## Barr's Buffon.

# Buffon's Natural History.

CONTAINING

## A THEORY OF THE EARTH,

A GENERAL

HISTORY OF MAN,

OF THE BRUTE CREATION, AND OF VEGETABLES, MINERALS,

 $\mathfrak{G}_{c}$ .  $\mathfrak{G}_{c}$ .

FROM THE FRENCH.

WITH NOTES BY THE TRANSLATOR.

IN TEN VOLUMES.

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#### THE RHINOCEROS.

AFTER the elephant the Rhinoceros (fig. 124.) is the most powerful of quadrupeds; he is at least twelve feet in length, from the extremity of the snout to the tail; six or seven feet in height, and the circumference of his body is nearly equal to his length. In bulk, therefore, he nearly resembles the elephant, and if he appears smaller it is because his legs are shorter in proportion than those of the elephant. But if he differs widely from that fagacious animal by his natural faculties and intelligence, having received from Nature merely what the grants in common to all animals. He is deprived of all feeling in his skin, having no organ to answer the purpose of hands, to give him a distinct sense of touching; instead of a trunk he has only a moveable lip, in which centers all his dexterity. He is superior to other animals only in strength, magnitude, and the offensive weapon, which he carries upon his nose, and which is peculiar to him. This weapon

weapon is a very hard horn, solid throughout, and placed more advantageously than the horn of ruminating animals; those only protect the superior parts of the head and neck, whilst the horn of the rhinoceros defends all the exterior parts of the muzzle, the mouth, and the face, from infult. For this reason the tiger attacks more readily the elephant, whose trunk he can feize, than the rhinoceros, which he cannot attack in front without running the danger of having his infide torn out; for the body and limbs are covered with so impenetrable a skin that he fears neither the claws of the tiger nor lion, nor the fire and weapons of the hunfman. His skin is blackish, of the same colour, but thicker and harder than that of the elephant; nor does he feel the sting of flies. He cannot contract nor extend his skin; it is folded by large wrinkles on the neck, shoulders, and rump, to facilitate the motion of his head and legs, which last are massive, and terminated by large feet, armed with three great toes. His head is larger in proportion than that of the elephant, but his eyes are still smaller, which he seldom opens entirely. The upper jaw projects above the lower, and the upper lip is moveable, and may be lengthened fix or seven inches; it is terminated by a sharp T t 2 edge,

edge, which gives the animal a power to gather grass and divide it into handfuls, as the elephant does with his trunk. This muscular and flexible lip is a fort of trunk very incomplete, but is equally calculated for strength and dexterity. Instead of those long ivory tusks, which form the weapons of the elephant, the rhinoceros has a powerful horn, and two strong incisive teeth in each jaw: these teeth, which the elephant has not, are placed at a great distance, one in each corner or angle of the jaws: the under jaw is square before, and there are no other incisive teeth in all the interior part, which is covered by the lips; but, independent of these four incisive teeth, placed in the four corners of the mouth, he has twenty-four smaller teeth, six on each side of each jaw. His ears are always erect; they are in form like those of the hog, only they are smaller in proportion to his body, and they are the only hairy parts about him. The end of the tail, like that of the elephant, is furnished with a tuft of large bristles, very hard and very folid.

Mr. Parsons, a celebrated physician in London, to whom the republic of letters is indebted for several discoveries in Natural History, and to whom I am under obligations for the marks

of esteem and friendship he has honoured me with, published in 1744, a Natural History of the Rhinoceros, of which I shall give an extract with more willingness, because whatever Mr. Parsonshas written deserves credit and attention.

"Though the rhinoceros was often feen at the spectacles at Rome, from the time of Pompey to that of Heliogabalus, though many have been transported into Europe in those last ages, and though Botius, Chardin, and Kolbe, have drawn his figure, both in the Indies and Africa, yet he was so badly represented, and his description was so incorrect, that he was known very imperfectly, until those which arrived in London in 1739 and 1741, were inspected, when the errors or caprices of those who had published figures of him became very visible. That of Albert Durer, which was the first, and also the least conformable to Nature; that figure has, nevertheless, been copied by most naturalists; some of them have loaded it with false drapery, and foreign ornaments. That of Botius is more simple and more true; but the inferior part of the legs is hardly delineated. On the contrary, that of Chardin represents naturally the foldings of the skin and the feet, but in other respects does not resemble the animal.

mal. That of Camerarius is not better; no more is that drawn from the rhinoceros which was in London in 1685, and which was published by Carwitham in 1739. Those which were engraved on the pavement of Præneste, or on the medals of Domitian, are very imperfect: but they have not the imaginary ornaments given to that of Albert Durer." Dr. Parsons has taken the trouble to draw this animal himfelf in three different views, before, behind, and in profile; and particular parts from other rhinocerosses which are preserved in the cabinets of Natural History.

The rhinoceros which arrived in London in 1739, was fent from Bengal: though not more than two years old, the expences of his food, and of his voyage, amounted to near one thoufand pounds flerling. He was fed with rice, fugar, and hay; they gave him daily feven pounds of rice, mixed with three pounds of fugar, which they divided into three portions: he had also hay and green herbage, to the last of which he gave the preference. His drink was water, of which he drank great quantities at a time. He was of a quiet disposition, and suffered all parts of his body to be felt. He grew unruly upon being struck, or when he was hungry;

hungry; and in both cases he could only be appealed by giving him fomething to eat. When he was angry he leaped forwards with impetuosity, and raised himself to a great height, and rushed furiously against the walls with his head, and which he did with a prudigious quickness, notwithstanding his heavy appearance and massive corpulence. "I have often been witness (says Dr. Parsons) of those motions produced by impatience or anger, efpecially in the morning before his rice and sugar were brought him. The quickness and celerity of the motions of this animal made me of opinion that he is absolutely unconquerable, and that he would cafily overtake any man who should have given him offence."

This rhinoceros, when two years old, was not higher than a young cow who had never had any young; but his body was very long and very thick. His head was large in proportion to his body; taking it from the ears to the horn of the nose, it formed a concavity, the extremities of which, that is, the upper end of the snout, and the part near the cars are very high. The horn, not then an inch long, was black, smooth at the end, but wrinkled and directed backwards at the base. His nostrils were not above an inch from the mouth; the under

under lip was like that of an ox, but the upper resembled that of an horse, with this difference and advantage, that the rhinoceros can lengthen, direct, turn it round a stick, and seize with it those objects which he wants to carry to his mouth. The tongue of this young rhinoceros was foft like that of a calf; his eyes have no vivacity, they were formed like those of a hog, and were placed very low, that is, near the opening of the nostrils. His ears were large, thin towards the end, and bound up with a fort of wrinkle at the origin. His neck was very short, the skin forming on this part two large foldings which surround him. His shoulders were very thick, and at their juncture there was another fold of skin which comes under the fore legs. The body of this young rhinoceros was very thick, and resembled that of a cow ready to bring forth. There was another fold betwixt the body and the rump, which descends under the hind legs; and lastly, there was another fold which transversally surrounds the lower part of the crupper, at some distance from the tail. The belly was very big, and hung down to the ground, especially the middle part; the legs were round, thick, strong, and bent backward at the joint, which was covered by a remarkable fold of the skin when the animal laid down

down, but it disappears when he was standing. The tail thin and short, comparatively to the volume of his body; that of this rhinoceros was not above seventeen inches in length; it is little thicker at the extremity, which is covered with hard, short, and thick hair. The fexual organ of the rhinoceros is of an extraordinary form; it is contained in a fort of case, like that of a horse, and the first thing which appears when irritated is a fecond prepuce of flesh colour, from which issues a hollow pipe, in form of a funnel, like a fleur de luce. It not being in a straight direction, but rather inclining backward, he emits his urine behind, and from which it appears their copulation must be different from other animals. The female has the exterior parts situate like those of the cow, and she resembles perfectly the male in the fize and form of the body. The skin is thick and impenetrable; in taking the folds with the hands, it feels like a wooden plank half an inch thick. "When it is tanned (fays Dr. Grew) it is excessively hard, and thicker than the skin of any other terrestrial animal." It is every where more or less covered with incrustations, in the shape of galls, which are small on the summit of the neck and back, but become bigger down the Uu Vol. VII. fides ;

sides; the largest are on the shoulders and crupper, the thighs, and around the legs, down to the feet; but betwixt the folds the skin is penetrable, and even tender, and as soft as silk, while the outward part of the folds is as rough as the rest. This tender skin between the folds is of flesh colour, and the skin of the belly is nearly the same colour and consistence; but those galls, or tuberosities, should not, as some authors have done, be compared to scales, as they are mere callosities of the skin, irregular in their figure and symmetry in their respective positions. The suppleness of the skin in the folds gives the rhinoceros the power of moving his head, neck, and limbs, with facility. The whole body, except at the joints, is inflexible, like a cuirass. Dr. Parsons says, that this animal hearkened with a fort of continual attention to any kind of noise; so that if he was even sleeping, eating, or in satisfying other urgent wants, he instantly raised up his head, and listened till the noise had ceased.

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

It is certain that some rhinocerosses have but one horn, and others have two; it is not equally certain that this variety is constant, and depends on the climate of Africa or India, or that two distinct species may be established from these differences. It seems that the rhinocerosses with one horn have it bigger and longer than those who have two. There are single horns of three feet and a half, and, perhaps, of more than four feet in length, by fix or seven inches in diameter at the base. Some double horns are but two feet in length. Commonly these horns are brown, or olive colour, though some are grey, and even white. They have only a small concavity, in form of a cup, under their base, by which they are fastened to the skin of the nose; the remaining part of the horn is solid, and very hard. It is with this weapon that the rhinoceros is said to attack, and sometimes mortally wound, the biggest elephants, whose long legs give the rhinoceros an opportunity of striking them with his fnout and horn under their bellies, where the skin is tender, and penetrable; but

if he misses the first blow the elephant throws him on the ground and kills him.

The horn of the rhinoceros is more valued by the Indians than the ivory of the elephant, not so much on account of its real use, though they make several things of it with the chissel, but for divers specific virtues, and medicinal properties, which they ascribe to it. The white, from being the most rare, are also those which they value most. Among the presents which the king of Siam sent to Louis XIV. in 1686, were six horns of the rhinoceros. We have seen in the king's cabinet twelve of different sizes, and one of them, though mutilated, is three seet eight inches and a half in length.

The rhinoceros, without being ferocious, carnivorous, or even very wild, is, nevertheless, untractable. He is of the nature of a hog, blunt and brutal, without intellects, sentiment, or docility. He is subject to fits of sury, that nothing can calm; for the rhinoceros which Emanuel, king of Portugal, sent to the Pope in 1513, was the cause of the ship being destroyed in which he was transporting; and that which we saw at Paris was drowned in the same manner, in going over to Italy. These animals,

animals, like the hog, are much inclined to wallow in the mire. They like damp and marshy places, and seldom leave the banks of rivers. They are found in Asia and Africa, in Bengal, Siam, Láos, Mogul, Sumatra, Java, in Abyssinia, in Ethiopia, in the country of the Anzicos, and as far as the Cape of Good Hope. But in general the species is not so numerous, or so universally spread, as that of the elephant. The female brings forth but one young, and that at a great distance of time. In the first month the rhinoceros is not much bigger than a large dog; he has no horn when first brought forth, although the rudiments of it is scen in the fœtus. When he is two years old his horn is not above an inch long; and in his fixth year it is about ten inches; and as some of these horns are very near four feet long, it appears that they grow till the half, or, perhaps, during the whole life of the animal, which must be long, fince the rhinoceros, described by Dr. Parsons, was not come to half his growth at two years old, which makes it probable that this animal, like man, lives to feventy or eightyyears.

Without the capacity of being useful as the elephant, the rhinoceros is equally hurtful by the prodigious devastation which he makes in

the fields. He has no one advantageous quality while alive. His flesh is excellent, according to the taste of the Indians and Negroes: Kolbe says, he has often eaten it with pleasure. His skin makes the best and hardest 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 as antidotes against poison, or remedies against several diseases. These antidotes, or remedies, extracted from different parts of the rhinoceros, are of the same use in the dispensatory of the Indians, as the theriaca is in that of Europe. Probably all those virtues are imaginary:-But how many things are held in great estimation, which have no value but in the opinion of men.

The rhinoceros feeds upon coarse herbs, such as this wild food to the sweetest pasture of the verdant meadows. He is fond of sugar canes, and eats also all sorts of corn. Having no taste for sless, he neither molests small animals, nor sears the large ones, but lives in peace with them all, not excepting the tiger, who often accompanies, without daring to attack him; therefore I doubt, whether the battles betwixt the elephant and rhinoceros have any foundation;

they must at least be seldom, since there is no motive for war on either side; and, besides, no fort of antipathy has been observed between these animals. Some even in captivity have lived quietly together, without giving offence or provocation. Pliny is, I believe, the first who has mentioned these battles betwixt the rhinoceros and elephant. It seems they were compelled to fight in the speciacles at Rome, and probably from thence the idea has been taken, that when in their natural state they fought as desperately, but every action without a motive is unnatural; it is an effect without a cause, which cannot happen but by chance.

The rhinocerofics do not herd together, nor march in troops like the elephants; they are more wild and folitary, and perhaps more difficult to hunt and subdue. They never attack men unless provoked; but then they become furious, and are very formidable. Neither seymetars, darts, nor lances, can make an incision upon his skin, which even resists musket balls; the only places penetrable in his body are the belly, the eyes, and around the ears; so that the hunters, instead of facing and attacking this animal, sollow him at a distance by his track, and wait till he lies down to rest or sleep. We have in the king's

tracted from the body of the mother, and fent from the island of Java: it was said, in a memorial which accompanied this present, that twenty-eight hunsmen having assembled to attack this rhinoceros, they followed her at a distance for some days, one or two walking now and then before to reconnoitre her situation; by these means they surprised her when she was assep, and silently came so near that they discharged at once their twenty-eight guns into the lower parts of her belly.

By the description given by Dr. Parsons, it appears that this animal has a good ear, and even very attentive: it is also affirmed, that his sense of smelling is excellent; but it is said that he has not a good eye, and fees only those things which are before him: his eyes are for fmall, and placed so low, and obliquely, they have so little vivacity and motion, that this fact feems to be confirmed. His voice, when he is calm, resembles the grunting of a hog; but when he is angry, it is sharp, and heard at a great distance. Though he lives upon vege-· tables, he does not ruminate: thus, it is probable, that, like the elephant, he has but one stomach, and very large bowels, which supply the office of many stomachs. His consumption

tion of food, though very great, is not comparable to that of the elephant, and it appears, by the thickness of his skin, that he loses much less than the latter by perspiration.

#### SUPPLEMENT.

IN the month of September, 1770, another rhinoceros was brought to the royal menagerie, which was faid to be only three months old; but I am persuaded it was as many years, for it was eight feet two inches in length, including the head, five feet fix inches high, and eight feet two inches in circumference; by the 28th of August, 1781, it had increased seven inches in length, three inches in the height, and seven inches in circumference; and on the 12th of August, 1772, it measured nine feet four inches in length, including the head, fix feet four inches high at the crupper, and only five feet eleven at the withers. In fome places its skin was spotted with black and grey, and in others it was in deep furrows, having the appearance of a kind of scales.  $\mathbf{X} \mathbf{x}$ This VOL. VII.

This animal had but one horn, which was brown, and of a very hard substance; and in all other respects he nearly resembled the defeription we have already given.

Mr. Bruce has remarked, that my conjecture, that in the interior parts of Africa there were rhinoceroses with two horns, was exactly the case, for he saw none in Abyssinia but what had one fituated near the nose, which was of the common form, and the other rather higher on the head, sharp at the point, and always shorter than the first. M. Daubenton received a letter from M. Allemand at Leyden, in 1776, in which that gentleman says, "In a passage M. de Buffon has quoted from Mr. Parsons, it is supposed, that the rhinoceroses of Asia have but one horn, and those of the Cape of Good Hope have two, but I am inclined to believe the opposite is the fact, for the heads of those I have received from Bengal, and other parts of India, had always two horns, and those which came from the Cape had but one." This remark of M. Allemand we may consider as a confirmation of our former observation, that the rhinocerofes with two horns form a variety in the species, and may be equally found in Asia and Africa.

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END OF THE SEVENTH VOLUME.