Encyclopaedia Britannica:

OR, A

DICTIONARY

OF

ARTS, SCIENCES, AND MISCELLANEOUS LITERATURE;

ENLARGED AND IMPROVED.

THE FIFTH EDITION.

Illustrated with nearly six hundred Engravings.

VOL. XII.

INDOCTI DISCANT; AMENT MEMINISSE PERITI.

EDINBURGH:
Printed at the Encyclopædia Press,
FOR ARCHIBALD CONSTABLE AND COMPANY, EDINBURGH:
GALE AND FENNER, LONDON; AND THOMAS WILSON
AND SONS, YORK.

1817.

Malvern ‖ Mamorun.

windows of the church are the hiſtorical paſſages of the Old Teſtament; and in the north windows the pictures of the holy family, the nativity and circumciſion of our Saviour, the adoration of the ſhepherds and the kings, his preſentation in the temple, his baptiſm, faſting, and temptation, his miracles, his laſt ſupper with his diſciples, his prayer in the garden, his paſſion, death, and burial, his deſcent into hell, his reſurrection and aſcenſion, and the coming of the Holy Ghoſt. The hiſtory of our Saviour's paſſion is painted differently in the eaſt window of the choir, at the expence of Henry VII. whoſe figure is therefore often repreſented, as is that of his queen. In the weſt window is a noble piece of the day of judgment, not inferior to the paintings of Michael Angelo. *Malvern Chaſe* contains 7115 acres in Worceſterſhire (beſides 241 acres called the Prior's Land), 619 in Herefordſhire, and 103 in Glouceſterſhire. *Malvern Hills* run from north to ſouth, the higheſt point 1313 feet above the ſurface of the Severn at Hanley, and appear to be of limeſtone and quartz. On the ſummit of theſe hills is a camp with a triple ditch, imagined to be Roman, and is ſituated on the Herefordſhire ſide of the hills.

MALUS. See PYRUS, BOTANY *Index*.

MAMALUKES, the name of a dynaſty that reigned in Egypt. See EGYPT.

MAMBRUN, PETER, an ingenious and learned French Jeſuit, born in the dioceſe of Clermont, in the year 1581. He was one of the moſt perfect imitators of Virgil in Latin poetry, and his poems are of the ſame ſpecies: Thus he wrote *Eclogues*, *Georgics*, or four books on the culture of the ſoul and the underſtanding; together with a heroic poem, entitled *Conſtantine*, or *Idolatry overthrown*. He ſhowed alſo great critical abilities in a Latin *Peripatetical Diſſertation on Epic Poetry*. He died in 1661. Mambrun ‖ Mamma.

MAMERTINI, a mercenary band of ſoldiers which paſſed from Campania into Sicily at the requeſt of Agathocles. When they were in the ſervice of Agathocles, they claimed the privilege of voting at the election of magiſtrates at Syracuſe, and had recourſe to arms to ſupport their unlawful demands. The ſedition was appeaſed by the authority of ſome leading men, and the Campanians were ordered to leave Sicily. In their way to the coaſt they were received with great kindneſs by the people of Meſſana, and ſoon returned perfidy for hoſpitality. They conſpired againſt the inhabitants, murdered all the males in the city, married their wives and daughters, and rendered themſelves maſters of the place. After this violence they aſſumed the name of Mamertini, and called their city Mamertum, or Mamertium, from a provincial word which in their language ſignified *martial* or *warlike*. The Mamertines were afterwards defeated by Hiero, and totally diſabled to repair their ruined affairs.

MAMMÆ, in *Anatomy*. See there, N° 227.

MAMMALIA,

1 Definition.

THE firſt claſs of the animal kingdom in the ſyſtem of Linnæus, containing thoſe animals which have *breaſts* or *paps*, (*mammæ*) at which they ſuckle their young. In this claſs are included, not only what are called the *viviparous quadrupeds*, but the BAT tribe, and ſeveral marine animals, as SEALS and WHALES. In the preſent article, we are to give an account of all but the whales, or CETACEA, which have been already fully treated of under the article CETOLOGY.

INTRODUCTION.

2 Utility of this part of natural hiſtory.

The relations that ſubſiſt between man and many of the animals arranged in this claſs, either from their utility as domeſtic ſervants, or from the warfare that they carry on againſt him, his property or his dependants, render the ſtudy of this part of natural hiſtory peculiarly important; while the extraordinary actions and faculties of ſome of theſe animals muſt make the hiſtory of them highly intereſting to every one who examines nature with a curious or diſcerning eye.

3 Our knowledge of it imperfect.

Quadrupeds have, accordingly, engaged the particular attention of naturaliſts in every country and in every age, and as our acquaintance with them is leſs difficult than with moſt other claſſes of animated nature, it is not ſurpriſing that their form, habits, and manners, are moſt familiar to us. Still, indeed, much remains in doubt reſpecting ſome of the foreign and rarer quadrupeds, and of ſome we know little more than the name. Even with regard to thoſe which have been longeſt known and deſcribed, as the *lion*, the *elephant*, the *porcupine*, &c. the obſervations of modern naturaliſts and travellers have corrected ſeveral erroneous notions that had been generally received as certain. Long as this part of natural hiſtory has occupied the attention of mankind, there yet probably remain many gleanings to repay the induſtry of future inquirers. It is probable that the unexplored regions of Africa, America, and New Holland, may contain many quadrupeds either entirely unknown to us at preſent, or known only by the foſſil remains that have been diſcovered in the bowels of the earth. There can, we think, be little doubt that the unicorn exiſts in Africa, not far north of the Cape of Good Hope, and perhaps, at ſome diſtant period it may be as well known as the elephant or the hippopotamus is at preſent*.

* See *Barrow's Travels in Southern Africa*.

To attempt any thing like a critical examination of even the moſt celebrated writers on the natural hiſtory of the mammalia would far exceed the limits which we are obliged to preſcribe to this article. We ſhall, however, briefly notice ſome of the more important and more intereſting works, to which our readers may refer for information which the nature of this work precludes us from affording them.

4 Writers on mammalia.

Among the ancients, the moſt celebrated writers on natural hiſtory in general, and on quadrupeds in particular, are Ariſtotle and Pliny, and of theſe the former has been much more circumſtantial, and probably much leſs credulous than the latter. Ariſtotle wrote more from obſervation, and the opportunities of obtaining a knowledge

GENERIC CHARACTERS.

17 Generic characters.

18 Primates.

ORDO I. PRIMATES.

HOMO. Situs erectus. Hymen et menstrua feminarum.	MAN. Posture erect. Female furnished with a hymen, and menstruating.
1. SIMIA. Dentes laniarii, hinc remoti.	S. Tusks distant from each other.
2. LEMUR. Dentes primores superiores 4; inferiores 6.	L. Fore teeth upper 4; lower 6 in number.
3. GALEOPITHECUS. Dentes primores superiores nulli; inferiores 6.	G. Front teeth in the upper jaw wanting; in the lower 6.
* 4. VESPERTILIO. Manus palmato-volatilis (A).	V. Fore feet palmate, formed for flying.

19 Bruta.

ORDO II. BRUTA.

5. BRADYPUS. Dentes molares primo longiore, absque laniariis primoribusve. Corpus pilosum.	B. Grinders longer in front, without tusks. Body hairy.
6. MYRMECOPHAGA. Dentes nulli. Corpus pilosum.	M. No teeth. Body hairy.
7. MANIS. Dentes nulli. Corpus squamatum.	N. No teeth. Body scaly.
8. DASYPUS. Molares absque laniariis primoribusve. Corpus cataphractum.	D. Grinders, without tusks or cutting teeth. Body crustaceous.
9. RHINOCEROS. Cornu in fronte positum.	R. Horn seated in front.
10. ELEPHAS. Dentes laniarii et molares. Nasus proboscide elongatus.	E. Tusks and grinders. Nose elongated into a proboscis.
11. SUKOTYRO. Cornu ad utrumque latus prope oculos.	S. A horn on each side near the eyes.
12. PLATYPUS. Os anatinum. Pedes palmati.	P. Mouth like a duck's bill. Feet webbed.
13. TRICHECUS. Dentes laniarii superiores, molares ex osse rugoso. Pedes compedes.	T. Upper tusks. Grinders rough and bony. Hinder feet uniting into a fin.

20 Feræ.

ORDO III. FERÆ.

* 14. PHOCA. Dentes primores superiores 6; inferiores 4.	* P. Six upper cutting teeth; 4 lower.
* 15. CANIS. Dentes primores 6, 6; superiores intermedii lobati.	* C. Front teeth, six in each jaw; the intermediate upper ones lobated.
* 16. FELIS. Dentes primores 6, 6; inferiores æquales. Lingua aculeata.	* F. Cutting teeth six in each jaw; the lower equal. Tongue aculeate.
* 17. VIVERRA. Dentes primores 6, 6; inferiores intermedii breviores.	* V. Cutting teeth 6 in each jaw; the intermediate lower ones shorter.
* 18. LUTRA. Dentes ut in VIVERRA. Pedes palmati.	* L. Teeth as in the last genus. Feet webbed.
* 19. URSUS. Dentes primores 6, 6; superiores excavati. Penis osse flexuoso.	* U. Cutting teeth 6 in each jaw; the upper hollowed. Penis furnished with a flexible bone.
20. DIDELPHIS. Dentes primores superiores 10; inferiores 8.	D. Cutting teeth 10 in the upper jaw; 8 in the lower.
21. DASYURUS. Dentes primores superiores 8; inferiores 6	D. Cutting teeth 8 in the upper jaw; 6 in the lower.
22. MACROPUS. Dentes primores superiores 6; inferiores 2. Molares utrinque 5, remoti.	M. Cutting teeth 6 in the upper jaw; 2 in the lower. Grinders 5 on each side, remote.
* 23. TALPA. Dentes primores superiores 6; inferiores 8.	* T. Cutting teeth in the upper jaw 6; in the lower 8.

* 24.

(A) The genera marked * have one or more of the species indigenous to Britain.

Classification.

* 24. SOREX. Dentes primores ſuperiores 2; inferiores 4.
* S. Cutting teeth in the upper jaw two; in the lower 4.

* 25. ERINACEUS. Dentes primores ſuperiores 2; inferiores 2.
* E. Cutting teeth two in each jaw.

Classification.

21 Glires.

ORDO IV. GLIRES.

26. HYSTRIX. Corpus ſpinis tectum.
H. Body covered with ſpines.

27. CAVIA. Dentes primores cuneati. Molares 4 ad utrumque latus. Claviculæ nullæ.
C. Cutting teeth wedge-ſhaped. Grinders 4 on each ſide. Clavicles wanting.

28. CASTOR. Dentes primores ſuperiores cuneati. Molares ad utrumque latus. Claviculæ perfectæ.
C. Upper cutting teeth wedge-ſhaped. Grinders 4 on each ſide. Clavicles complete.

* 29. MUS. Dentes primores ſuperiores cuneati. Molares 3 ad utrumque latus. Claviculæ perfectæ.
* M. Upper cutting teeth wedge-ſhaped. Grinders 3 on each ſide. Clavicles complete.

30. HYDROMYS. Pedes poſteriores palmatæ. Cauda cylindrica.
H. Hind feet webbed. Tail round.

31. ARCTOMYS. Dentes primores cuneati. Molares ſuperiores 5, inferiores 4, ad utrumque latus. Claviculæ perfectæ.
A. Cutting teeth wedge-ſhaped. Grinders 5 in the upper jaw, 4 in the lower, on each ſide. Clavicles complete.

* 32. SCIURUS. Dentes primores ſuperiores cuneati; inferiores acuti. Molares ſuperiores 5, inferiores 4, ad utrumque latus. Claviculæ perfectæ. Cauda diſticha. Myſtaces longæ.
* S. Upper cutting teeth wedge-ſhaped; lower acute. Grinders 5 in the upper jaw, 5 in the lower, on each ſide. Clavicles complete. Tail ſpreading towards each ſide. Whiſkers long.

* 33. MYOXUS. Myſtaces longæ. Cauda rotunda, apice craſſior.
* M. Whiſkers long. Tail round, thicker at the tip.

34. DIPUS. Pedes anteriores perbreves; poſteriores prælongi.
D. Four fore feet ſhort; hind feet very long.

* 35. LEPUS. Dentes primores ſuperiores duplicati.
* L. Upper cutting teeth double.

36. HYRAX. Dentes primores ſuperiores lati. Cauda nulla.
H. Upper cutting teeth broad. Tail wanting.

22 Pecora.

ORDO V. PECORA.

37. CAMELUS. Ecornis. Dentes laniarii plures.
C. Without horns. Tuſks many.

38. MOSCHUS. Ecornis. Dentes laniarii ſolitarii; ſuperioribus exſertis.
M. Without horns. Tuſks ſingle; upper projecting.

* 39. CERVUS. Cornua ſolida, ramoſa, deciduæ. Dentes laniarii nulli.
* C. Horns ſolid, branching, deciduous. Tuſks wanting.

40. CAMELOPARDALIS. Cornua breviſſima. Pedes anteriores poſterioribus multo longiores.
C. Horns very ſhort. Fore feet much longer than the hind.

41. ANTILOPE. Cornua ſolida, ſimplicia, perſiſtentia. Dentes laniarii nulli.
A. Horns ſolid, unbranched, perſiſtent. Tuſks wanting.

* 42. CAPRA. Cornua tubuloſa, erecta. Dentes laniarii nulli.
* C. Horns hollow, erect. Tuſks wanting.

* 43. OVIS. Cornua tubuloſa reclinata. Dentes laniarii nulli.
* O. Horns hollow, reclined. Tuſks wanting.

* 44. BOS. Cornua tubuloſa porrecta. Dentes laniarii nulli.
* B. Horns hollow, turned outwards. Tuſks wanting.

23 Belluæ.

ORDO VI. BELLUÆ.

* 45. EQUUS. Dentes primores ſuperiores 6; inferiores 6.
* E. Cutting teeth 6 in each jaw.

46. HIPPOPOTAMUS. Dentes primores ſuperiores 4; inferiores 4.
H. Cutting teeth 4 in each jaw.

47. TAPIR. Dentes primores ſuperiores 10; inferiores 10.
T. Cutting teeth 10 in each jaw.

* 48. SUS. Dentes primores ſuperiores 4; inferiores 6.
* S. Cutting teeth in the upper jaw 4; in the lower 6.

ORDO VII. CETE.—See CETOLOGY.

Brutæ. So little is known of the habits and manners of these animals that we shall not dwell longer on them.

Genus 8. Dasypus. *Armadillos.*

46 Dasypus or *Armadillo.* Cutting and canine teeth wanting; grinders several; body covered with a shelly armour, divided into zones or bands.

The animals of this tribe are called *armadillos*, from the very singular *armour*, by which the upper part of their bodies is defended. This is composed partly of large irregular pieces covering the shoulders and rump, and partly of regular bands lying between these, and folding one over another, like the parts of a lobster's tail, so as to accommodate themselves to all the motions of the animal. The number of these bands varies in the several species; and though this circumstance makes part of the specific characters, it is doubtful whether it is sufficiently constant or exact, as various authors have numbered them very differently. The armadillos resemble each other so much in their habits and way of life, that a general account of them may suffice.

They are very harmless animals, and live retired in subterraneous retreats, which they burrow for themselves by means of the large strong claws with which their feet are furnished. They wander about chiefly by night, in search of roots, grain, worms, insects, and other small animals; when attacked, they coil themselves up in a ball like the pangolins, and are then invulnerable. They are said to drink much, and often grow very fat. They are very prolific, breeding three or four times in a year, and producing several young at a birth. They are all natives of South America, and are considered as excellent food. The Indians hunt them with small dogs trained for that purpose. When surprised, they run to their holes, or attempt to make a new one, which they do with great expedition, having strong claws on their fore feet, with which they adhere so firmly to the ground, that if they should be caught by the tail whilst making their way into the earth, their resistance is so great, that they will sometimes leave their tails in the hand of their pursuers: to avoid this, the hunter has recourse to artifice; and, by tickling the animal with a stick, it gives up its hold, and suffers itself to be taken alive. If no other means of escape be left, it rolls itself up within its covering, by drawing in its head and legs, and bringing its tail round them, as a band to connect them more forcibly together: in this situation it sometimes escapes by rolling itself over the edge of a precipice, and generally falls to the bottom unhurt.

The most successful method of catching armadillos is by snares laid for them by the sides of rivers or other places which they frequent.

There are six species of armadillos, that are, as we have said, chiefly distinguished by the number of shelly bands that envelope the middle part of their body.

1. *Dasypus Tricinctus*, Three-banded A. Armour divided into three bands, and five-toed feet.—2. *D. Sexcinctus*, Six-banded A. Six bands, and five-toed feet.—3. *D. Septemcinctus*, Seven banded A. Seven bands, and fore feet four-toed, hind feet five-toed.—4. *D. Novemcinctus*, Nine-banded A. Nine bands; fore feet four-toed, hind feet five-toed.—5. *D. 12-cinctus*, 12 banded A. Twelve bands.—6. *D. 18-cinctus*, Eighteen-banded A. Eighteen bands. History of the species.

Genus 9. Rhinoceros. 47 Rhinoceros.

Horn solid, perennial, conical, seated on the nose.

There are at least two species, viz. *R. Unicornis*, Single-horned R. with a single horn, and, 2. *R. Bicornis*, Two-horned R. with two horns.

As both species are remarkable, both for their form and habits, we shall describe both pretty much at large.

1. *R. Unicornis*, Single-horned rhinoceros. This animal, if we except the elephant, is the largest of all terrestrial animals, and in strength and power it is exceeded by none. It is generally about 12 feet long, and nearly as many in the circumference of its body. Its whole form is very awkward and clumsy; its head is large and long; its back sinks in considerably, and its skin is puckered up into several folds, giving the animal the appearance as if it were invested with a coat of mail. The upper lip hangs over the lower in the form of a lengthened tip, which seems to answer the purpose of a small proboscis, and, being extremely pliable, is useful to the animal in taking hold of the shoots of vegetables, and delivering them into the mouth. The horn is situated on the nose, and is slightly curved, sharp pointed, and very strong, and is sometimes three feet long, and 18 inches round at the base. This horn the rhinoceros uses both as an offensive and defensive weapon, by which it is completely armed against the attacks of the most ferocious animals, who cannot face it without danger of having their bowels torn out. The Roman epigrammatist, Martial, long ago remarked, that with this horn the rhinoceros could lift up a bull as easily as a foot-ball. The ears are pretty large, upright and pointed; the eyes small. The skin is naked, very rough, and marked with numerous large callous granulations; it is destitute of hair, except a few straggling coarse bristles on some parts of the head. The folds of the skin are very remarkable, and are disposed in various parts of the body in a singular manner. There is one large plait about the neck, another passing through the shoulders to the fore legs, and a third from the hind part of the back to the thighs. The belly is pendulous like that of a hog; the legs are very short, strong and thick; and the feet marked with three large hoofs all standing forwards. The tail is slender, flattened at the end, and covered on the sides with very stiff, thick, black hairs (c). 48 *Unicornis.* Single-horned Rhinoceros.

This animal is a native both of the continent of Asia, and of several of the islands in the Indian ocean, especially Ceylon, Java, and Sumatra; and is sometimes found in Ethiopia. It usually resides in cool se-

(c) For an accurate osteological account of this species, with a figure of his skeleton by Cuvier, see *Annales de Muséum National*, N° 13, or Philosophical Magazine, vol. xix.

History of the Species.

queſtered ſpots near waters and in ſhady woods, and delights to roll itſelf in the mud. It ſeems to live entirely on vegetables.

The ſight of this animal is but indifferent; but he is ſaid to poſſeſs an acute and moſt attentive ear, and to liſten with a deep, long-continued attention to any kind of noiſe. It is generally of a quiet inoffenſive diſpoſition, but when provoked or attacked, he becomes furious and implacable. He is even ſaid to be ſubject to paroxyſms of rage which nothing can allay. One that was ſent as a preſent to the pope by Emmanuel king of Portugal in 1513, deſtroyed the veſſel in which they were tranſporting it. He runs with great ſwiftneſs, and from his prodigious ſtrength ruſhes with reſiſtleſs violence through woods, and over every obſtacle, bending the ſmall trees as he paſſes like ſo many twigs.

The female produces but one young at a birth, but its time of geſtation is not certainly known.

The fleſh of this animal is eaten by the natives, who often engage in hunting parties againſt it. It is a difficult matter to kill the rhinoceros, its ſkin being ſo hard that an ordinary leaden bullet will not pierce it, and they are obliged to uſe iron bullets for that purpoſe. The horn is employed for many uſeful purpoſes, eſpecially for making drinking cups, which are uſed by the Indian princes, under an idea that if any poiſonous liquor is poured into them, it will ferment and boil over the top. Profeſſor Thunberg tried ſeveral of theſe horns, both of old and young animals, wrought into goblets and unwrought, with ſeveral poiſonous liquors, both weak and ſtrong, without obſerving any efferveſcence; but on pouring a ſolution of corroſive ſublimate into one of them, there aroſe a few bubbles, which he ſuppoſes to have been incloſed in the pores of the horn, and diſengaged from them by the liquor. The ſkin is alſo employed by the Javaneſe for making ſhields, and in ſome parts of India almoſt every part of the animal is uſed medicinally.

Several of theſe animals have been brought into Europe. Buffon gives an account of one, and Dr Parſons has given a particular deſcription of one that was brought to England from Bengal. This animal was only two years old, and yet conſumed ſo much food, that his voyage coſt 1000l. He had every day at three meals ſeven pounds of rice mixed with three pounds of ſugar, beſides hay and green plants, and he drank large quantities of water. He was in general, very quiet and peaceable, readily ſuffering people to touch every part of his body; but when hungry, or when ſtruck, he became very miſchievous, and nothing would appeaſe him but food. At this time he was about the ſize of a young cow.

In the year 1748, there was exhibited at Paris a rhinoceros brought from the kingdom of Ava. It was very tame, gentle, and even careſſing; was fed principally on hay and corn; and was much delighted with ſharp or prickly plants, and the thorny branches of trees. The attendants frequently gave him branches that had very ſharp and ſtrong thorns on them; but he bent and broke them in his mouth without ſeeming in the leaſt incommoded. It is true they ſometimes drew blood from the mouth and tongue, but that, ſays Father Le Comte, who gives us the deſcription, might even render them more palatable, and thoſe little wounds might ſerve only to cauſe a ſenſation ſimilar to that excited by ſalt, pepper, or muſtard on ours. Bruta.

The rhinoceros is even ſometimes domeſticated, and brought into the field of battle by the Aſiatics, in order to terrify their enemies; but he is ſo unmanageable, that his uſe ſeems to be attended with more diſadvantage than benefit, and when wounded, they are as likely to turn on their maſters as on the enemy.

49 *Bicornis.* Two-horned Rhinoceros.

R. Bicornis, Two-horned rhinoceros. In ſize, and in many of its general habits, this ſpecies greatly reſembles the former, but differs much in its external appearance, as the ſkin, inſtead of the regularly marked folds in that, has only a ſlight wrinkle acroſs the ſhoulders, and on the hind parts, ſo as, in compariſon with the other ſpecies, to appear almoſt ſmooth, though its ſurface is rough and tuberculated, eſpecially in the larger ſpecimens. It is chiefly diſtinguiſhed, however, by the two horns, one ſmaller than the other, and ſituated higher up on the front. Theſe horns are ſaid to be looſe when the animal is quiet, but to become fixed and immoveable when he is in an enraged ſtate. Dr Sparrman has obſerved that theſe horns are fixed to the noſe by a ſtrong apparatus of muſcles or tendons, ſo as to enable the animal to fix or relax them at pleaſure, and on inſpecting the horns and ſkin on which they are ſeated, it does not appear that the horns are firmly attached to the ſkull bone, or cloſely connected with it.

This ſpecies is found in various parts of Africa, and appears to have been that which was introduced by the Romans into their public ſhows.

Mr Bruce has given us an account of this animal, which is highly intereſting. He ſays, that beſides the trees capable of moſt reſiſtance, there are in the vaſt foreſts within the rains, trees of a ſofter conſiſtence, and of a very ſucculent quality, which ſeem to be deſtined for his principal food. For the purpoſe of gaining the higheſt branches of theſe, his upper lip is capable of being lengthened out ſo as to increaſe his power of laying hold with it, in the ſame manner as the elephant does with his trunk. With this lip, and the aſſiſtance of his tongue, he pulls down the upper branches, which have moſt leaves, and theſe he devours firſt; having ſtripped the tree of its branches, he does not therefore abandon it, but placing his ſnout as low in the trunk as he finds his horns will enter, he rips up the body of the tree, and reduces it to thin pieces like ſo many laths; and when he has thus prepared it, he embraces as much of it as he can in his monſtrous jaws, and twiſts it round with as much eaſe as an ox would do a root of celery, or any ſuch pot herb or garden ſtuff.

When purſued, and in fear, he poſſeſſes an aſtoniſhing degree of ſwiftneſs, conſidering his ſize, the apparent unwieldineſs of his body, his great weight before, and the ſhortneſs of his legs. He is long, and has a kind of trot, which after a few minutes increaſes in a great proportion, and takes in a great diſtance; but this is to be underſtood with a degree of moderation. It is not true, that in a plain he beats the horſe in ſwiftneſs. Mr Bruce has paſſed him with eaſe, and ſeen many worſe mounted do the ſame; and though it is certainly true that a horſe can ſeldom come up with him, this is owing to his cunning, and not to his ſwiftneſs. He makes conſtantly from wood to wood, and forces himſelf into the

Bruta. the thickeſt parts of them. The trees that are dead or dry, are broken down, as with a cannon ſhot, and fall behind him and on his ſide in all directions. Others that are more pliable, greener, or fuller of ſap, are bent back by his weight and the velocity of his motions: and after he has paſſed, reſtoring themſelves like a green branch to their natural poſition, they often ſweep the incautious purſuer and his horſe from the ground, and daſh them in pieces againſt the ſurrounding trees.

The eyes of the rhinoceros are very ſmall; he ſeldom turns his head, and therefore ſees nothing but what is before him. To this he owes his death, and never eſcapes if there be ſo much plain as to enable the horſe to get before him. His pride and fury then make him lay aſide all thoughts of eſcaping but by victory over his enemy. He ſtands for a moment at bay; then at a ſtart runs forward at the horſe like a wild boar, which in his manner of action he very much reſembles. The horſe eaſily avoids him by turning to one ſide, and this is the fatal inſtant; the naked man with the ſword drops from behind the principal horſeman, and unſeen by the rhinoceros, who is ſeeking his enemy the horſe, he gives him a ſtroke acroſs the tendon of the heel, which renders him incapable of further flight or reſiſtance.

In ſpeaking of the great quantity of food neceſſary to ſupport this enormous maſs, we muſt likewiſe conſider the vaſt quantity of water which he needs. No country but that of the Shangalla, which he poſſeſſes, deluged with ſix months rain, and full of large deep baſons made in the living rock, and ſhaded by dark woods from evaporation, or watered by large and deep rivers, which never fall low or to a ſtate of dryneſs, can ſupply the vaſt draughts of this monſtrous creature: but it is not for drinking alone, that he frequents wet and marſhy places; large, fierce, and ſtrong as he is, he muſt ſubmit to prepare himſelf againſt the weakeſt of all his adverſaries. The great conſumption he makes of food and water neceſſarily confine him to certain limited ſpaces; for it is not every place that can maintain him; he cannot emigrate or ſeek his defence among the ſands of Atbara.

This adverſary is a fly (probably of the genus OESTRUS) which is bred in the black earth of the marſhes: it perſecutes him ſo unremittingly, that it would in a ſhort time entirely ſubdue him, but for a ſtratagem which he practiſes for his preſervation. In the night when the fly is at reſt, the rhinoceros chooſes a convenient place, and there rolling in the mud, clothes himſelf with a kind of caſe, which defends him againſt his enemy for the following day. The wrinkles and folds of his ſkin ſerve to keep this muddy plaiſter firm upon him, except about his hips, legs, and ſhoulders, where by motion it cracks and falls off, leaving him expoſed to the attacks of the fly. The itching and pain which follow, occaſion him to rub himſelf in thoſe parts againſt the roughеſt trees, and this is ſuppoſed to be one cauſe of the numerous puſtules or tubercles which we ſee upon him.

He ſeems to enjoy the rubbing of himſelf very much, and groans and grunts ſo loud during this action that he is heard at a conſiderable diſtance. The pleaſure he receives from this enjoyment, added to the darkneſs of the night, deprives him of his uſual vigilance and attention. The hunters guided by his noiſe, ſteal ſecretly on him; and while lying on the ground, wound him with their javelins, moſtly in the belly, where the wound is mortal. History of the Species.

It is by no means true that the ſkin of this rhinoceros, as it has been often repreſented, is hard and impenetrable like a board. In his wild ſtate he is eaſily killed by javelins thrown from different hands, ſome of which enter many feet into his body. A muſket ſhot will go through him, if it meet not with the intervention of a bone; and the Shangalla, an Abyſſinian tribe, kill him by the worſt and moſt inartificial arrows that ever were uſed by any people practiſing that weapon, and cut him to pieces afterwards with the very worſt of knives.

To ſhew the amazing ſtrength of the rhinoceros, even after being ſeverely wounded, we ſhall quote Mr Bruce's account of the hunting of this animal in Abyſſinia. "We were on horſeback (ſays this gentleman) by the dawn of day in ſearch of the rhinoceros, many of which we had heard making a very deep groan and cry as the morning approached. Several of the agageers (hunters) then joined us, and after we had ſearched about an hour in the very thickeſt part of the wood, one of them ruſhed out with great violence, croſſing the plain towards a wood of canes that was about two miles diſtance. But though he ran, or rather trotted, with ſurpriſing ſpeed conſidering his bulk, he was in a very little time transfixed with 30 or 40 javelins, which ſo confounded him that he left his purpoſe of going to the wood, and ran into a deep hole or ravine, a *cul de ſac*, without outlet, breaking above a dozen javelins as he entered. Here we thought he was caught as in a trap, for he had ſcarce room to turn, when a ſervant who had a gun ſtanding directly over him, fired at his head, and the animal fell immediately to all appearance dead. All thoſe on foot now jumped in with their knives to cut him up; and they had ſcarce begun, when the animal recovered ſo far as to riſe upon his knees: happy then was the man that eſcaped firſt; and had not one of the agageers who was himſelf engaged in the ravine, cut the ſinews of the hind leg as he was retreating, there would have been a very ſorrowful account of the foot hunters that day.

"After having diſpatched him, I was curious to ſee what wound the ſhot had given which had operated ſo violently upon ſo huge an animal, and I doubted not it was in the brain; but it had ſtruck him no where but upon one of the horns, of which it had carried off above an inch, and this occaſioned a concuſſion, that had ſtunned him for a minute till the bleeding had recovered him."

It has been often aſſerted that the tongue of the rhinoceros is ſo hard and rough as to take away the ſkin and fleſh wherever it licks any perſon that has unfortunately fallen a victim to its fury. Dr Sparrman ſays, however, that he thruſt his hand into the mouth of one that had juſt been ſhot, and found the tongue perfectly ſmooth and ſoft.

Foſſil bones have been found below the earth in Siberia that ſeem to belong to a third ſpecies of rhinoceros, differing from the two above mentioned in having a longer head, and in the partition between the noſtrils being otherwiſe ſhaped. It ſeems alſo to have had two horns. In 1772 a ſpecimen was dug up

Explanation of the Plates.

The compiler of this article is conſcious that it labours under many deficiencies; that many animals, which ought to have been deſcribed, are merely enumerated; and that the accounts of ſeveral, which are uſually conſidered as important objects of natural hiſtory, are much leſs complete than might have been expected. For many of theſe defects he does not hold himſelf accountable. From the very limited ſpace within which he was obliged to confine the article, it was neceſſary, either that he ſhould treat of every ſpecies in a very conciſe manner, ſo as to make the treatiſe merely a tabular ſketch, or that he ſhould content himſelf with a ſyſtematic arrangement of all the mammalia at preſent known, and enlarge only on a few of the more important ſpecies. He has choſen the latter alternative, which, by making the article more intereſting to the generality of readers, ſeems beſt adapted to the nature of this work; while the ſyſtematic arrangement, with the ſpecific characters, will aſſiſt the naturaliſt who knows where to refer for a particular account of the individuals.

Explanation of the Plates.

EXPLANATION OF THE PLATES.

Plate CCCI.

Fig. 1. *Simia Satyrus*, Oran Otan.
Fig. 2. *Simia Inuus*, Magot or Barbary Ape.
Fig. 3. *Simia Sylvanus*, Pygmy.
Fig. 4. *Simia Sphinx*, Great Baboon.
Fig. 5. *Simia Beelzebul*, Alouatte, or Preacher Monkey.
Fig. 6. *Simia Argentata*, Mico or Fair Monkey.

Plate CCCII.

Fig. 7. *Lemur Tardigradus*, Slow Lemur.
Fig. 8. *Galeopithecus Volans*, Flying Calugo.
Fig. 9. *Veſpertilio Auritus*, Long-eared Bat.
Fig. 10. *Veſpertilio Vampyrus*, Vampyre Bat.
Fig. 11. *Bradypus Tridactylus*, Three-toed Sloth.
Fig. 12. *Myrmecophaga Jubata*, Great Ant-Eater.

Plate CCCIII.

Fig. 13. *Manis Pentadactyla*, Pangolin, or Short-tailed Manis.
Fig. 14. *Manis Tetradactyla*, Long-tailed Manis.
Fig. 15. *Daſypus Sexcinctus*, Six-banded Armadillo.
Fig. 16. *Rhinoceros Unicornis*, Single-horned Rhinoceros.

Plate CCCIV.

Fig. 17. *Elephas Maximus*, Elephant.
Fig. 18. *Sukotyro.*
Fig. 19. *Platypus Anatinus*, Duck-billed Platypus.
Fig. 20. *Trichecus Roſmarus*, Arctic Walrus.

Plate CCCV.

Fig. 21. *Phoca Vitulina*, Common Seal, or Sea-calf.
Fig. 22. *Canis Domeſticus*, Common Dog.
Var. Shepherd's Dog.
Fig. 23. Maſtiff.
Fig. 24. Foxhound.
Fig. 25. Terrier.
Fig. 26. Greyhound.
Fig. 27. Iriſh Greyhound.

Plate CCCVI.

Fig. 28. *Canis Lupus*, Wolf.
Fig. 29. *Canis Hyæna*, Hyæna.
Fig. 30. *Canis Aureus*, Jackal.
Fig. 31. *Canis Zerda*, Fennec.
Fig. 32. *Felis Leo*, Lion.
Fig. 33. *Felis Tigris*, Tiger.

Plate CCCVII.

Fig. 34. *Felis Catus*, Wild Cat.
Fig. 35. *Viverra Ichneumon*, Ichneumon.
Fig. 36. *Viverra Civetta*, Civet Cat.
Fig. 37. *Viverra Foina*, Marten.
Fig. 38. *Viverra Furo*, Ferret.
Fig. 39. *Lutra Vulgaris*, Common Otter.

Plate CCCVIII.

Fig. 40. *Urſus Arctos*, Brown Bear.
Fig. 41. *Urſus Maritimus*, White or Polar Bear.
Fig. 42. *Urſus Meles*, Badger.
Fig. 43. *Didelphis Virginiana*, Virginian Opoſſum.
Fig. 44. *Didelphis Dorſigera*, Merian Opoſſum.
Fig. 45. *Daſyurus Viverrinus*, Viverrine Daſyurus.

Plate CCCIX.

Fig. 46. The *Wombat.*
Fig. 47. *Macropus Major*, Kanguroo.
Fig. 48. *Talpa Radiata*, Radiated Mole.
Fig. 49. *Sorex Araneus*, Common Shrew.
Fig. 50. *Erinaceus Europæus*, Common Hedgehog.
Fig. 51. *Hyſtrix Criſtata*, Porcupine.
Fig. 52. *Caſtor Fiber*, Common Beaver.

Plate CCCX.

Fig. 53. *Cavia Cobaya*, Reſtleſs Cavy, or Guinea-Pig.
Fig. 54. *Mus Cricetus*, Hamſter Rat.
Fig. 55. *Hydromys Coypus*, Coypou Rat.
Fig. 56. *Arctomys Marmota*, Alpine Marmot.
Fig. 57. *Sciurus Vulgaris*, Common Squirrel.
Fig. 58. *Myoxus Muſcardinus*, Common Dormouſe.
Fig. 59. *Dipus Jaculus*, Common Jerboa.

Plate CCCXI.

Fig. 60. *Lepus Timidus*, Hare ſitting.
Fig. 61. *Hyrax Syriacus*, Syrian Hyrax.
Fig. 62. *Camelus Dromedarius*, Arabian Camel or Dromedary.
Fig. 63. *Moſchus Moſchiferus*, Tibetian Muſk.
Fig. 64. *Cervus Alces*, Elk.
Fig. 65. *Camelopardalis Giraffa*, Camelopardalis or Giraffe.

Plate

Fig. 14.

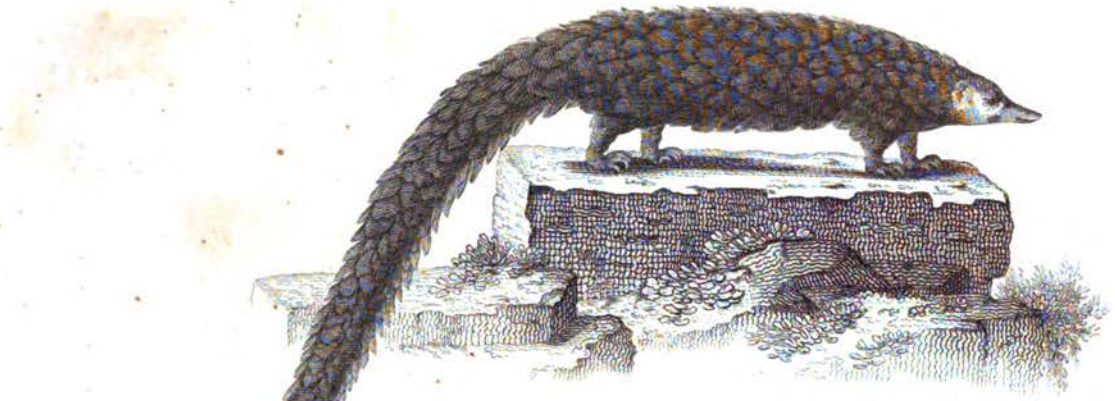

Fig. 13.

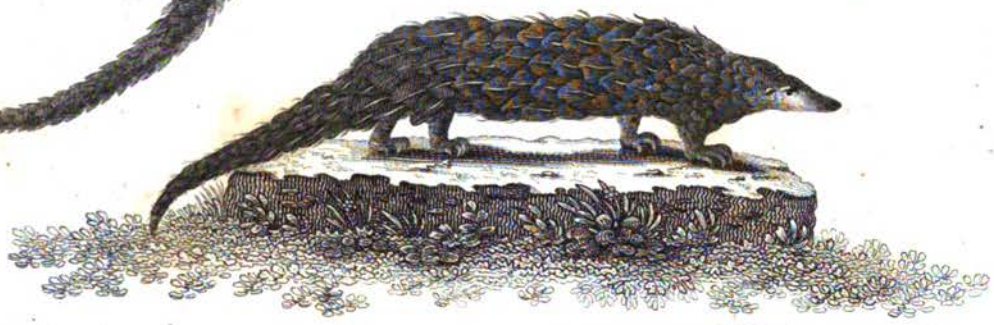

Fig. 15.

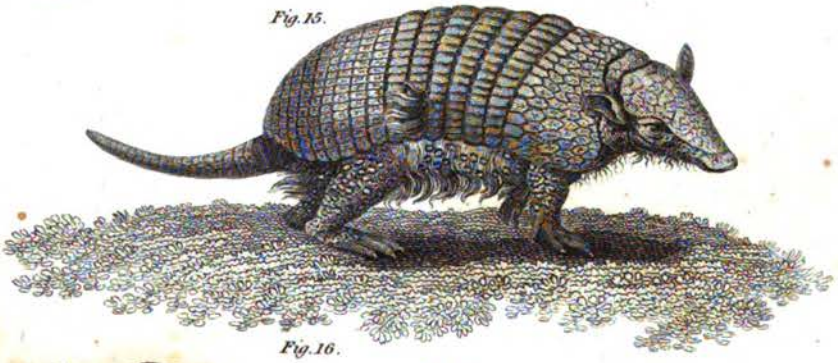

Fig. 16.