the left side only.

From Victoria. See Murie, "On the Species of *Phascolomys*," Proc. Zool. Soc. 1865, p. 838.

Presented by J. Bush, Esq.

3644. Cranium. O. C. 1841.

The type specimen described by Professor Owen.

Presented by Dr. Hobson.

3645. Skull. O. C. 1842.

The teeth are remarkable for the unequal manner in which they have been worn.

Presented by Dr. Hobson.

The following specimens, described by Professor Owen under the name of *Phascolomys mitchelli* (Appendix to Sir Thomas Mitchell's 'Three Expeditions into Australia,' ii. p. 363, 1838), have been referred by Dr. Murie to this species:—

3646. Right upper incisor and an upper molar. O. C. F. 1540 and 1541.

From a cave in Wellington Valley, Australia.

Presented by Colonel Sir T. L. Mitchell.

3647. Fragment of mandible, with a molar tooth in situ. O. C. F. 1542.

From a cave in Wellington Valley.

Presented by Count Strzelecki.

Phascolomys latifrons.

Owen, Proc. Zool. Soc. 1845, p. 82.

THE HAIRY-NOSED WOMBAT.

Hab. South Australia.

3648. Skull. O. C. 1843.

The typo specimen described by Owen in the Proc. Zool. Soc. 1845, p. 82; also figured and described in the Trans. Zool. Soc. vol. iii. p. 303.

From South Australia.

Presented by Sir George Grey.

3649. Incomplete skeleton of young.

Vertebræ: C. 6 (incompl.), D. 13, L. 6, S. 4, C. 8 (incompl.).

In Museum before 1862.

3650. Hyoid bones of adult male.

From an animal which died in the Zoological Society's Gardens, 10 March, 1870.

Purchased, 1870.

Family PHALANGISTIDÆ.

Subfamily PHASCOLARCTINE.

Genus PHASCOLARCTOS.

De Blainville, Bullet. de la Soc. Philomat. de Paris, 1816, p. 108. Dentition:—i. $\frac{3}{1}$, c. $\frac{1}{0}$, p. $\frac{1}{1}$, m. $\frac{4}{4}$, $=\frac{9}{6}$: total 30.

Phascolarctos cinereus.

Lipurus cinereus, Goldfuss, Isis, p. 271 (1819). Phascolarctos fuscus, Desmarcst, Mammalogie, p. 276 (1820).

THE KOALA.

Hab. Australia.

3651. Articulated skeleton of male.

Vertebræ: C. 7, D. 11, L. 8, S. 3, C. 7.

Purchased, 1878.

Phascolarctos cinereus.

3652. Skeleton, partially articulated and not quite complete.

Vertebræ: C. 7, D. 11, L. 7, S. 4, C. 7.

In Museum before 1862.

3653. Incomplete skeleton. O. C. 1844, 1847, and 1848.

Presented by Sir Everard Home, 1804.

3654. Imperfect skeleton, wanting the skull.

The epiphyses of the long bones are not united.

Presented by Sir Everard Home, 1804.

3655. Articulated skeleton of young.

The posterior molars are not yet in place. Vertebræ: C. 7, D. 11, L. 7, S. 3, C. 8.

Purchased, 1863.

3656. Skeleton of a very young animal. O. C. 1845.

The third and fourth melars have not come into place. From the banks of the river Nepean, New Holland.

Presented by Sir Everard Home, 1804.

3657. Disarticulated skull of young. O. C. 1846.

Presented by Sir Everard Home, 1804.

3658. Mutilated skull of young.

The teeth which are in place (the incisors and first molar) appear all to belong to the permanent sories; the premolar has not yet cut the gum, and there is no appearance of a deciduous predecessor.

Presented by Mr. E. Gerrard, Jun., 1867.

3659. Bones of right hind foot.

Presented by J. W. Clark, Esq., 1869.

Subfamily PHALANGISTINÆ.

Genus CUSCUS.

Cæscoes, Lacépède, Mém. de l'Institut, iii. p. 491 (1801).

Cuscus, Lesson et Garnot, Voyage de la Coquille, Atlas Zool. (1826) pl. iv.; Férussac, Bull. des Sc. Nat. tom. viii. p. 96 (1826).

Dentition :—i. $\frac{3}{1}$, c. $\frac{1}{1}$, p. $\frac{2}{3}$, m. $\frac{4}{4}$, $=\frac{10}{9}$: total 38.

Cuscus maculatus.

Phalangista maculata, Desmarest, Nouv. Diet. d'Hist. Nat. xxv. p. 472 (1817).

Cuscus maculatus, Lesson et Garnot, Voyage de la Coquille, Atlas, pl. iv. (1826).

THE SPOTTED CUSCUS.

Hab. New Guinea and neighbouring islands.

3660. Skull, mutilated in the occipital region.

From the island of Aroo.

Purchased, 1875.

3661. Skull, mutilated in the occipital region.

From Port Moresby, New Guinea.

Purchased, 1882.

3662. Skull of young.

The milk-molar is in place, with the first and second true molars. The germ of the posterior premolar of the right side of the upper jaw is exposed by the removal of the outer wall of its formative cavity.

From Port Moresby, New Guinea.

Purchased, 1882.

Genus PHALANGISTA.

Cuvier, Leçons d'Anatomie Comparé, i. tab. 1 (1799).

Dentition:—i. $\frac{3}{1}$, c. $\frac{1}{1}$, p. $\frac{2 \text{ or } 3}{1 \text{ to } 2}$, m. $\frac{4}{4}$, $=\frac{10 \text{ or } 11}{7 \text{ to } 9}$: total 34 to 40.

Phalangista vulpina.

Didelphis vulpina, Shaw, Gen. Zool. vol. i. pt. 2, p. 503 (1800).

THE VULPINE PHALANGER.

Hab. Australia.

Phalangista vulpina.

3663. Articulated skeleton. O. C. 1851.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 22 (incomplete).

Brookes Collection. Purchased, 1828.

3664. Skeleton of smaller size, but presented as that of an animal of this species.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 27. From Grafton, New South Wales.

Presented by C. E. Porter, Esq., 1865.

3665. Imperfect skeleton.

Many of the bones are mounted in the Separate Series.

In Museum before 1862.

3666. Skull. O. C. 1853.

Presented by H. Everett, Esq.

3667. Skull.

3668. Skull.

3669. Skull.

3670. Skull.

3671. Skull.

3672. Skull.

The above six specimens were in the Museum before 1862, without history.

3673. Skull. O. C. 1852.

Presented by Henry Cline, Esq.

3674. Vertically and longitudinally bisected skull. O. C. 1856.

Presented by Dr. Hobson.

3675. Skull.

Presented by C. E. Porter, Esq., 1865.

3676. Skull. O.C. 1854.

This formed part of the original Hunterian Collection, and the name "Wha-tapoa-roo" was attached to it, indicating it to have been of the same species as the *Phalangista vulpina*, described by Hunter under the above native name in White's Journal of a Voyage to New South Wales, p. 278 (1790).

Hunterian.

3677. Skull, of smaller size than the preceding. O. C. 1860. From the Murray River, South Australia.

Presented by Dr. Hobson.

3678. A similar skull. O. C. 1861.

Presented by Dr. Hobson.

3679. Cranium. O. C. 1855.

It has been transversely and vertically bisected through the brain-cavity.

Presented by Dr. Hobson.

3680. Cranium. O. C. 1857.

Presented by H. Everett, Esq.

All the foregoing specimens exhibit the complete adult dentition.

3681. Skull of young.

Prepared in 1867 from a specimen in spirit, to show the dentition. It has been described and figured by Prof. Flower in the 'Philosophical Transactions' for 1867, p. 634, pl. xxix. fig. 6. The teeth which in the upper jaw have risen above the level of the alveoli are the first and second incisors, the milk-molar, and the first true molar. The germ of the third incisor, the canine, two premolars, and second molar are exposed in situ.

3682. Pelvis and two caudal vertebræ. O. C. 1859.

Presented by Henry Cline, Esq.

3683. Pelvis and three caudal vertebræ. O. C. 1858.

Hunterian.

Phalangista vulpina.

3684. Bones of the right hind foot.

Prepared from a specimen in the Spirit Stores, 1870.

3685. Hyoid bones.

Prepared from a specimen in the Spirit Stores, 1869.

Phalangista canina.

Ogilby, Proc. Zool. Soc. (1835), p. 191.

THE SHORT-EARED PHALANGER.

Hab. New South Wales.

3686. Skull. O. C. 1862.

From the Scrub-districts, New South Wales.

Gould Collection. Purchased, 1840.

Phalangista cooki.

Phalangista cookii, Geoffroy in Desmarest, Nouv. Diet. d'Hist. Nat. vol. xxv. p. 476 (1817).

Cook's Phalanger.

IIab. Australia.

3687. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 25.

Presented by H. Everett, Esq. Hunterian Substitute, 1846.

3688. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 25. From Brighton, Tasmania, 15 Dec., 1869.

Purchased, 1870.

3689. Skull. O. C. 1864.

Presented by H. Everett, Esq.

3690. Skull. O. C. 1865.

Presented by Ronald Gunn, Esq.

3691. Skull. O. C. 1866.

Presented by Ronald Gunn, Esq.

Genus PETAURUS.

Shaw, Naturalist's Miscellany, ii. pl. 60 (1791).

Dentition:—i. $\frac{3}{1}$, c. $\frac{3}{1}$, p. $\frac{3}{2 \text{ or } 3}$, m. $\frac{4}{4}$, $=\frac{11}{8 \text{ or } 9}$: total 38 or 40.

Petaurus taguanoides.

Desmarest, Nouv. Dict. d'Hist. Nat. xxv. p. 400 (1817). Hab. New South Wales.

3692. Imperfect skeleton.

Vertebræ: C. 7, D. 10, L. 6, S. 2, C. 25 (incomplete).

Gould Collection. Purchased, 1840.

Petaurus australis.

Petaurus australis, Shaw, Naturalist's Miscellany, ii. pl. 60 (1791). Didelphis petaurus, Shaw, General Zoology, i. pt. 2, p. 496, pl. 112 (1800).

Petaurus flaviventer, Desmarest, Nouv. Diet. d'Hist. Nat. xxv. p. 403 (1817).

Belideus flaviventer, Gould, Mammals of Australia, i. pl. xxiii. (1863).

Hab. New South Wales.

3693. Articulated skeleton. O. C. 1849.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 17 (incomplete).

Brookes Collection. Purchased, 1828.

3694. Skull.

The posterior upper molar is not developed.

In Museum before 1862.

3695. Mutilated skull.

Labelled "Large Flying Opossum, N. S. Wales."

In Museum before 1862.

Petaurus sciureus.

Didelphis sciurea, Shaw, General Zoology, vol. i. pt. 2, p. 498 (1800).

Hab. New South Wales.

3696. Articulated skeleton. O. C. 1850.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 15 (incomplete).

Purchased.

3697. Skull.

From Queensland.

Presented by Sir Walter Elliot, K.C.S.I., 1882.

Genus TARSIPES.

Gervais and Verreaux, Proc. Zool. Soc. 1842, p. 1.

Dentition:—i. \(\frac{2}{1}\), c. \(\frac{1}{0}\), p. & m. variable and rudimentary.

Tarsipes rostratus.

Tarsipes rostratus, Gervais and Verreaux, Proc. Zool. Soc. 1842, p. 1.

Hab. Western Australia.

3698. Mutilated skull, bones of extremities, and tail.

Dentition: i. $\frac{2-2}{1-1}$, c. $\frac{1-1}{0-0}$, p. & m. $\frac{3-4}{2-3}$: total 20.

Taken from a skin which is preserved with the specimen.

In Museum before 1862.

Family MACROPODIDÆ.

Dentition:—i. $\frac{3}{1}$, c. $\frac{0 \text{ or 1}}{0}$, p. $\frac{2}{2}$, m. $\frac{4}{4}$, = $\frac{9 \text{ or } 10}{7}$: total 32 or 34.

Canines, when present, often deciduous, always small. Anterior premolar always deciduous, being lost at about the time when the second replaces the milk-molar, so that both premolars are

never found in place and in use in the same individual. In the species of the first section of the genus *Macropus* the posterior premolar and first true molar are also lost as life advances.

Genus MACROPUS.

Shaw, Naturalist's Miscellany, i. pl. 33 and accompanying text (1790).

Section A. Macropus proper.

Macropus giganteus.

Yerboa gigantea, Zimmermann, Specimen Zoologiæ Geographicæ, p. 526 (1777).

Didelphis gigantea, Schreber, Säugthiere, iii. p. 552, tab. 154 (1778).

Macropus giganteus, Shaw, Nat. Miscell. i. pl. 33 (1790). Macropus major, Shaw, Gen. Zoology, i. pt. 2, p. 505 (1800).

THE GREAT KANGAROO.

Hab. Australia and Tasmania.

3699. Articulated skeleton of a nearly adult male. O. C. 1724.

The anterior premolar of the upper jaw has been shed, the teeth in place being the milk-molar and the three anterior true molars.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 23. Prepared from a specimen from Tasmania.

Presented by Ronald Gunn, Esq.

3700. Articulated skeleton of a somewhat younger animal. O. C. 1725.

The upper anterior premolar is retained on the right side, with the milk-molar and two anterior true molars. The third true molar is not fully in place.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 21.

Brookes Collection. Purchased, 1828. Hunterian Substitute, 1846.

Macropus giganteus.

The following specimens are arranged according to their age, as shown by the state of development of the teeth.

3701. Cranium of a very large and old animal.

The incisors are worn down almost to their roots. The three posterior molars only remain in place.

Brought by Lady Franklin from Point Nepean, Port Phillip.

Presented by Miss Florence Pollock, 1877.

3702. Skull of female. O. C. 1735.

The four upper and three posterior lower molar teeth are in place and use. The ealvarium has been removed.

Presented by Professor Owen.

3703. Skull, longitudinally and vertically bisected. O. C. 1732.

Three true molars are in place in the upper jaw, with, on the right side, the milk-molar, about to be replaced by the posterior premolar. The anterior premolar has been shed on both sides.

Hunterian.

3704. Skull of female. O. C. 1734.

The milk-molars are shed. The posterior premolars and three anterior true molars are in place. The fourth is just rising above the alveolus.

From an animal which died in the Menagerie at Exeter Change.

Purchased.

3705. Skull. O. C. 1733.

The dentition corresponds with that of the last specimen.

Hunterian.

3706. Skull, vertically and longitudinally bisected. O. C. 1726.

The milk-molars and the three anterior true molars are in place.

Purchased.

3707. Skull. O. C. 1731.

The anterior premolars are shed; the right upper milk-molar remains, but the corresponding tooth on the left side is replaced by the posterior premolar. Three true molars are in place.

Purchased.

3708. Cranium.

The milk-molars, with the left upper anterior premolar and the first and second true molars, are in place.

In Museum before 1862.

3709. Skull. O. C. 1730.

The anterior premolars, the milk-molars, and the first and second true molars are in place. The germ of the posterior premolar is exposed *in situ* by the removal of part of the outer alveolar wall on the right side.

Hunterian.

3710. Skull.

The anterior premolars, milk-molars, and first true molars are in place.

In Museum before 1862.

3711. Mutilated skull. O. C. 1729.

The dentition is in a corresponding state to that of the last.

Hunterian.

3712. Skull. O. C. 1728.

In a corresponding state of dentition. The germ of the posterior premolar is exposed in the left side of both jaws.

Presented by Mr. Mornay, 1809.

3713. Skull.

The dentition is as in the three preceding specimens. Figured in the memoir "On the Development and Succession of the Teeth in the Marsupialia," Philos. Trans. 1867, pl. xxix. fig. 3.

In Museum before 1862.

3714. Left ramus of mandible. O. C. 1738.

The teeth in situ are the milk-molar, and the first, second, and third true molars. The posterior premolar is shown, by the

Macropus giganteus.

removal of part of the alveolar wall, to be in a very advanced state, and about to replace the milk-molar.

Presented by Professor Owen.

3715. Left ramus of a mandible of a younger animal. O. C. 1736.

The teeth in place are the anterior deciduous premolar, the milk-molar, and the first true molar. The germ of the posterior premolar is exposed in its alveolar eavity and is much less advanced than in the last specimen.

Presented by Professor Owen.

The two preceding specimens are figured in the article "Teeth," 'Cyclopædia of Anatomy and Physiology,' vol. iv. p. 934.

3716. Disarticulated bones of a skull. O. C. 1727.

The teeth are displayed separately.

Presented by Professor Owen.

3717. Various bones, including four cervical, two dorsal, five lumbar, and one caudal vertebræ, the pelvis, both femurs, both tibiæ and fibulæ, the left foot, the right astragalus, calcaneum, and naviculare; the left scapula and radius, and the right manus. O. C. 1757–1773.

Hunterian.

3718. Pelvis of an animal of large size.

In Museum before 1862.

Section B. OSPHRANTER.
Gould, Monograph of Macropodidæ, i. (1841).

Macropus rufus.

Kangurus rufus, Desmarest, Mammalogie, Suppl. p. 541 (1822). Kangurus laniger, Gaimard, Bull. Sci. Philomat. 1823, p. 138.

THE RED KANGAROO.

Hab. Australia.

3719. Mutilated skull.

The teeth present are the three posterior molars, and in the upper jaw the first molars also, on the point of being shed.

In Museum befere 1862.

3720. Portions of the right maxilla and mandible, with the molar teeth in situ. O. C. F. 1510' and 1511'.

Figured in 'Philos. Trans.' 1874, pl. xxiii. figs. 1 and 14. The animal to which these belonged was killed by Mr. Gould between the rivers Murray and Adelaide, Australia; it measured 8 feet 2 inches from the nose to the extremity of the tail, and was the largest Kangaroo which he saw in Australia.

Presented by John Gould, Esq.

3721. Hyoid bones of female.

Purchased, 1870.

3722. Skull of young of an allied species. O. C. 1744.

The anterior premolar, the milk-molar, and the first true molar are in place.

Hunterian.

Macropus antilopinus.

Osphranter antilopinus, Gould, Proc. Zool. Soc. 1841, p. 80.

THE ANTELOPINE KANGAROO.

Hab. Australia.

3723. Skeleton, ♀.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 23.

Purchased, 1882.

Section C. Halmaturus.

Illiger, Prodromus Syst. Mamm. et Av. p. 80 (1811) (as a synonym of *Macropus*).

Macropus bennetti.

Waterhouse, Proc. Zool. Soc. 1837, p. 103.

BENNETT'S WALLABY.

Hab. Tasmania.

Macropus bennetti.

3724. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 22.

Presented by Jacob Bell, Esq., M.P.

3725. Imperfect skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 24.

In Museum before 1862.

3726. Skull. O. C. 1743.

The posterior premolar and the four true molars are present in both jaws, constituting the complete adult dentition.

Hunterian.

3727. Skull.

The dentition is in the same condition as in the last specimen.

In Museum before 1862.

3728. Skull, wanting the right ramus of the mandible.

In the same condition of dentition.

In Museum before 1862.

3729. Skull. O. C. 1742.

The anterior premolar and milk-molars are present, with the three anterior true molars. The germs of the posterior premolars of both upper and lower jaw are exposed in situ on the left side.

Hunterian.

3730. Skull of young.

The deciduous anterior premolar, the milk-molar, and the first and second permanent molars are in place.

In Museum before 1862.

3731. Skull of young. O. C. 1741.

The deciduous anterior premolar, the milk-molar, and the first true molar are in place; the second molar is just rising above the alveolar margin.

Presented by Dr. George Bennett.

Macropus derbianus.

Halmaturus derbianus, Gray, Mag. Nat. Hist. new series, i. p. 583 (1837).

LORD DERBY'S WALLABY.

Hab. Australia.

3732. Mutilated skull. O. C. 1745.

It has the complete adult dentition, much worn.

Brookes Collection. Purchased, 1828.

Macropus houtmanni.

Gould, Proc. Zool. Soc. 1844, p. 31.

HOUTMANN'S WALLABY.

Hab. Western Australia.

3733. Skull of male. O. C. 1749.

With complete adult deutition.

Gould Collection. Purchased, 1840.

3734. Skull of female. O. C. 1750.

With complete adult dentition.

Gould Collection. Purchased, 1840.

Macropus billardierii.

Kangurus billardierii, Desmarest, Mammalogie, Suppl. p. 542 (1822).

LABILLARDIÈRE'S WALLABY.

Hab. Tasmania.

3735. Skull. O. C. 1748.

The complete adult dentition is present, with rudimentary canines in the maxilla.

Brookes Collection. Purchased, 1828.

3736. Skull. O. C. 1747.

Brookes Collection. Purchased, 1828.

Section D. LAGORCHESTES.

Gould, Monograph of the Macropodidæ, i. (1841).

Macropus leporoides.

Gould, Proc. Zool. Soc. 1840, p. 93.

THE HARE KANGAROO.

Hab. South Australia.

3737. Skull.

The posterior (permanent) premolar has been acquired, with the first, second, and third true molars.

In Museum before 1862.

3738. Skull. O. C. 1751.

The anterior (deciduous) premolar, the milk-molar, and the first, second, and third true molars are in place, the last being not fully developed.

Gould Collection. Purchased, 1840.

3739. Skull.

Rather younger than the last, tho third molar being still below the lovel of the alveolar margin.

In Museum before 1862.

Macropus hirsutus.

Lagorchestes hirsutus, Gould, Proc. Zool. Soc. 1844, p. 32.

Hab. Western Australia.

3740. Skull. O. C. 1752.

The upper anterior (deciduous) premolars have been shed. The milk-molar remains on the left side, but has been lost on the right, showing the crown of the posterior premolar just about to replace it. The three anterior molars are in place.

Gould Collection. Purchased, 1840.

3741. Skull. O. C. 1753.

From a younger animal, the anterior premelar, the milk-molar, and two true molars only being fully in place. The germ of the permanent premelar is exposed on the right side.

Gould Collection. Purchased, 1840.

Section E. Petrogale.

Gray, Mag. Nat. Hist. new ser. i. p. 583 (1837).

Macropus xanthopus.

Petrogale wanthopus, Gray, Proc. Zool. Soc. 1854, p. 249.

THE YELLOW-FOOTED ROCK-KANGAROO.

Hab. South Australia.

3742. Skull and imperfect skeleton of female.

The adult dentition has been acquired. In both upper and lower jaws the first molar is pressed upon and displaced by the premolar in front and the second molar behind, and its roots are undergoing absorption.

The right manus and pes are mounted in the Separate Series. From an animal which died in the Zoological Society's Gardens, Nov. 1874.

Presented by the Zoological Society, 1874.

Extinct Species of Macropus from Deposits in Australia presumably of Pleistocene age.

Macropus anak.

Macropus anak, Owen, Proc. Geol. Society, xv. p. 185 (1859). Protemnodon anak, Owen, Phil. Trans. 1874, p. 275.

3743. Portion of right maxilla. O.C.F. 1519.

The first and second molars are preserved, with the milk-molar and portion of the anterior premolar. The internal alveolar wall has been removed, showing the germ of the permanent premolar in its cavity. Figured in the 'Philos. Trans.' 1874, pl. xxiii. figs. 4, 5, and 6.

From the Wellington Valley, New South Wales.

Presented by Count Strzelecki, 1844.

3744. Small portion of right maxilla of a young animal similar to the last. O. C. F. 1520.

From the Wellington Valley, New South Wales.

Presented by Count Strzelecki, 1844.

Macropus anak.

3745. Portion of left maxilla, with the three anterior molars and the anterior (deciduous) premolar and the milk-molar. O. C. F. 1513.

A portion of the internal alveolar wall has been removed to show the germ of the posterior or permanent premolar in situ in its cavity. Figured in the 'Philos. Trans.' 1874, pl. xxiii. figs. 7, 8, and 9.

From the Condamine River, west of Moreton Bay, Queensland.

Presented by Col. Sir T. L. Mitchell, C.B.

3746. Portion of the left maxilla, with the molar teeth.

From the eaves in the Wellington Valley.

Presented by Count Strzelecki, 1844.

3747. Portion of maxilla, with two molar teeth.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

3748. Greater portion of right ramus of mandible with three molars, the anterior of which has the crown broken off.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

Macropus atlas.

Macropus atlas, Owen, Mitchell's Three Expeditions into Australia, ii. p. 359 (1838).

Sthenurus atlas, Owen, Philos. Trans. 1874, p. 265.

3749. Portion of right maxilla with two molar teeth. O. C. F. 1514.

From the Condamine River, west of Moreton Bay, Queensland.

Presented by Col. Sir T. L. Mitchell, C.B.

3750. Portion of left maxilla with two molar teeth.

From New South Wales.

Presented by Dr. George Bennett, 1882.

3751. Portion of left ramus of mandible with three molar teeth.

From New South Wales.

Presented by Dr. George Bennett, 1882.

3752. Portion of left ramus of mandible with three molar teeth.
O. C. F. 1516.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3753. Portion of the left ramus of mandible with two molar teeth. O. C. F. 1515.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3754. Portion of left ramus of mandible with two molar teeth.

In Museum before 1862.

3755. Portion of left ramus of mandible with one molar tooth.

In Museum before 1862.

Macropus titan.

Owen in Mitchell's Three Expeditions into Australia, ii. p. 360 (1838).

3756. Portion of the right maxilla. O. C. F. 1510.

The molar series is preserved. Figured in the 'Philos. Trans.' 1874, pl. xxiii. figs. 2 & 3.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C B.

Macropus titan.

3757. Portion of the right maxilla with the molar series of teeth.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

3758. Portion of the right ramus of the mandible with the three posterior molars.

Figured in the 'Philos, Trans.' 1874, pl. xxiii. figs. 12 & 13. From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3759. Portion of right ramus of mandible with the two posterior molars.

From New South Wales.

Presented by Dr. George Bennett, 1882.

3760. Greater portion of the right ramus of mandible with two molar teeth.

In Museum before 1862.

3761. Portion of the right ramus of mandible with the posterior part of the last molar tooth. O. C. F. 1512.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3762. Greater portion of the left ramus of mandible with the molar series of teeth.

From Darling Downs, Queensland.

Presented by Dr. George Bennett, 1881.

3763. Portion of a ramus of mandible with the three molar teeth and portion of the incisors.

From New South Wales.

Presented by Dr. George Bennett, 1882.

Macropus affinis.

Owen, Cat. Fossil Mammalia and Aves, Mus. Roy. Coll. Surg. p. 328 (1845).

3764. Portion of left ramus of mandible. O. C. F. 1524.

This is the type specimen, and is figured in the 'Philos. Trans.' 1874, pl. xxiii. figs. 10 & 11.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

Macropus gouldii.

Osphranter gouldii, Owen, Philos. Trans. 1874, p. 261.

3765. Portion of the left ramus of mandible. O. C. F. 1521.

Figured in the 'Philos. Trans.' 1874, pl. xxiii. figs. 15 & 16. From Wellington Valley.

Presented by Count Strzelecki, 1844.

3766. Portions of the right and left rami of mandible.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

3767. Portion of the right ramus of mandible with the molar teeth.

In Museum before 1862.

3768. Portion of the right ramus of mandible with three molars.

From New South Wales.

Presented by Dr. George Bennett, 1882.

3769. Fragment of right ramus of mandible with two molars. O. C. F. 1522.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

Macropus gouldii.

3770. Portion of left ramus of mandible of a young animal. O. C. F. 1523.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

Macropus mimas.

Protemnodon mimas, Owen, Philos. Trans. 1874, p. 278.

3771. Dentary portion of the left maxilla, with the molar series of teeth complete.

From New South Wales.

Presented by Dr. George Bennett, 1882.

3772. Left ramus of mandible with the molar series of teeth.

From New South Wales.

Presented by Dr. George Bennett, 1882.

3773. Portion of right maxilla with the two last molars.

In Museum before 1862.

3774. Left ramus of mandible of a somewhat larger animal with the molar teeth.

In Museum before 1862.

Macropus goliah.

Macropus goliah, Owen, in Waterhouse's Mammalia, i. p. 59 (1846).

Procoptodon goliah, Owen, Philos. Trans. 1874, p. 791.

3775. A nearly perfect mandible.

"Found at a depth of 40 feet below the surface by a miner on bottoming his hole at Young, one of the gold-fields, 250 miles south-west of Sydney." It has been described and figured in the 'Philos. Trans.' by Prof. Owen, 1874, p. 794, pl. lxxx. figs. 6 and 7.

Presented by Dr. Robert Falder, 1863.

3776. Portion of right ramus of mandible with two molars and part of a third.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

Macropus rapha.

Procoptodon rapha, Owen, Phil. Trans. 1874, p. 788.

3777. Portion of left maxilla with three molar teeth.

In Museum before 1862.

3778. Left ramus of mandible.

In Museum before 1862.

Of uncertain Species.

3779. Portion of right ramus of the mandible with the three molar teeth.

These present characters intermediate between those of the genera *Protemnodon* and *Procoptodon* of Owen.

From New South Wales.

Presented by Dr. George Bennett, 1882.

3780. Portion of right ramus of mandible with the two last molar teeth.

Though the teeth are smaller in this than in the previous specimen, they present the same form, so that, judging from the dental characters, the two specimens belong to identical or closely allied species.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

3781. Portion of left ramus of mandible from which the crowns of the molar teeth have been broken off. O. C. F. 1517.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

Uncertain Species.

3782. Caudal vertebra.

In Museum before 1862.

3783. Distal end of right humerus. O. C. F. 1526.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3784. Shaft of right humerus. O.C.F. 1525.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3785. Distal end of left femur.

In Museum before 1862.

3786. Distal end of left femur. O. C. F. 1528.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3787. Distal end of left femur. O. C. F. 1527.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3788. Distal end of right femur. O. C. F. 1529.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3789. Segment from the middle of the shaft of the left tibia. O. C. F. 1530.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3790. Os calcis. O. C. F. 1531.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3791. Proximal phalanx of the fourth toe of the hind foot. O. C. F. 1532.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3792. Second phalanx of fourth toe of hind foot. O. C. F. 1533.

From Wellington Valley Caves.

Presented by Count Strzelecki, 1844.

3793. Shaft of ulna. O. C. F. 1534.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

3794. Mutilated os calcis. O. C. F. 1535.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

The following specimens of jaws of a small species of Kangaroo were described by Owen (Catal. Fossil Mammalia and Aves, Mus. Coll. Surg. p. 332, 1845) under the name of Appsiprimnus spelecus, but the characters of the molar teeth do not agree with those of that genus as now restricted.

3795. Portion of right maxilla, with the permanent premolar and two molar teeth. O. C. F. 1537.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

3796. Portion of left maxilla, with the anterior premolar, the milk-molar, and two true molar teeth. O. C. F. 1536.

From Wellington Valley.

Presented by Count Strzelecki, 1844. 3 A 2

Uncertain Species.

3797. Portion of left ramus of mandible with dentition corresponding to the last. O. C. F. 1538.

The germ of the permanent premolar has been exposed in its alveolar cavity.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

3798. Portion of left ramus of mandible with three molars. O. C. F. 1539.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

Genus DENDROLAGUS.

Schlegel & S. Müller, Verhand. Natuurl. Geschied. Nederland. Overzeesche Bezittingen, Zoogdieren, p. 130 (1839-44).

Dendrolagus ursinus.

Schlegel & S. Müller, op. cit. p. 131.

THE URSINE TREE-KANGAROO.

Hab. New Guinea.

3799. Articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 10 (incomplete). The terminal phalanges of the digits are wanting.

Presented by the Zoological Society, 1853.

Genus DORCOPSIS.

Schlegel & S. Müller, op. cit. p. 130.

Dorcopsis luctuosa.

Halmaturus luctuosus, D'Albertis, Proc. Zool. Soc. 1874, p. 110. Hab. New Guinea.

3800. Skull, mutilated in the occipital region.

From Port Moresby, New Guinea.

Purchased, 1882.

Genus HYPSIPRYMNUS.

Illiger, Prod. Syst. Mamm. et Av. p. 79 (1811).

Hypsiprymnus murinus.

Macropus minor, Shaw, Gen. Zoology, i. pt. 2, p. 513 (1800). Hypsiprymnus murinus, Illiger (op. cit. p. 79), Waterhouse, Gould, &c.

THE RAT-TAILED POTOROO.

Hab. New South Wales.

3801. Articulated skeleton. O. C. 1781.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 23.

The complete adult dentition is present, but the epiphyses of some of the long bones are not united to their shafts.

Gould Collection. Purchased, 1840.

3802. Skeleton. O. C. 1782.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. (wanting).

Presented by Dr. George Bennett.

3803. Skull. O. C. 1780.

Taken from the skin originally described and figured by Hunter in White's 'Journal of a Voyage to New South Wales,' p. 286, as the Potoroo. The teeth are much worn. It is smaller than any of the other skulls assigned to this species in the collection, the facial portion especially being shorter and relatively broader. It is stated in the former Catalogue to be that of a female.

Hunterian.

3804. Skull. O. C. 1783.

From the Murray River, South Australia.

Presented by Governor Sir George Grey.

3805. Skull. O. C. 1784.

Gould Collection. Purchased, 1840.

Hypsiprymnus murinus.

3806. Skull.

In Museum before 1862.

3807. Skull.

In Museum before 1862.

3808. A cranium from which the calvaria has been removed.

In Museum before 1862.

3809. The left moiety of a vertically bisected skull. O. C. 1785.

Gould Collection. Purchased, 1840.

3810. Innominate bones. O. C. 1791.

A small ossiele intervenes between the pubic bone and the acetabulum.

Presented by Professor Owen.

Genus BETTONGIA.

Gray, Mag. Nat. Hist. new ser. i. p. 584 (1837).

Bettongia gaimardi.

Kangurus gaimardi, Desmarest, Mammalogie, Suppl. p. 542 (1822).Hypsiprymnus hunteri, Owen, Cat. Osteol. Ser. Roy. Coll. Surg. i. p. 328 (1853).

GAIMARD'S RAT-KANGAROO.

Hab. New South Wales.

3811. Articulated skeleton. O. C. 1777.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 23.

Hunterian.

3812. Skull. O. C. 1778.

The large permanent posterior premolars have recently been acquired, except in the right ramus of the mandible, in which the anterior (deciduous) premolar and the milk-molar are still in place.

Presented by Dr. Hobson.

3813. Skull vertically and longitudinally bisected. O. C. 1779.

Presented by Professor Owen.

3814. Skull.

In Museum before 1862.

Bettongia grayi.

Hypsiprymnus graii, Gould, Proc. Zool. Soc. 1840, p. 178.

GRAY'S RAT-KANGAROO.

Hab. Western and Southern Australia.

3815. Skeleton of young.

The teeth of the molar series in place are the anterior (deciduous) premolar, the milk-molar, and the first and second true molars. The germ of the large posterior (permanent) premolar is exposed in its formative cavity on the left side.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 23.

The epiphyses of the long bones are not yet united to the shafts.

Purchased, 1868.

3816. Skull.

The complete permanent dentition has been acquired.

Purchased, 1871.

Genus ÆPYPRYMNUS.

Garrod, Proc. Zool. Soc. 1875, p. 59.

Æpyprymnus rufescens.

Bettongia rufescens, Gray, Mag. Nat. Hist. new ser. i. p. 584 (1837).

THE RUFOUS RAT-KANGAROO.

Hab. New South Wales.

3817. Skull, mutilated behind.

The teeth of the molar series in place are the anterior (deciduous) premolar, the milk-molar, and the first and second true

Æpyprymnus rufescens.

molars. The germ of the large posterior permanent premolar is exposed in its formative cavity on the right side of both jaws.

This specimen is figured in Waterhouse's 'Natural History of Mammalia,' i. pl. x. fig. 1*.

In Museum before 1862.

3818. Skull.

The permanent dentition has been acquired.

Purchased, 1872.

Family DIPROTODONTIDÆ.

Dentition:—i. $\frac{3}{1}$, c. $\frac{0}{9}$, p. $\frac{1}{1}$, m. $\frac{4}{4}$, = $\frac{8}{6}$: total 28.

Genus DIPROTODON.

Owen, Mitchell's Three Expeditions into the Interior of Eastern Australia, ii. p. 362 (1838).

Diprotodon australis.

Owen, loc. cit.

Hab. Australia. Pleistocene.

3819. Portion of the left maxilla and premaxilla, and the nearly complete mandible with the teeth.

In Museum before 1862.

3820. Anterior portion of right ramus of mandible with the incisive tusk, the first and second molars, and the socket of the premolar. O. C. F. 1460.

Figured in the 'Catal. Fossil Mammal. and Aves,' pl. vii. From the Condamine River, west of Moreton Bay.

Presented by Col. Sir T. L. Mitchell, C.B.

^{*} A skull of *Bettongia cuniculus*, figured in the same plate, and described at p. 202 as belonging to the College Museum, could not be found in the collection in 1862.

3821. Posterior portion of the right ramus of mandible with the roots of the two last molar teeth. O. C. F. 1461.

From the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3822. Symphysial portion of mandible, with the left incisive tusk.

The rami are ankylosed at the symphysis, so that the animal must have been adult. It is of smaller size and of different form from the preceding specimen, and may belong to another species. The jaw is broader and more square in front, and the tusk less laterally compressed.

- 3823. Portion of right ramus of mandible with the last molar tooth in situ.
- **3824.** Portion of ramus of mandible with two much-worn molars in situ.
- 3825. Portion of right maxilla with the penultimate molar in situ.
- **3826.** Portion of maxilla with a much-worn second molar in situ.
- 3827. A very perfect right upper incisor.
- 3828. Section of a lower incisor.
- 3829. A thin section of the same mounted on glass.
- 3830. Longitudinal section of the same.
- 3831. Three portions of unworn crowns of molar teeth.

The above ten specimens were in the Museum before 1862, without history.

Diprotodon australis.

3832. Various fragments of bones, including the following:—an atlas vertebra nearly complete, and two other fragments of atlas (O. C. F. 1486); two portions of scapula; two portions of humerus (O. C. F. 1474 & 1475); proximal end of left ulna (O. C. F. 1476); portion of iliac crest; three portions, probably, of femur; two portions, probably, of tibia; distal end, probably, of fibula.

Some of the above specimens were in the Museum before 1862 without history; as they very closely resemble other catalogued specimens they were probably obtained with them from the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B.

3833. A much-worn upper molar tooth.

From Darling Downs, Queensland.

Presented by Dr. George Bennett, 1881.

3834. Crown of a much-worn molar tooth. O. C. F. 1487. From Darling Downs.

Presented by Col. Sir T. L. Mitchell, C.B., 1842.

3835. Fragment of spine of scapula. O. C. F. 1488. From Darling Downs.

Presented by Col. Sir T. L. Mitchell, C.B.

3836. Mutilated femur. O. C. F. 1489.

From Darling Downs.

Presented by Col. Sir T. L. Mitchell, C.B., 1842.

3837. Lower tusk.

Probably from Mount Maccdon, Mclbourne.

In Museum before 1862.

The three following specimens were discovered by Patrick Mayne, Esq., during the operation of sinking a well at Mount Macedon, near Melbourne, Victoria, Australia.

3838. Right lower second molar. O. C. F. 1492.

Presented by Dr. Hobson.

3839. Left lower second molar, much worn. O. C. F. 1493.

Presented by Dr. Hobson.

3840. Some fragments of bones consisting of:—a portion of caudal vertebra (O. C. F. 1498); a fragment of rib (O. C. F. 1499); a fragment of scapula (O. C. F. 1500); epiphysial portion of proximal end of femur (O. C. F. 1501); portion of the shaft of a long bone (O. C. F. 1502).

Presented by Dr. Hobson.

3841. Proximal half of the shaft of right femur. O. C. F. 1504. From Wellington Valley.

Presented by Count Strzelecki, 1844.

3842. Lower end of the humerus of an animal allied to *Diprotodon*.

It much resembles the corresponding part of *D. australis*, figured by Prof. Owen in the Philos. Trans. 1870, pl. xlvi., but is smaller in the proportion of 7 to $9\frac{1}{2}$.

Found in the bank of a tributary of the Murray River about 400 miles north of Adelaide.

Presented by George Lindsay Johnson, Esq., M.B., 1876.

Genus NOTOTHERIUM.

Owen, Catal. Foss. Mammalia and Aves Mus. Roy. Coll. Surgeons, p. 314 (1845).

Dototherium mitchelli.

Nototherium mitchelli, Owen, op. cit. p. 316. Nototherium inerme, Owen, op. cit. p. 314.

Hab. Australia. Pleistocene.

3843. Mutilated posterior half of left ramus of mandible, containing the two last molar teeth, the crowns of which are much fractured. O. C. F. 1506.

The typo specimen. Figured at pl. ix. O. C. F. It differs from most of those subsequently described, both in the 'Philosophical Transactions' and in this Catalogue, in the advanced position of the hinder molar with respect to the anterior edge of the ascending ramus of the jaw. This, however, may be the result of age.

From the Pleistocene deposits in the bed of the Condamino River, west of Moreton Bay, Australia.

Presented by Col. Sir T. L. Mitchell, C.B., 1842.

3844. Mutilated right ramus of mandible, with the roots of the molar teeth, the crowns having been broken away. O. C. F. 1505.

The elongated symphysis supporting the large incisor teeth has been broken off, and the fractured surface much abraded; hence the specific name *inerme* applied to this, the first fragment of the genus scientifically examined and described. Figured at pl. viii. O. C. F., and in the 'Philosophical Transactions' for 1872, pl. viii.

From the bed of the Condamine River.

Presented by Col. Sir T. L. Mitchell, C.B., 1842.

3845. Anterior part of mandible, including the symphysis with the two large incisors, and the greater part of the left ramus with the molar teeth.

A longitudinal section has been made through the right

ineisor, showing that its root does not extend backwards so far as to lie beneath the true molar teeth.

In Museum before 1862.

3846. Portion of right maxilla, with the premolar and two anterior molar teeth.

This may have belonged to the same individual as the last.

In Museum before 1862.

3847. Anterior portion of upper jaw, with the broken first pair of incisors and the sockets of the other incisors.

From a cave in the Wellington Valley.

Presented by Count Strzelecki, 1844.

3848. Left ramus of mandible, with the three posterior molar teeth in situ.

In Museum before 1862.

3849. Part of left ramus of the mandible with the penultimate molar entire, the others with their crowns broken.

In Museum before 1862.

3850. Mutilated cervical vertebra.

It closely resembles the fifth cervical vertebra of a Wombat, but from its size it is probably *Nototherium*.

In Museum before 1862.

3851. Upper extremity of left fibula of probably the same animal.

In Museum before 1862.

3852. Left astragalus of a large Marsupial, probably *Nototherium*. O. C. F. 1509.

From the Condamine River. Figured at pl. x. figs. 1 and 2, O. C. F.

Presented by Col. Sir T. L. Mitchell.

Family THYLACOLEONTIDÆ.

Genus THYLACOLEO.

Owen, in Gervais's Zoologie et Paléontologie Françaises, i. p. 192 (1848-52, fide Owen); Philos. Trans. 1859, p. 309.

Dentition:—i. $\frac{3}{1}$, c. $\frac{1}{0}$, p. $\frac{3}{1}$, m. $\frac{1}{2}$, $=\frac{8}{4}$: total 24.

Thylacoleo carnifer.

Owen, Philos. Trans. 1859, p. 309.

3853. Mutilated cranium, with the large posterior premolar and the single molar tooth of the right side.

The type specimen. Figured and described by Prof. Owen in the Philos. Trans. for 1859, p. 309, pls. xi., xiii., xiv., and xv. Sce also "On the Affinities and probable Habits of Thylacoleo carnifex," by W. H. Flower, Quarterly Journal of Geological Society, 1868, p. 307.

From a calcareous conglomerate stratum eighty miles southwest of Mclbourne, Victoria.

Presented by W. Adeney, Esq., 1846.

3854. Portion of left lower premolar tooth.

Described and figured by Prof. Owen, loc. cit. From the same locality.

Presented by W. Adeney, Esq., 1846.

3855. Anterior portion of right ramus of mandible.

It shows the socket for the large incisor, that of a small tooth immediately behind it, the two roots of the great premolar, and the root of the first molar, the crown having been broken off, and the socket of the second molar.

From Wellington Valloy.

Presented by Count Strzelecki, 1844.

3856. Cast of anterior part of the right ramus of mandible with the incisor, large premolar, and first molar tooth.

Taken from a specimen in the Sydney Museum obtained from a eave in the Wellington Valley.

Presented by G. Krefft, Esq., 1872.

3857. Cast of a right upper first incisor.

From the same locality.

Presented by G. Krefft, Esq., 1872.

3858. Cast of upper third incisor.

From the same locality.

Presented by G. Krefft, Esq., 1872.

3859. Cast of upper canine.

From the same locality.

Presented by G. Krefft, Esq., 1872.

3860. Metacarpal bone of an unknown animal, perhaps *Thylacoleo*.

From the same collection as the eranium, No. 3853. Figured by Prof. Owen in the Philos. Trans. 1859, pl. xiii.

Presented by W. Adeney, Esq., 1846.

B. Polyprotodont Series.

Family PERAMELIDÆ.

Dentition:—i. $\frac{5}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{4}{4}$, $=\frac{1}{1}\frac{3}{1}$: total 48.

Genus PERAGALEA.

Macrotis, Reid, Proc. Zool. Soc. 1836, p. 131*. Peragalea, Gray, List of Mammalia Brit. Mus. p. 96 (1843).

^{*} Previously (1833) applied by Dejean to a genus of Coleoptera.

Peragalea lagotis.

Perameles (Macrotis) lagotis, Reid, Proc. Zool. Soc. 1836, p. 129.

THE RABBIT-EARED PERAMELES.

Hab. Western Australia.

3861. Skeleton, nearly complete. O. C. 1880.

Purchased.

3862. Mutilated skull. O. C. 1881.

Presented by the Zoological Society of London.

3863. Bones of the fore and hind limbs.

Those of the right side are mounted in the Separate Scries.

In Museum before 1862.

Genus PERAMELES.

Geoffroy, Ann. du Muséum, iv. p. 56 (1804).

Perameles obesula.

Didelphis obesula, Shaw, Naturalist's Miscellany, vol. iii. tab. 298; Gen. Zool. vol. i. pt. 2, p. 490.

Perameles obesula, Gcoffroy, Ann. du Mus. iv. p. 64, pl. 45 (1804).

THE SHORT-NOSED PERAMELES.

Hab. Australia and Tasmania.

3864. Articulated skeleton. O. C. 1873.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 15.

Presented by Dr. Hobson. Hunterian Substitute, 1846.

3865. Skull.

From Queensland.

Presented by Sir Walter Elliot, K.C.S.I., 1881.

3866. Skull.

From Queensland.

Presented by Sir Walter Elliot, K.C.S.I., 1881.

3867. Skull. O. C. 1874.

Presented by Governor Sir George Grey, C.B.

3868. Skull.

In Museum before 1862.

3869. Skull.

Purchased, 1875.

The following specimens are somewhat smaller than the preceding, and may possibly belong to an allied species:—

3870. Skull. O. C. 1875.

From Port Phillip.

Presented by Dr. Hobson.

3871. Skull. O. C. 1878.

Presented by Dr. Hobson.

Perameles fasciata.

Gray, Appendix to Grey's Journals of two Expeditions of Discovery in North-west and Western Australia, vol. ii. p. 407 (1841).

THE WHITE-BANDED PERAMELES.

Hab. Australia.

3872. Skull. O. C. 1876.

Gould Collection. Purchased, 1840.

3873. Skull. O. C. 1879.

Presented by H. Everett, Esq.

3874. Skull of young. O. C. 1877.

The milk-molar is retained in both upper and lower jaws; the germ of the premolar which replaces it is exposed in its alveolar cavity on the right side. The fourth true molar is not fully in place. Figured in the 'Philos. Trans.' for 1867, pl. xxx. fig. 1.

Gould Collection. Purchased, 1840.

PART II. 3 B

Perameles nasuta.

Geoffroy, Ann. du Muséum, tom. iv. p. 62, pl. 44.

THE LONG-NOSED PERAMELES.

Hab. New South Wales.

3875. Incomplete skeleton.

From Sydney.

In Museum before 1862.

3876. Skull.

Purchased, 1875.

Genus CHŒROPUS.

Ogilby, Proc. Zool. Soc. 1838, p. 26.

Chœropus castanotis.

Chæropus ecaudatus, Ogilby, Proc. Zool. Soc. 1838, pp. 25, 26 *. Chæropus castanotis, Gray, Ann. Nat. Hist. vol. ix. p. 42 (1842).

THE CHEROPUS.

Hab. Southern Australia.

3877. Skeleton, somewhat mutilated, of young.

Vertebræ: C. (missing), D. 13, L. 6, Sacro-caudal 22.

The animal was caught by a dog and much injured, as stated on a label attached to the specimen; but it still shows many interesting points in the osteology of this rare species. The right foot is mounted in the Separate Series.

In Museum before 1862.

* This name, originally given to a specimen of which the tail had been accidentally lost, has been discarded as obviously inappropriate.

Family DASYURIDÆ.

Subfamily MYRMECOBIINÆ.

Genus MYRMECOBIUS.

Waterhouse, Proc. Zool. Soc. 1836, p. 69, and Trans. Zool. Soc. vol. ii. p. 149 (read 1836, pub. 1841).

Dentition:—i. $\frac{4}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{6}{6}$, $=\frac{14}{13}$: total 54.

Myrmecobius fasciatus.

Waterhouse, Proc. Zool. Soc. 1836, p. 69.

THE BANDED MYRMECOBIUS.

Hab. Western and Southern Australia.

3878. Articulated skeleton. O. C. 1882.

Vertebræ: C. 7, D. 12, L. 7, S. 3, C. 24.

Gould Collection. Purchased, 1840. Hunterian Substitute, 1846.

3879. Skull, longitudinally and vertically bisected. O. C. 1883.

Four molars only are in place in the upper jaw.

Gould Collection. Purchased, 1840.

Subfamily DASYURINÆ.

Genus PHASCOGALE.

Temminck, Monographie de Mammalogie, i. p. 56 (1827). Dentition:—i. $\frac{4}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{4}{4}$, $=\frac{12}{11}$: total 46.

Phascogale penicillata.

Didelphis penicillata, Shaw, Gen. Zool. i. pt. 2, p. 502 (1800).

THE BRUSH-TAILED PHASCOGALE.

Hab. Australia.

Phascogale penicillata.

3880. Skull.

From Queensland.

Presented by Sir Walter Elliot, K.C.S.I., 1881.

3881. Skull.

From Queensland.

Presented by Sir Walter Elliot, K.C.S.I., 1881.

Phascogale calura.

Gould, Proc. Zool. Soc. 1844, p. 104.

Hab. Southern Australia.

3882. Mutilated skull and bones of the tail and limbs. O.C. 1885 & 1886.

Gould Collection. Purchased, 1840.

Phascogale flavipes.

Phascogale flavipes, Waterhouse, Proc. Zool. Soc. 1837, p. 75.

Antechinus flavipes, Gray, List of Mammalia in the Brit. Mus.
1843, p. 99.

THE YELLOW-FOOTED PHASCOGALE.

Hab. New South Wales and South Australia.

3883. Articulated skeleton. O. C. 1884.

Vertebræ: C. 7, D. 13, L. 6, S. 4, C. 10 (incomplete).

Gould Collection. Purchased, 1840. Hunterian Substitute, 1846.

3884. Skeleton of young.

Vertebræ: C. 7, D. 13, L. 6, Sacro-caudal 22.

Purchased from Mr. Gould, 1872.

3885. Skull.

From Queensland.

Presented by Sir Walter Elliot, K.C.S.I., 1881.

Of uncertain Species.

3886. Skull.

From Queensland.

Presented by Sir Walter Elliot, K.C.S.I., 1881.

3887. Skull of a small species.

Labelled "Bush-Mouse." From Queensland.

Presented by Sir Walter Elliot, K.C.S.I., 1881.

Genus DASYURUS.

Geoffroy, Ann. du Muséum, iii. p. 353 (1804).

Dentition:—i. $\frac{4}{3}$, c. $\frac{1}{1}$, p. $\frac{2}{2}$, m. $\frac{4}{4}$, $=\frac{11}{10}$: total 42.

Dasyurus maculatus.

Viverra maculata, Shaw, Gen. Zool. vol. i. pt. 2, p. 433 (1800). Dasyurus macrourus, Geoffroy, loc. cit. p. 358.

THE SPOTTED-TAILED DASYURE.

Hab. Australia and Tasmania.

3888. Articulated skeleton. O. C. 1887.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 19 (incomplete).

Gould Collection. Purchased, 1840. Hunterian Substitute, 1846.

3889. Naturally articulated skeleton, wanting the skull.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 24.

Gould Collection. Purchased, 1840.

3890. Skull, J. O.C. 1888.

Presented by II. Everett, Esq.

Dasyurus maculatus.

3891. Skull, 2. O. C. 1889. *Presented by H. Everett, Esq.*

3892. Skull. In Museum before 1862.

3893. Skull, mutilated behind. In Museum before 1862.

3894. Longitudinally and vertically bisected skull.

In Museum before 1862.

3895. Anterior part of mutilated skull. O.C. 1890.

Presented by H. Everett, Esq.

3896. Mutilated skull, with complete dentition.

The two maxillary premolars of the right side are united so as to form a single tooth. On the left side they present the usual characters.

In Museum before 1862.

3897. Hyoid bones.

From a specimen in spirit. Prepared in 1869.

Dasyurus viverrinus.

Didelphis viverrina, Shaw, Gen. Zool. vol. i. pt. 2, p. 491 (1800). Dasyurus maugei et viverrinus, Geoffroy, Ann. du Muséum, tom. iii. pp. 359 & 360 (1804).

THE VIVERRINE DASYURE.

Hab. Australia and Tasmania.

3898. Natural skeleton. O. C. 1893.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 13 (incomplete).

Presented by Ronald Gunn, Esq.

3899. Skull, vertically and transversely bisected. O. C. 1897.

Presented by Ronald Gunn, Esq.

3900. Skull, vertically and longitudinally bisected. O. C. 1895.

Presented by Dr. Hobson.

3901. Skull. O.C. 1894.

Presented by Dr. Hobson.

3902. Skull. O. C. 1896.

Presented by H. Everett, Esq.

3903. Skull. O. C. 1892.

Hunterian.

Dasyurus ursinus.

Didelphis ursina, Harris, Trans. Linn. Soc. ix. p. 176 (read 1807, pub. 1808).

THE URSINE DASYURE.

Hab. Tasmania.

3904. Articulated skeleton. O. C. 1898.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 16 (incomplete).

Presented by Ronald Gunn, Esq. Hunterian Substitute, 1846.

3905. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. (incomplete). Most of the bones are mounted in the Separate Series.

Presented by W. L. Crowther, Esq., 1866.

3906. Imperfect skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 3, C. 15 (incomplete).

In Museum before 1862.

3907. Skull. O. C. 1899. Presented by H. Everett, Esq.

3908. Skull. In Museum before 1862.

3909. Skull. In Museum before 1862.

3910. Skull. In Museum before 1862.

Dasyurus ursinus.

3911. Skull.

In Museum before 1862.

3912. Skull.

In Museum before 1862.

3913. Skull, slightly mutilated. O. C. 1901.

Presented by Ronald Gunn, Esq.

3914. Dentary portions of jaws, with the teeth. O. C. 1902.

Presented by Ronald Gunn, Esq.

3915. Bones of the right fore and hind feet.

From the skin of a wild animal.

Received in exchange from the University of Cambridge.

Dasyurus laniarius.

Owen, Mitchell's Three Expeditions into the Interior of Australia, ii. p. 363 (1838).

3916. Portion of right maxilla, with two premolar and two molar teeth. O. C. F. 1543.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

3917. Portions of the right maxilla, premaxilla, and nasal bones.

The earline and two premolars are preserved. The second is of large-size compared to the corresponding tooth in the previous specimen or in the recent D. ursinus.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

3918. Fragment of the right ramus of mandible, with the last molar tooth. O. C. F. 1544.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

3919. Portion of the left ramus of mandible, with two molar teeth. O. C. F. 1546.

From Wellington Valloy.

Presented by Count Strzelecki, 1844.

3920. A right and a left lower molar tooth, and the crown of a canine tooth. O. C. F. 1545, 1547, and 1547'.

From Wellington Valley.

Presented by Count Strzelecki, 1844.

Genus THYLACINUS.

Temminck, Monographio de Mammalogic, i. p. 60 (1827). Dentition:—i. $\frac{4}{3}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{4}{4}$, = $\frac{12}{11}$: total 46.

Thylacinus cynocephalus.

Didelphis cynocephala, Harris, Trans. Linn. Soc. ix. p. 174 (read 1807, pub. 1808).

THE THYLACINE.

Hab. Tasmania.

3921. Articulated skeleton of male. O. C. 1903.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 23.

Prepared from a specimen presented by Ronald Gunn, Esq. Hunterian Substitute, 1846.

3922. Articulated skeleton of female. O. C. 1904.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 22 (incomplete).

Prepared from a specimen presented by Ronald Gunn, Esq. Hunterian Substitute, 1846.

3923. Skeleton, nearly adult.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 9 (incomplete). Most of the bones are mounted in the Separate Series.

Presented by W. L. Crowther, Esq., 1866.

Thylacinus cynocephalus.

3924. Incomplete skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 22 (incomplete).

In Museum before 1862.

3925. Incomplete skeleton. O. C. 1911–1913.

Presented by Ronald Gunn, Esq.

3926. Incomplete skeleton of female. O. C. 1906.

The skull has been longitudinally and vertically bisected. Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 19.

Presented by Captain Sir John Franklin, R.N.

3927. Skull.

Presented by Ronald Gunn, Esq.

3928. Skull. O. C. 1905.

Presented by H. Everett, Esq.

3929. Cisarticulated bones of skull. O. C. 1908.

Presented by Ronald Gunn, Esq.

3930. Partly disarticulated cranium. O. C. 1907.

Presented by Captain Sir John Franklin, R.N.

3931. Mutilated skull of young, showing the dentition.

It is slightly older than the specimen figured in the memoir, "On the Development and Succession of the Teeth of the Marsupialia," Philos. Trans. 1867, pl. xxx. The small milkmolars, one on each side of each jaw, are retained, and the apices of the permanent teeth are beginning to appear above the gums.

Presented by Professor Huxley, 1867.

3932. Disarticulated skull of a still younger animal. O. C. 1909.

The milk-molar of the right side of the mandible is in place. The others have been lost.

Presented by Ronald Gunn, Esq.

3933. Hyoid of adult female.

Presented by the Zoological Society, 1870.

Thylacinus spelzeus.

Owen, Cat. Fossil Mammalia Mus. Roy. Coll. Surgeons, p. 335 (1845).

Hab. Australia. Pleistocene.

3934. Portion of left ramus of mandible. O. C. F. 1548.

Two molars are present. From Wellington Valley.

Presented by Count Strzelecki.

3935. Right lower penultimate molar. O. C. F. 1549.

From Wellington Valley.

Presented by Count Strzelecki.

Family DIDELPHYIDÆ.

Dentition:—i. $\frac{5}{4}$, c. $\frac{1}{1}$, p. $\frac{3}{3}$, m. $\frac{4}{4}$, $=\frac{1}{12}$: total 50.

Genus DIDELPHYS.

Didelphis, Linnæus, Syst. Nat. ed. 12, i. p. 71 (1766). Didelphys, Schreber, Säugthiere, iii. p. 532 (1778).

Didelphys virginiana.

Kerr, Linn. An. Kingd. p. 193 (1792).

THE VIRGINIAN OPOSSUM.

Hab. North America.

3936. Articulated skeleton. O. C. 1867.

Vortebræ: C. 7, D. 13, L. 6, S. 2, C. 18 (incompleto).

The bones are all in a more or less diseased condition, as is usually the ease with these animals when they have lived in captivity in this country.

Brookes Collection. Purchased, 1828.

Didelphys virginiana.

3937. Partially articulated skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 25.

In Museum before 1862.

3938. Incomplete skeleton (without skull).

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 24.

From a wild animal.

Presented by the Smithsonian Institution, 1871.

3939. Incomplete skeleton.

Many of the bones are mounted in the Separate Series.

In Museum before 1862.

3940. Skull.

It is of larger size than any of the other skulls in the eollection, the facial portion especially being more elongated and relatively narrower, and the premolar teeth further apart.

Presented by the Smithsonian Institution, 1871.

3941. Skull. O. C. 1869.

This was marked "Rat-tailed Opossum." In the shortness and breadth of the face it presents a marked contrast to the last. Most of the following specimens are intermediate in their characters, or more resemble the present one.

Hunterian.

3942. Skull. O. C. 1868.

Hunterian.

3943. Skull.

In Museum before 1862.

3944. Skull, with the bones disarticulated. O. C. 1870.

Hunterian.

3945. Cranium.

In Museum before 1862.

3946. Axis and third cervical vertebra, showing the remarkable height and thickness of their spines. O. C. 1871 and 1872.

Hunterian.

3947. Natural skeleton of young.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 26.

The bones are affected with rickets.

The teeth in place are the permanent incisors, canines, first and second premolars, milk-molar, and in the upper jaw the first true molar. In the lower jaw, the second true molar is fully in place, and the third making its appearance above the alveolar border. The germs of the third premolars, the only teeth which replace milk predecessors in the Marsupials, are exposed on the right side in their formative eavities. This specimen is figured in Prof. Flower's Memoir on the dentition of the Marsupials, Philos. Trans. 1867, pl. xxx.

Yarrell Collection. Purchased, 1856.

Didelphys cancrivora.

Gmelin, Syst. Nat. i. p. 108 (1788).

THE CRAB-EATING OPOSSUM.

Hab. South America.

3948. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 24 (incomplete).

From an animal which died in the Zoological Society's Gardens, 10 October 1880.

Purchased, 1880.

Didelphys azaræ.

Temminck, Monogr. Mammalogie, i. p. 30 (1827).

AZARA'S OPOSSUM.

Hab. South America.

3949. Natural skeleton of young male.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 29.

The milk-molar is still in place, with the first and second true molars in the upper, and the first, second, and third in the lower jaw.

From an animal which died in the Zoological Society's Gardens, 1 April 1868.

Purchased, 1868.

Of uncertain Species.

3950. Skeleton of a small species of Didelphys.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 26.

In Museum before 1862.

Genus CHIRONECTES.

Illiger, Prod. Syst. Mamm. et Av. p. 76 (1811).

Chironectes variegatus.

Lutra minima, Zimmerman, Geogr. Geschich. ii. p. 317 (1780).Chironectes variegatus, Illiger, Abhandl. Akad. Berlin, 1811, p. 107.

THE YAPOCK OF WATER-OPOSSUM.

Hab. Central and South America.

3951. Skeleton.

Vertebræ: C. 7, D. 13, L. 6, S. 2, C. 29. Obtained at Medellin, U.S. Colombia.

Received in exchange, 1876.

Order MONOTREMATA.

Family ECHIDNIDÆ.

Genus ECHIDNA.

Echidna, Cuvier, Tableau élémentaire d'Hist. Nat. p. 143 (1798). Tachyglossus, Illiger, Prod. Syst. Mamm. et Av. p. 114 (1811)*.

Echidna aculeata.

Myrmecophaga aculeata, Shaw, Naturalist's Miscellany, iii. pl. 109 (1792).

Ornithorhynchus hystrix, Home, Philos. Trans. 1802, p. 348. Echidna hystrix and setosa, Cuvier, Règne Animal, i. p. 226 (1817).

THE ECHIDNA.

Hab. Australia and Tasmania.

3952. Articulated skeleton.

Vertebræ: C. 7, D. 16, L. 3, S. 4, C. 11.

Purchased, 1868.

3953. Articulated skeleton, young. O. C. 1704.

Vertebræ: C. 7, D. 16, L. 3, S. 3, C. 5 (incomplete).

South Collection. Purchased, 1835.

^{*} This name is often used now under the impression that *Echidna* is preoccupied by Forster (1778) for a genus of Pisces; but as that was not
characterized in a recognizable manner, the author not even mentioning
the species for which it was constituted, it is now generally considered a
synonym for *Muræna* (see Günther's 'Catalogue of Fishes Brit. Mus.' vol.
viii. p. 93, 1870), and is certainly insufficient to bar a name so universally
acknowledged and so deeply rooted in Mammalian literature. Merrem's
genus *Echidna* (Reptilia) is of later date, viz. 1820.

Echidna aculeata.

3954. Partially articulated skeleton of a young male.

Vertebræ: C. 7, D. 16, L. 3, S. 3, C. 11.

Prepared from an animal which died in the Zoological Society's Gardens.

Purchased, 1862.

3955. Imperfect skeleton. O. C. 1705, 1709–1722.

Presented by Ronald Gunn, Esq.

3956. Imperfeet skeleton of young. O. C. 1708.

Vertebræ: C. 7, D. 16, L. 3, S. 4, C. 1 (incomplete).

Presented by Dr. Hobson.

3957. Skeleton of young male.

From Tasman's Peninsula, Tasmania. Collected by G. S. Baden-Powell, Esq., 6 Dec. 1869.

Purchased, 1871.

3958. Skull.

Purchased, 1868.

3959. Skull.

Presented by C. E. Parker, Esq., of Grafton, Clarence River, N. S. W., 1865.

3960. Cranium, longitudinally and vertically bisected.

One half is mounted in the Separate Series.

Presented by the Zoological Society, 1867.

3961. Anterior part of a cranium, prepared to show the extent and complexity of the superior part of the turbinal capsules of the organ of smell. O. C. 1707.

Prepared from a specimen presented by Dr. Hobson.

3962. Pelvis.

In Museum before 1862.

Echidna bruijnii.

Tachyglossus bruijnii, Peters and Doria, Annali del Mus. Civ. di St. nat. di Genova, ix. p. 182 (1876-77).

Acanthoglossus bruijnii, Gervais, Ostéographie des Monotrèmes, p. 43 (1877).

Proechidna bruijnii, Gervais, ibid.*

Hab. New Guinea.

3963. Cast of skull.

The original, in the Paris Museum, is described and figured by Prof. Gervais in his 'Ostéol. des Monotrèmes' (1877-78).

Presented by Professor Gervais, 1878.

Family ORNITHORHYNCHIDÆ.

Genus ORNITHORHYNCHUS.

Plutypus, Shaw, Naturalist's Miscellany, x. pls. 385, 386 (1799)†. Ornithorhynchus, Blumenbach, Voigt's Magazin, ii. p. 205 (1800).

Ornithorhynchus anatinus.

Plutypus anatinus, Shaw, Nat. Miscell. x. pl. 385 (1799).
Ornithorhynchus paradoxus, Blumenbach, Voigt's Magazin, ii. p. 205 (1800).

THE DUCK-BILLED PLATYPUS OF ORNITHORHYNCHUS.

Hab. South-eastern Australia and Tasmania.

3964. Articulated skeleton. O. C. 1699.

Vertebræ: C. 7, D. 17, L. 2, S. 3, C. 19.

Presented by W. Clift, Esq.

* This generic name was proposed as a substitute for Acanthoglossus, which was objectionable as too nearly resembling Acanthoglossa, already in use for a genus of Coleoptera.

† This name was previously (in 1793) applied by Herbst to a genus of Coleoptera, and hence Ornithorhynchus has been universally adopted.

3 c

Ornithorhynchus anatinus.

3965. Articulated skeleton. O. C. 1700.

Vertebræ: C. 7, D. 17, L. 2, S. 3, C. 20.

A few of the posterior ribs are missing. The integumentary parts of the beak and of the digits are preserved.

South Collection. Purchased, 1835.

3966. Articulated skeleton, imperfect. O. C. 1701.

Vertebræ: C. 7, D. 17, L. 2, S. 3, C. 4 (incomplete).

Presented by Sir Everard Home.

3967. Articulated skeleton of young female.

Vertebræ: C. 7, D. 17, L. 2, S. 3, C. 11 (incomplete). From a specimen "killed 8 June, 1869, at Cope's Creek, New South Walcs."

Purchased, 1871.

3968. Partially articulated skeleton of young. O. C. 1698.

Vertebræ: C. 7, D. 17, L. 2, S. 3, C. 19.

Presented by Dr. George Bennett.

3969. Incomplete skeleton. O. C. 1703.

A transverse vertical section has been made through the skull to show the structure of the olfactory region. Many of the bones are mounted in the Separate Series.

Presented by Dr. Hobson.

3970. Skull. O. C. 1702.

Presented by Sir Everard Home.

3971. Skull.

In Museum before 1862.

3972. Cranium.

In Museum before 1862.

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