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ARRANGED ACCORDING TO THE CLASSIFICATION OF STARK

EDITED BY A. A. GOULD, M. A.

WITH 400 ENGRAVINGS.

BOSTON:

PHILLIPS, SAMPSON AND COMPANY. 1857. the sty, and do not quarrel among each other, except when they happen to be fed in common. When enraged, they draw their breath with great force, and their bristles point upward; nor, on such occasions, can these be said so much to resemble the bristles of the wild boar as the sharp armor of the hedgehog.



Captain Waterton, who made several excursions into the forests of Guiana, tells us that the Macoushi Indians are accustomed to kill birds and other game, with arrows dipped in poison called wourali. This is made from a plant of that name, mixed with several other ingredients, and prepared with magical ceremonies and incantations. A large portion of the food of the natives consists of peccaries slain by the poisoned arrows. The bow is commonly used, and the animal seldom runs two hundred paces after being struck before he dies by the effect of the subtle poison. It is remarkable that the flesh of creatures killed in this manner, is perfectly wholesome. Besides the bow, the Indians often use a tube made of a reed eleven or twelve feet in length, through which the arrow is sent by the breath with great precision and considerable force. Birds are generally killed in this way, and sometimes larger animals.

## THE RHINOCEROS.

AFTER the elephant, the rhinoceros is the most powerful of all quadrupeds. He is at least twelve feet in length, from the extremity of the snout to the

¹ Rhinoceros of India, Rhinoceros Indicus, Sumatra Rhinoceros, Rhinoceros Sondaicus, and Rhinoceros Sumatrensis, (two species.) Two homed Rhinoceros, Rhinoceros Africanus and Rhinoceros Camus, (two species.) The genus Rhinoceros has sometimes bone, sometimes two, and sometimes four upper and the same number of lower incisors; no canines; twelve or fourteen upper and the same number of lower molars. Incisors unequal among themselves when they exist; anterior molars small, the posterior increasing progressively; eyes small, lateral; ears long, narrow; three toes on all the feet; one or two horns placed on the nose, above the nasal cavity; skin very thick, naked and ragous; tail short, laterally compressed.

tail; six or seven feet in height; and the circumference of his body is very nearly equal to his length; he is therefore like the elephant in bulk; and if he appears much smaller, it is because his legs are much shorter in proportion to those of the elephant; but he differs widely from that sagacious animal, in his natural faculties, and his intelligence; having received from nature merely what she grants in common to all animals, deprived of all feeling in the skin, having no organ answering the purpose of hands, nor distinct for the sense of feeling, he has nothing instead of a trunk, but a moveable upper lip, in which centres all his dexterity. He is superior to other animals only in strength, size, and the offensive weapon which he carries upon his nose, and which is peculiar to him. This weapon is a very hard horn, solid throughout, and placed more advantageously than the horns of ruminating animals; these only protect the superior parts of the head and neck, whilst the horn of the rhinoceros defends all the exterior parts of the snout, and preserves the muzzle, the mouth, and the face from insult: so that the tiger attacks more readily the elephant, in seizing his trunk, than the rhinoceros, which he cannot attack in front, without running the danger of being killed; for the body and limbs are covered with an impenetrable skin; and this animal fears neither the claws of the tiger nor the lion, nor even the fire and weapons of the huntsman; his skin is a dark leather, of the same color, but thicker and harder than that of the elephant; he does not feel he sting of flies; he cannot contract his skin; it is only folded by large wrinkles on the neck, the shoulders, and the buttocks, to facilitate the motions of the legs, which are massive, and terminate in large feet, armed with three great claws. The skin of the two horned rhinoceros is much more easily penetrable than that of the single horned. It not only appears that the skin is thinner than that of the one horned rhinoceros, but it seems that it has not the same folds. Mr Burchell says that there are two distinct species of the two horned rhinoceros in South Africa. He has the head larger in proportion than the elephant; but the eye still smaller, which he never opens entirely, and they are so situated that the animal can see only what is in a direct line before him. The upper jaw projects above the lower; and the upper lip has a motion, and may be lengthened six or seven inches; it is terminated by a sharp edge, which enables this animal, with more facility than other quadrupeds, to gather branches and grass, and divide them into handfuls, as the elephant does with his trunk. This muscular and flexible lip is a sort of trunk very incomplete, but which is equally calculated for strength and dexterity. Instead of those long ivory teeth which form the tusks of the elephant, the rhinoceros has his powerful horn, and two strong incisive teeth in each jaw. These incisive teeth, which the elephant has not, are placed at a great distance from each other in the jaws of the rhinoceros. He has, besides these, twenty-four smaller teeth, six on each side of each jaw. His ears are always erect; they are, for the form like those of a hog, only they are larger in proportion to his tody; they are the only harry parts of it. The end of the tail is, like that of the elephant, furnished with a tust of large bristles, very hard and very solid. Huge and seemingly unwieldy as the rainoceros is, he has the power of running with very great swiftness.

The rhinoceros which arrived in London in 1739, had been sent from Bengal. Although he was young, (being but two years old,) the expenses of his food, and his voyage, amounted to near one thousand pounds sterling; he was fed with rice, sugar, and hay. They gave him daily seven pounds of rice, mixed with three pounds of sugar; which they divided into three parts. He had, also, a great quantity of hay and green grass, to which he gave the preference. His drink was nothing but water, of which he drank a great quantity at once. He was of a quiet disposition, and let his manager touch him on all the parts of his body. He grew unruly when he was struck, or was hungry; and in both cases he could not be appeased without giving him something to eat. When he was angry, he leaped forward with impetuosity to a great height, beating furiously the walls with his head; which he did with a prodigious quickness, notwithstanding his heavy appearance.

This rhinoceros, when he was two years old, was not much higher than a young cow who has not yet borne soung; but his body was very long and very thick. The tongue of this young rhinoceros was soft, like that of a calf; his eyes had no vivacity; they are like those of a hog in form, and were placed very low; that is, nearer the opening of the nostrils.

Mr Parsons says, that he has observed a very particular quality in this animal; he hearkened with a sort of continual attention to any noise; so that, if he even was sleepy, employed in eating, or in satisfying other-urgent wants, he started instantly, raised up his head, and gave attention till the noise had ceased.

It is certain that some rhinoceroses have but one horn on the nose, and others two. In the two-horned rhinoceros, one of the horns is smaller than the other, and is situated above it. When the animal is quiescent these homs are loose, but they become fixed when it is irritated. There are single horns of three feet and a half, and perhaps of more than four feet in length, by six or seven inches in diameter at the base; there are also double horns which are but two feet in length. Commonly, these horns are brown, or olive color; yet some are gray and even white. They have only a small concavity, in form of a cup, at their basis, 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 to wound mortally the largest elephants, whose long legs give the rhinoceros who has them much shorter; an opportunity of striking them with his horn under the belly, where the skin is tender, and more 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 the matter, of which they make several works with the chisel, but for its substance, to which they attribute divers virtues, and medicinal properties. The white ones, as the most rare, are also those which they value most. Cups made of this horn are used to drink out of by many of the Indian princes, under the erroneous idea that when any poisonous fluid is put into them, the liquor will ferment and run over the top.

The rhinoceros, without being ferocious or carnivorous, or even very wild, is nevertheless untamable. He is of the nature of a hog, blunt and grunting, without intellect, without sentiment, and without tractableness. These animals are also, like the hog, very much inclined to wallow in the mire; they like damp and marshy places, and seldom leave the banks of They are found in Asia, and Africa, in Bengal, Siam, Laos, in the Mogul dominions, in Sumatra, in Java, in Abyssinia, and about the Cape of Good Hope. The two-horned rhinoceros is only found in Africa. 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 at a great distance of time. In the first month the rhinoceros is not much bigger than a large dog; he has not, when first brought forth, the horn on the nose, although the rudiment of it is seen in the fœtus. When he is two years old, this horn is only an inch long; and in his sixth year it is about ten inches. And as some of these horns have been seen very near four feet long, it seems they grow till his middle age, and perhaps during the whole life of the animal, which must be long, since the rhinoceros described by Mr Parsons was not come to half his growth when he was two years old; which makes it probable, that this animal lives, like a man, seventy or eighty years.

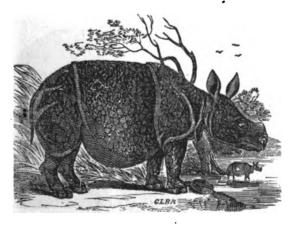
Without being useful, as the elephant, the rhinoceros is very hurtful, by the prodigious devastation which he makes in the fields. The skin is the most valuable part of this animal. His flesh is excellent, according to the taste of Indians and negroes. Kolben says, he has often eaten it with great pleasure. 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, his urine, and his excrements, are esteemed as antidotes against poison, or a remedy against several diseases; probably, however, all those virtues are imaginary.

The rhinoceros feeds upon herbs, thistles, prickles, and shrubs; and he prefers this wild food to the sweet pasture of the verdant meadows: he is very fond of sugar-canes, and eats all sorts of corn. Having no taste whatever for flesh, he does not molest small animals, neither fears the large ones, living generally in peace with them all, even with the tiger, who often accompanies him, without daring to attack him.

The rhinoceroses do not herd together, nor march in troops, like the elephant; they are wilder, and more solitary, and perhaps more difficult

to be hunted and subdued. They never attack men unless provoked; but then they become furious, and are very formidable. The steel of Damascus, the cimeters of Japan, cannot make an incision in his skin; the darts and lances cannot pierce him through. His skin even resists the balls of a musket; those of lead become flat upon his leather, and the iron ingots cannot penetrate through it. The only places absolutely penetrable in this body, armed with a cuirass, are the belly, the eyes, and round the ears; so that huntsmen, instead of attacking this animal standing, follow him at a distance by his track, and wait to approach him at the time that he sleeps or rests himself. There is, in the king of France's cabinet, the fœtus of a rhinoceros, which was sent from the island of Java, and extracted from the body of the mother. It was said, in a memorial which accompanied this present, that twenty-eight huntsmen had assembled to attack this rhinoceros. They had followed her far off for some days, one or two men walking now and then before, to reconnoitre the position of the animal. By these means, they surprised her when she was asleep, and came so near in silence, that they discharged, all at once, their twenty-eight guns into the lower parts of her belly.

A rhinoceros, about a year old, recently brought from Calcutta, was lately exhibited in Boston. The engraving furnishes a very exact representation of this animal. Its length, from the nose to the insertion of the tail,

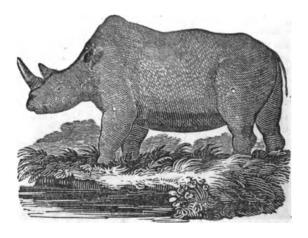


was six feet; its height, three feet four inches. The length of its head, eighteen inches; that of its tail, thirteen inches. The horn had not made its appearance upon the nose, but there was a large protuberance, which indicated the place where it was growing, and seemed to form the root or basis of it. The animal, when disturbed, made a noise like a young calf. It had very much the air and manners of a hog. It betrayed no fear

or shyness, but seemed constantly intent upon getting something to eat. It fed upon hay, potatoes, and grain, and so greedy was its appetite, that no hing came amiss. Another recently arrived at Boston, and died in the harbor. It was about a third larger than the one above mentioned. Its skeleton, beautifully prepared, is now in the Cabinet of the Boston Society of Natural History.

We have seen that this animal has a good ear; it is also affirmed, that he has the sense of smelling in perfection; but it is pretended he has not a good eye, and sees only before him. His eyes are so small, and placed so low, and so obliquely, they have so little vivacity and motion, that this fact needs no other confirmation. His voice, when he is calm, resembles the grunting of a hog; and when he is angry, his sharp cries are heard at a great distance. Though he lives upon vegetables, 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 the paunch. His consumption, though very great, is not comparable to that of the elephant; and it appears, by the thickness of his skin, that he loses less than the elephant his perspiration.

Two species of the two horned rhinoceros are found in South Africa. The following figure was drawn from life, by Mr Melville, and conveys an accurate representation of the species, which abounds most in the Bechuana



country. The horn of the female is, however, much longer and more slender than that of the male, being three and a half feet long. Being a strong, ponderous, and elastic substance, it is much prized by the natives, for handles to their battle-axes. The secondary horn is, in many instances so small as to be scarcely perceptible at a little distance.