NATURAL HISTORY,

GENERAL AND PARTICULAR,

BY THE

COUNT DE BUFFON.

TRANSLATED INTO ENGLISH,

ILLUSTRATED

WITH ABOVE THREE HUNDRED COPPER-PLATES,

AND OCCASIONAL

NOTES AND OBSERVATIONS,

By WILLIAM SMELLIE,

MEMBER OF THE ANTIQUARIAN AND ROYAL SOCIETIES OF EDINBURGH.

THE THIRD EDITION,

IN NINE VOLUMES.

VOL. VI.

LONDON:

PRINTED FOR A. STRAHAN, AND T. CADELL IN THE STRAND.

M DCC XCI.

THE RHINOCEROS*.

NEXT to the elephant, the Rhinoceros is the strongest quadruped. He is at least twelve feet long, from the extremity of the muzzle

* The rhinoceros has one large horn, fometimes two, placed near the end of the nose; it is sometimes three feet and a half long, black, and smooth. The upper lip is long, hangs over the lower, ends in a point, is very pliable, and ferves to collect its food, and deliver it into the mouth. The nostrils are placed transversely. The ears are large, erect, and pointed. The eyes are fmall and dull, The skin is naked, rough, or tuberculated, and lies about the neck in vaft folds. There is another fold from the shoulders to the fore legs, and another from the hind part of the back to the thighs. The skin is fo thick and fo strong as to turn the edge of a scimitar and refift a musket ball. The tail is slender, flatted at the end, and covered on the fides with very stiff, thick, black hairs. The belly hangs low. The legs are fhort, ftrong, and thick. The hoofs are divided into three parts, each pointing forward; Pennant's Synops. of Quad. p. 75.

Though the name of this animal be entirely Greek, it was unknown to the ancient Greeks. Aristotle takes no notice of it. Strabo is the first Greek, and Pliny the first Roman author who mentions it. The rhinoceros probably did not frequent that part of India into which Alexander had penetrated, though he met with great numbers of elephants; for it was about three hundred years after Alexander, that Pompey first

brought this animal to Europe.

Rhinocerote in Italian; Abada in Portuguese; Linscot, Navig. in Orient. pars ii. p. 44. Abada in India and Java; Bontius Ind. Orient. p. 50. P. Philippe, p. 371. Purchas's Pilgrim, vol. ii. p. 1001. 1773. Borri Hist. Cochin-china, p. 797. Du Haldes's China,

muzzle to the origin of the tail, and the circumference of his body is nearly equal to his length *.

In

China, wol. i. p. 120. Faunul. Sinenf. Chiengtuenden and Elker-kedon in Persia; Pietro della Valle, tom. iv. p. 245. Chardin, tom. iii. p. 45. Arou haris, according to Thevenot; Relation de Divers Vojages, p. 10.

Rhinoceros; Plin. lib. viii. c. 20. Gesner. Quad. p. 842. Raii Synops. p. 122. Klein. Quad. p. 26. Grew's Mus. p. 29. Worm. Mus. p. 336. Brisson. Quad. p. 78. Phil. Trans. Abrid. vol. ix.

p. 93. Kolben, vol. ii. p. 101.

Rhinoceros unicornis; Linn. Syft. Nat. p. 104. Edwards's

Gleanings of Natural Hist. p. 221.

Rhinoceros, a esc et useuc. Naricornis Catelani. It is called Noemba in Java; Tuabba, Nabba, at the Cape of Good Hope; Nezorozec, Zebati, in Poland; and Gomala in India.

* I have in my possession a sigure of a rhinoceros, drawn by an officer of the Shaftesbury East India vessel in the year 1737. The figure corresponds very well with mine. The animal died in the passage from the East Indies to Britain-This Officer had written the following note at the bottom of the figure. 'His back was about feven feet high. His colour refembled that of a hog, whose skin is beginning to dry after wallowing in the mire. He had three hoofs on each foot. The folds of his skin lay backward on each other. Between these folds were harboured insects, millepeds, scorpions, ' fmall ferpents, &c. He was not above three years old when his figure was drawn. His penis, when extended, spread out in the form of a flower de luce.' In a corner of the plate I have given a figure of the penis. As this figure was communieated to me by Dr. Tyson, I had not an opportunity of confulting the author, whether these noxious infects, which he fays take up their abode in the folds of the animal's skin, were feen by himfelf, or whether he only related what had been told him by the Indians. I acknowledge that the fact appears very fingular; Edwards's Gleanings, p. 25. Note, This last fact is not only doubtful, but that of the animal's age, compared with his largeness, appears to be false. We saw a rhinoceros

In magnitude, therefore, he makes a near approach to the elephant; and he appears to be much lefs, only because his legs are proportionally shorter than those of the elephant. But he differs fill more from the elephant in his natural powers and intelligence; for Nature has beflowed on him nothing that elevates him above the ordinary rank of quadrupeds. He is deprived of all fenfibility in his fkin; neither has he hands to enable him to improve by the fense of touching; and instead of a trunk, he has only a moveable lip, to which all his means of dexterity or address are limited. His chief sources of fuperiority over other animals confifts in his ftrength, his magnitude, and the offenfive weapon on his nofe, which is entirely peculiar to him. This weapon is a very hard horn, folid throughout its whole extent, and fituated more advantageously than the horns of ruminating animals. which defend only the fuperior parts of the head and neck. But the horn of the rhinoceros preferves from infult the muzzle, the mouth, and the face. For this reason, the tiger will rather attack the elephant, whose trunk he lays hold of, than the rhinoceros, whom he dare not face, without running the risk of having his bowels torn out; for horn, and two throng meils e teeth in each jaw.

of, at least, eight years of age, which exceeded not five feet in height. Mr. Parsons saw one of two years, which was not higher than a heifer, which may be computed at about four feet. How, then, could the rhinoceros above taken notice of be only three years old, if it was seven feet high?

the body and limbs of the rhinoceros are covered with a skin so impenetrable, that he fears neither the claws of the tiger or lion, nor the fword or thot of the hunter. His fkin is blackish, being of the same colour, but thicker and harder than that of the elephant, and is not fenfible to the things of flies. He can neither extend nor contract his fkin, which is rolled up into large folds at the neck, the shoulders, and the crupper, in order to facilitate the motion of his head and limbs, which last are massy, and terminated by large feet, armed with three great toes. His head is proportionably longer than that of the elephant; but his eyes are still smaller, and seldom above half open. The upper, which projects over the under lip, is moveable, and can be stretched out about fix or feven inches in length; and it is terminated by a pointed appendix, which gives this animal a power of collecting herbage in handfuls, as the elephant does with its trunk. This mufcular and flexible lip is a kind of hand or imperfect trunk; but it enables the creature to feize any object with force. and to feel with fome dexterity. Instead of those long ivory tufks which conflitute the armour of the elephant, the rhinoceros has a formidable horn, and two strong incifive teeth in each jaw. These teeth, of which the elephant is deprived, are lituated at a great distance from each other, one in each angle of the jaw. The under jaw is fquare before; and there are no other incifive teeth

teeth in the anterior part of the mouth, which is covered by the lips. But befide the four cutting teeth, in the four corners of the mouth, there are twenty-four grinders, fix on each fide of the two jaws. He holds his ears always erect: In figure they refemble those of the hog; but they are proportionally smaller. The ears are the only parts of the body on which there are hairs, or rather briftles. The extremity of the tail, like that of the elephant, is garnished with a bush of large, solid, hard briftles.

Dr. Parsons, a celebrated physician in London, to whom the republic of letters is much indebted for many valuable discoveries in natural history, and to whom I owe the highest acknowledgments for the marks of esteem and friendship with which he has been pleased to honour me, published, in the year 1743, a history of the rhinoceros, from which I shall the more willingly make extracts, because every composition of that gentleman merits the attention and confidence of the public.

Though the rhinoceros was frequently exhibited in the Roman spectacles, from the days of Pompey to those of Heliogabalus; though he has often been transported into Europe in more modern times; and though Bontius, Chardin, and Kolben, have drawn figures of him both in India and Africa; yet so ill was he represented and described, that he was very imperfectly known till the errors and caprices of those who

had published figures of him were detected by inspection of the animals which arrived in London in the years 1739 and 1741. The figure given by Albert Durer was the first, and the least conformable to Nature; yet it was copied by most naturalists, some of whom loaded it with preposterous drapery and foreign ornaments. That of Bontius is more simple and correct; but the inferior part of the legs is improperly represented. That of Chardin, on the contrary, gives a pretty good idea of the feet, and the folds of the fkin; but, in other respects, it has no refemblance to the animal. That of Camerarius is no better; neither is that drawn from the rhinoceros exhibited at London in the year 1685, and which was published by Carwitham in the 1739. In fine, the figures on the ancient pavement of Præneste, and on Domitian's medals, are extremely imperfect; but they have the merit of not being deformed by the imaginary ornaments represented in the figure drawn by Albert Durer. Dr. Parsons has taken the trouble of drawing this animal himself * in three different views.

One of our learned philosophers, M. de Mours, has made fome remarks on this subject, which must not be omitted. 'The figure,' says he, 'of the rhinoceros which Dr. Parsons has added to his Memoir, and which he drew from the life, is so disterent from that engraved at Paris in the year 1749, from a rhinoceros exhibited at the sair of Saint-Germain, that it is difficult to recognise them to be the same animal. That of Dr. Parsons is shorter, and the folds of the skin are fewer in vol. 11.

views, before, behind, and in profile. He has likewife drawn the male organs of generation, the

number, less marked, and some of them placed in a different position. The head, particularly, has hardly any resemblance to that of the Saint-Germain rhinoceros. We cannot, however_ entertain a doubt with regard to the accuracy of Dr. Parfons. "The reasons of such remarkable differences must be sought for in the age and fex of the two animals. That of Dr. Parsons was drawn from a male rhinoceros, which exceeded not the e age of two years. That which I have here added, was drawn from a picture of the celebrated M. Oudry, a most distinguished animal painter. He painted from the life, and of the na-* tural fize, the Saint-Germain rhinoceros, which was a female. and at least eight years old; I say at least eight years; for we · fee by an inscription written on the bottom of a wooden * print, entitled, A true portrait of a living rhinoceros exhibited at the fair of Saint-Germain in Paris, that this animal, when taken, e in 1741, in the province of Assem belonging to the Moe gul, was three years old: And, eight lines lower, it is faid, that the animal was only one month old when fome Indians entangled it with ropes, after having flain the mother by their fpears and darts. Hence it must have been at least eight ' years of age, and might be ten or twelve. This difference of age is probably the reason of the remarkable differences between Dr. Parsons's figure and that of M. Oudry, whose picture, executed by the order of the King, was exhibited in the * painter's hall. I shall only remark, that M. Oudry has made the horn of his rhinoceros too long; for I examined the animal with great attention, and I find that this part is better represented in the wooden print. The horn of the present figure was drawn after this print, and the rest is copied from . M. Oudry's picture. The animal which it represents was weighed, about a year before, at Stouquart, in the dutchy of · Wittemberg, and its weight was at that time five hundred pounds. It eat, according to the relation of Captain Dowemot Wan-dermeer, who conducted it to Europe, fixty pounds of hay, and twenty pounds of bread, every day. It was very tame, and furprifingly agile, confidering the enormity of its mass, and its unwieldy aspect. These remarks, like all those

the fingle and double horns, as well as the tail, from other rhinocerofes, whose parts are preferved in the cabinets of Natural History.

The rhinoceros which came to London in the year 1730, was fent from Bengal. Though not above two years of age, the expence of his food and journey amounted to near one thousand pounds sterling. He was fed with rice, fugar, and hay. He had daily feven pounds of rice, mixed with three pounds of fugar, and divided into three portions. He had likewise hay and green herbs, which last he preferred to hay. His drink was water, of which he took large quantities at a time. He was of a peaceable difpolition, and allowed all parts of his body to be touched. When hungry or struck by any perfon, he became mischievous, and, in both cases, nothing appeafed him but food. When enraged, he fprung forward, and nimbly raifed himself to a great height, pushing, at the same time, his head furiously against the walls, which he performed with amazing quickness, notwithstanding his heavy aspect and unwieldy mass. I often observed, fays Dr. Parsons, these movements produced by rage or impatience, especially in the mornings before his rice and fugar were brought to him. The vivacity and promptitude of his movements, Dr. Parsons adds, led

of M. de Mours, are judicious and fenfible. See the figure in his French translation of the Philosophical Translations, ann.

me to think, that he is altogether unconquerable, and that he could eafily overtake any man who should offend him.

This rhinoceros, at the age of two years, was not taller than a young cow that has never produced. But his body was very long and very thick. His head was disproportionally large. From the ears to the horn there is a concavity, the two extremities of which, namely the upper end of the muzzle, and the part near the ears, are confiderably raifed. The horn, which was not yet above an inch high, was black, fmooth at the top, but full of wrinkles directed back-The noftrils are fituated ward at the base. very low, being not above an inch diftant from the opening of the mouth. The under lip is pretty fimilar to that of the ox; but the upper lip has a greater resemblance to that of the horse, with this advantageous difference, that the rhinoceros can lengthen this lip, move it from fide to fide, roll it about a ftaff, and feize with it any object he wishes to carry to his mouth. The tongue of this young rhinoceros was foft, like that of a calf *. His eyes had no vivacity: In

Most voyagers and all naturalists, both ancient and modern, tell us, that the tongue of the rhinoceros is very rough, and its papillæ so sharp, that with the tongue alone, he tore the slesh from a man's body even to the bones. This sact, which is every where related, appears to be very suspicious and ill imagined; because the rhinoceros does not eat slesh, and animals, in general, which have rough tongues, are seldom carnivorous.

figure, they refembled those of the hog, and were fituated lower, or nearer the noftrils, than in any other quadruped. His ears are large, thin at the extremities, and contracted at their origin by a kind of annular rugofity. The neck is very fhort, and furrounded with two large folds of skin. The shoulders are very thick, and, at their juncture, there is another fold of fkin, which descends upon the fore legs. The body of this young rhinoceros was very thick, and pretty much refembled that of a cow about to bring forth. Between the body and crupper there is another fold, which defcends upon the hind legs. Laftly, another fold transversely furrounds the inferior part of the crupper, at fome distance from the tail. The belly was large, and hung near the ground, particularly its middle part. The legs are round, thick, ftrong, and their joint bended backwards. This joint, which, when the animal lies, is covered with a remarkable fold of the skin, appears when he stands. The tail is thin, and proportionally short; that of the rhinoceros fo often mentioned exceeded not fixteen or feventeen inches in length. It turns a little thicker at the extremity, which is garnished with some short, thick, hard hairs. The form of the penis is very extraordinary. It is contained in a prepuce or sheath, like that of the horse; and the first thing that appears in the time of erection, is a fecond prepuce, of a flesh-colour, from which there issues a hollow tube, in the form of a funnel cut and bordered fomewhat like a flower de luce*, and conftitutes the glans and extremity of the penis. This anomalous glans is of a paler flesh-colour than the fecond prepuce. In the most vigorous erection, the penis extends not above eight inches out of the body; and it is eafily procured by rubbing the animal with a handful of straw when he lies at his eafe. The direction of this organ is not ftraight, but bended backward. Hence he throws out his urine behind; and, from this circumstance, it may be inferred, that the male covers not the female, but that they unite with their cruppers to each other. The female organs are fituated like those of the cow. and the exactly refembles the male in figure and groffness of body. The skin is so thick and impenetrable, that, when a man lays hold of any of the folds, he would imagine he is touching a wooden plank of half an inch thick. When tanned, Dr. Grew remarks, it is excessively hard, and thicker than the hide of any other terrestrial animal. It is every where covered more or less with incrustations in the form of galls or tuberofities, which are pretty finall on the top of the neck and back, but become larger on the fides. The largest are on the shoulders and crupper, and are still pretty large on the thighs and legs, upon which they are spread all round, and even on the feet. But, between the folds, the

Phil. Trans. No. 470. pl. 111. Edwards's Gleanings.

Tkin is penetrable, delicate, and as foft to the touch as filk, while the external part of the fold is equally hard with the rest. This tender Tkin between the folds is of a light flesh-colour; and the skin of the belly is nearly of the same colour and confiftence. These galls or tuberosities should not be compared, as some authors have done, to scales. They are fimple indurations of the fkin only, without any regularity in their figure, or fymmetry in their respective positions. The flexibility of the skin in the folds enables the rhinoceros to move with facility his head, neck, and members. The whole body, except at the joints, is inflexible, and refembles a coat of mail. Dr. Parsons remarks, that this animal liftened with a deep and long continued attention to any kind of noise; and that, though he was fleeping, eating, or obeying any other pressing demands of nature, he raised his head and liftened till the noise ceased.

In fine, after giving this accurate description of the rhinoceros, Dr. Parsons examines whether the rhinoceros, with a double horn, exists; and, having compared the testimonies of the ancients and moderns, and the remains of this variety in the collections of natural objects, he, with much probability, concludes, that the rhinoceroses of Asia have commonly but one horn, and that those of Africa have generally two.

It is unquestionably true, that some rhinoceroses have but one horn, and that others have two *. But it is not equally certain that this variety is conftant, and depends on the climate of Africa or India; or that this difference is alone fufficient to constitute two distinct species. It appears that the rhinocerofes with one horn have this excrescence always longer than those with two. There are fingle horns of three and a half, and perhaps of above four feet in length, by fix or feven inches diameter at the base. Some double horns are two feet long †. These horns are commonly of a brown or olive colour; though there are instances of their being gray, and even white. They have only a flight concavity in form of a cup under the base, by which they are fixed to the skin of the nose. The rest of the horn is folid, and harder than common horn. It is with this weapon that the rhinoce-

^{*} Kolben afferts positively, and as if he had been an eye-witness, that the first horn of the rhinoceros is upon the nose, and the second upon the front, in a right line with the first; that the latter, which is brown, never exceeds two feet in length; and that the second is yellow, and seldom longer than six inches; Descript du Cap de Bonne Esperance, tom. iii. p. 17.—But we have already mentioned double horns, the second differing very little from the first, which was two feet long, and both were of the same colour, Besides, it appears to be certain, that they are never at such a distance from each other, as this author has placed them; for the basis of the two horns, preserved in the cabinet of Sir Hans Sloane, were not three inches asunder.

[†] Ursus cornu gemino; Martial, Spettac. ep. 22. Phil. Trans. Abrid. vol. ix. p. 100. vol. xi. p. 910. Phil. Trans. vol. lvi. p. 32. tab. 2. Flacourt, Hist. Madag. p. 395. Lobo Abys. p. 230. Rhinoceros bicornis; Linn. Syst. Nat. p. 104.

ros is faid to attack and fometimes mortally wound the largest elephants, whose tall legs give the rhinoceros an opportunity of striking, with his snout and horn, their bellies, where the skin is most tender and penetrable. But, if he misses his first blow, the elephant throws him on the ground and kills him.

The horn of the rhinoceros is more esteemed by the Indians than the ivory of the elephant, not on account of its real utility, though they make several toys of it with the chifel and turner's lathe, but on account of certain medicinal qualities they ascribe to it*. The white horns, being

[.] Sunt in regno Bengalen rhinocerotes Lufitanis Abadas dicti, cujus animalis corium, dentes, caro, fanguis, ungulæ, et cæteræ ejus partes, toto genere resistant venenis; qua de causa in maximo pretio est apud Indos .- In those parts of Bengal which border on the Ganges, the rhinocerofes or unicorns, there called Abades, are very common, and numbers of their horns are brought to Goa. They are about two palms in circumference at the base, gradually taper to a point, and ferve the animal as a defensive weapon. They are of an obscure colour, and the cups made of them are highly esteemed, especially if they have the power of counteracting poifonous liquors; Voyage du P. Philippe, p. 371.- Every part of the rhinoceros's body is medicinal. His horn is a powerful antidote against all kinds of poison; and the Siamese make a great article of traffic with it among the neighbouring nations. Some of them are fold for more than a hundred crowns. Those which are of a bright gray colour, and spotted with white, are most valued by the Chinese; Hift. Nat. de Siam, par Nic. Gervaife, p. 34 .- The horns, teeth, toes, flesh, fkin, blood, and even their urine and excrements, are in great request among the Indians, as powerful remedies for different diseases; Voyage de la Compagnie des Indes de Hollande, tom. i. p.

being rarest, are in great request. Among the presents sent by the King of Siam to Lewis XIV. in the year 1686*, were six horns of the rhinoceros. In the royal cabinet we have twelve, of different sizes; and one of them, though cut, is three seet eight inches and a half long.

The rhinoceros, without being ferocious, carnivorous, or even extremely wild, is, however, perfectly untractable †. He is nearly among large, what the hog is among small animals, rash and brutal, without intelligence, sentiment, or docility. He seems even to be subject to paroxysms of sury, which nothing can appease;

417.—His horn is placed between the two nostrils; it is very thick at the base, and terminates in a sharp point: It is of a greenish brown colour, and not black, as some authors maintain. When very gray or approaching to white, it brings a high price. But it is always dear, on account of the value put on it by the

Indians; Idem, tom. vii. p. 277.

Among the prefents sent by the King of Siam to France, in the year 1686, were six rhinoceroses horns, which were greatly valued over all the East. The Chevalier Vernati has written from Batavia to Brkain, that the horns, teeth, toes, and blood of the rhinoceros, are antidotes, and that they are as much used in the Indian pharmacoposia as the theriaca in that of Europe; Voyage de la Compagnie des Indes de Hollande,

tom. vii. p. 484.

† Chardin fays, (tem. iii. p. 45.) that the Abyffinians tame the rhinoceros, and train him to labour, like the elephants. This fact feems to be extremely suspicious: No other author mentions it; and it is well known, that, in Bengal, Siam, and other southern parts of India, where the rhinoceros is, perhaps, still more common than in Æthiopia, and where the natives are accustomed to tame the elephants, he is regarded as an irreclaimable animal, of which no domestic use can be made.

for the one which Emanuel King of Portugal fent to the Pope in the year 1513, destroyed the veffel in which they were transporting him *; and the rhinoceros, which we lately faw in Paris, was drowned in the fame manner in its voyage to Italy. Like the hog, these animals are fond of wallowing in the mire. They love moift and marshy grounds, and never quit the banks of rivers. They are found in Afia and Africa, in Bengal +, Siam +, Laos |, Mogul &, Sumatra **, at Java in Abyffinia ++, in Æthiopia ±±, in the country of the Anzicos || ||, and as far as the Cape of Good Hope &. But, in general, the species is not numerous, and much less diffused than that of the elephant. The female produces but one at a time, and at confiderable intervals. During the first month, the

* Philosophical Transactions, No. 470.

† Voyage du P. Philippe, p. 371.—Voyage de la Compagnie des Indes de Hollande, tom. i. p. 417.

1 Histoire Naturelle de Siam, par Gervaise, p. 33.

|| Journal de l'Abbé de Choify, p. 339.

§ Voyage de Tavernier, tom. iii. p. 97.—Voyage d'Edward Terri, p. 15.

** Histoire Generale des Voyages, par M. l'Abbé Prevôt, tom. ix. p. 339.

†† Voyage de la Compagnie des Indes de Hollande, tom vii. p. 277.

11 Voyage de Chardin, tom, iii. p. 45.—Relation de Thevenot, p. 10.

|| Histoire Generale des Voyages, par M. l'Abbé Prevôt, tom. v. p. 91.

§§ Voyage de Franc. le Guat. tom. ii. p. 145.—Description du Cap de Bonne-esperance, par Kolbe, tom. iii. p. 15 et suiv.

young rhinoceros exceeds not the fize of a large dog*. When recently brought forth, it has no horn †, though the rudiments of it appear in the fœtus. At the age of two years, the horn exceeds not an inch in length ‡. and, at the age of fix, it is from nine to ten inches long || : Now, as fome of these horns are known to be near four feet in length, it appears that they continue to grow during the half, or perhaps during the whole of the animal's life, which must be considerably long, since the rhinoceros described by Dr. Parsons had only acquired about one half of its height at the age of two years; from which we may conclude, that this animal, like man, should live seventy or eighty years.

Without the capacity of becoming useful, like the elephant, the rhinoceros is equally hurtful by his voracity, and particularly by the great waste he makes in the cultivated fields. He is of no use till he is slain. His slesh is reckoned

^{*} We have feen a young rhinoceros which was not larger than a dog. It followed its master every where, and drank the milk of the buffalo. But it lived only three weeks. The teeth were beginning to appear; Voyage de la Compagnie des Indes de Hollande, tom. vii. p. 483.

[†] In two young rhinocerofes, nothing but a prominence was observed on the place where the horns were to arise, though the animals were then as large as an ox. But their legs are very short, especially those before, which are shorter than the hind legs; Voyage de Pietro della Valle, tom, iv. p. 245.

¹ Phil. Tranf. No. 470.

[|] Id. ibid.

excellent by the Indians and Negroes*; and Kolbe fays he often eat it with pleasure. His skin makes the hardest and best leather in the world †; and not only his horn, but all the other parts of his body, and even his blood ‡, urine, and excrements, are esteemed to be antidotes against poison, or remedies for particular diseases. These autidotes or remedies, extracted from different parts of the rhinoceros, are of equal use in the Indian Pharmacopæia as the theriaca in that of Europe | Most of the virtues ascribed to both are probably imaginary: But how many objects are in the highest repute, which have no value but in the opinions of men?

The rhinoceros feeds on the groffest herbs, as thistles and thorny shrubs, which he prefers to the soft pasture of the best meadows §. He is fond

^{*} The Indians eat the flesh of the rhinoceros, and reckon it excellent. They even derive advantage from his blood, which they collect with care as a remedy for diseases in the breast; Hist. Nat. de Siam, par Gervaise, p. 35.

[†] His skin is of a fine gray colour, approaching to black, like that of the elephant; but it is rougher and thicker than that of any other animal. . . The skin is covered every where, except on the neck and head, with small knots or tubercles, &c.; Voyage de Chardin, tom. iii. p. 45.

¹ Voyage de Mandelslo. tom. ii. p. 350.

^{||} Voyage de la Comp. des Indes de Hollande, tom. vii.

[§] This animal feeds upon plants, and prefers brushwood, broom, and thisses. But of all plants he is fondest of a shrub which resembles the juniper, and is called the rbinoceros shrub. Great quantities of it grow on heathy lands and on the mountains;

fond of the fugar cane, and likewise eats all kinds of grain. Having no appetite for flesh, he neither difturbs the fmall nor fears the large animals, but lives in peace with all, not excepting the tiger, who often accompanies the rhinoceros, without daring to attack him. This peaceful disposition renders the combats between the elephant and the rhinoceros very fuspicious: Such combats must at least be rare, fince there is no motive to war on either fide. Befides, no antipathy has ever been remarked between these animals. They have been known, even in a flate of captivity, to live peaceably together, without discovering any marks of resentment or antipathy *. Pliny, I believe, is the first author who mentions these combats between the elephant and rhinoceros. It appears that these animals were compelled to fight at the Roman spectacles +; and from hence, probably, the idea was formed, that, when in their natural

mountains; Descript. du Cap de Bonne-esperance, par Kolbe, tom. iii. p. 17.

† The Romans took pleasure in making the rhinoceros and elephant fight at their public shews; Singular. de la France Antarctique, par André Thevet, p. 41.

^{*} The Dutch history, entitled P Ambassade de la Chine, gives a false description of this animal, especially when it exhibite the rhinoceros as the chief enemy of the elephant; for the rhinoceros I am mentioning was kept in the same stable with two elephants, and I have several times seen them near each other without discovering the smallest antipathy. An Æthiopian ambassador had brought this animal as a present; Voyage de Chardin, tom. iii. p. 45.

state of liberty, they fight in the same manner. But every action without a motive is unnatural; it is an effect without a cause, which cannot happen but by accident.

The rhinoceroses assemble not, nor march in troops like the elephants. They are more solitary and savage; and it is, perhaps, more difficult to hunt, and to overcome them. They never attack men *, unless they are provoked, when they become furious and formidable. Their skin is so hard as to resist sabres, lances, javelins, and even musket balls †. The only penetrable parts of the body are the belly,

The rhinoceros never attacks any person, nor becomes furious, unless he is provoked, and then his ferocity is tremendous; he grunts like a hog, and overturns trees and every thing that comes in his way; Voyage de la Compagnie des Indes

de Hollande, tom. vii. p. 278.

⁺ His skin is thick, hard, and rough. . . It is even impenetrable by the fabres of the Japanese, and coats of arms, bucklers, &c. are made of it; Id. Ibid. p. 483 .- The rhinoceros feldom attacks man, unless when provoked, or the person wears a red habit. In both these cases, he becomes furious, and overturns every thing that opposes him. When these animals attack a man, they feize him by the middle of the body, and tofs him up with fuch force, that he is killed by the fall. . . . However enraged he may be, it is easy to avoid his approach: He is, indeed, very fwift; but he turns with great difficulty. Befides, according to my information, he fees only what is before him. Hence, when he comes within a few paces, we have only to step to a side; for he then loses fight of us, and it is very difficult for him to return in quest of us. I have experienced this fact, having more than once feen him advance toward me with all his fury; Descript. du Cap de Bonne-efperance, par Kolbe, tom. iii. p. 17.

the eyes, and about the ears *. Hence the hunters, instead of attacking him face to face, follow him at a distance by the tracks of his feet, and watch till he lies down to fleep. We have, in the royal cabinet, a foctus of a rhinoceros, which was extracted from the body of the mother, and fent to us from the island of Java. By the memoir which accompanied this fœtus, we are informed, that twenty-eight hunters having affembled to attack the mother, they followed her at a distance for some days, detaching one or two of their number, from time to time, in order to reconnoitre her fituation; that, by this means, they furprifed her when afleep, and filently approached fo near, that the whole twenty-eight muskets were discharged at once into the lower part of her belly.

From the description given by Dr. Parsons, it appears that this animal has an acute and very attentive ear. We are likewise assured that his

^{*} It is difficult to kill him; and men never attack him without danger of being torn to pieces. Those who are accustomed to hunt the rhinoceros sind means, however, to defend themselves from his sury; for he is fond of marshy grounds; they observe when he repairs thither, and, concealing themselves among the bushes opposite to the direction of the wind, they watch till he lies down either to sleep or to wallow, that they may have an opportunity of shooting him near the ears, where alone he can receive a mortal wound. They place themselves against the wind; because the scent of the rhinoceros is so acute, that he never approaches any object he perceives till the smell of it reaches his nostrils; Hist. Nat. de Siam, par Gervaise, p. 35.

sense of smelling is excellent. But it is said, that his eyes are not good, and that he fees fuch objects only as are before him *. The extreme minuteness of his eyes, their low, oblique, and deep fituation, the dullness, and the finall degree of motion they feem to poffefs, tend to confirm this fact. His voice, when he is in a state of tranquillity, is blunt, and refembles the grunting of a hog; but, when enraged, it becomes fharp, and is heard at a great distance. Though he lives on vegetables only, he does not ruminate. Hence it is probable, that, like the elephant, he has but one stomach, and capacious bowels, which supply the place of many stomachs. His confumption of food, though confiderable, is not near fo great as that of the elephant; and it appears, from the denfity and un-

^{*} See the preceding note.-The eyes of the rhinoceros are very fmall, and he fees only forward. When he walks, or purfues his prey, he proceeds always in a direct line, forcing, overturning, and piercing through every obstruction that falls in his way. Neither bushes, nor trees, nor thickets of brambles, nor large stones, can turn him from his course. With the horn on his nofe, he tears up trees, raifes stones high in the air, and throws them behind him to a confiderable distance, and with a great noise: In a word, he overthrows every object which he can lay hold of. When he is enraged, and meets with no obstruction, lowering his head, he plows the ground, and throws large quantities of earth over his head. He grunts like a hog: His cry, when in a state of tranquillity, does not reach far; but, when in pursuit of his prey, it may be heard at a great distance; Descript, du Cap de Bonne Esperance, tar Kolbe.

interrupted thickness of his skin, that he also loses much less by perspiration.

SUPPLEMENT.

I Have feen a fecond rhinoceros, which was lately brought to the royal menagery. In the month of September 1770, if the people who conducted it can be credited, the animal was only three months old. But, I am perfuaded, that it was at least two or three years of age; for its body, including the head, was already eight feet two inches long, five feet fix inches high, and eight feet two inches in circumference. A year afterward, its body was lengthened feven inches; fo that on the 28th day of August 1771, it was eight feet nine inches, including the length of the head, five feet nine inches high, and eight feet nine inches in circumference. On the 12th day of August 1772, the length of the body, comprehending the head, was nine feet four inches, the height of the crupper fix feet four inches, and that of the withers only five feet eleven inches. Its skin had the colour and appearance of an old elm tree, fpotted in fome places with black and gray, and in others doubled into deep furrows, which formed a kind of scales. It had only one horn, the colour

colour of which was brown, and its fubstance folid and hard. The eyes are fmall and prominent, the ears large, and pretty fimilar to those of an afs. The back, which was hollow, or depressed, seemed to be covered with a natural faddle. The legs were short and very thick. The feet were rounded behind, and divided before into three hoofs. The tail refembled that of an ox, and was garnished with black hairs at the extremity. The penis lay along the tefticles, and erected itself for the discharge of urine, which the animal threw out to a great distance. The point of it was also very remarkable, forming a cavity like the mouth of a trumpet. The fheath from which it issues is fleshy, and of a vermilion colour, like the penis itself. This fleshy substance, which formed the first tube, came out of a fecond sheath composed of skin, as in other quadrupeds. The tongue is fo hard and rough, that it tears off the skin of any perfon whom it licks; hence this animal eats large thorns, without feeling any pain. The rhinoceros requires one hundred and fixty pounds of food every day. His flesh is much relished by the Indians and Africans, and especially by the Hottentots. If trained when young, he might be rendered domestic, and, in this state, he would multiply more eafily than the elephant.

'I could never discover the reason (M. P. remarks) why in Asia the rhinoceros is allowed to remain in a wild state, while in Abyssinia he

s is rendered domestic, and is employed in car-

rying burdens *.'

' M. de Buffon,' fays Mr. Bruce, ' conjectured that there were, in the interior parts of Africa,

frhinocerofes with two horns. This conjecture

is fully verified; for all the rhinocerofes I faw

in Abysfinia had two horns. The first, that is,

the one nearest the nose, is of the common

form; the second is sharp at the point, and

always shorter than the first. Both spring at

the fame time; but the first grows more quickly,

and exceeds the other in fize, not only during

the time of growth, but during the whole life of the animal +.'

On the other hand, M. Allamand, a very able naturalist, wrote to M. Daubenton a letter, dated at Leyden, October 31, 1766, in the following terms:

I recollect a remark of M. Parsons, in a paffage quoted by M. de Buffon: He suspected

that the rhinoceroses of Asia have but one

horn, and that those of the Cape of Good

Hope have two. I suspect the very opposite:

"The heads of the rhinocerofes which I received

from Bengal and other parts of India, had al-

ways double horns, and all those which came

^{*} Defense des Recherches sur les Americains, p. 95.

⁺ Note communicated by Mr. Bruce to M. de Buffon.

from the Cape of Good Hope had but one horn.'

This last passage proves what we have formerly remarked, that the rhinoceroses with double horns form a variety in the species, a particular race, which is found equally in Asia and Africa.

THE RHINOCEROS.

to remain in a wild flate, while in Abyffinia he is rendered domedie, and is employed in car-



RHINOCEROS.