

WILD ANIMALS

PHOTOGRAPHED AND DESCRIBED.

*ILLUSTRATED BY PHOTOTYPE REPRODUCTIONS OF
PHOTOGRAPHIC NEGATIVES TAKEN FROM LIFE*

BY

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CHAPTER XIX.

THE RHINOCEROS FAMILY (*RHINOCERIDÆ*).

IN size and strength the members of this extraordinary family of quadrupeds rank next to the elephants; they are, therefore, the second largest and most powerful of terrestrial mammalia. Although there are seven or eight recognized species still existing, yet, as more than this number have become extinct, the family must at one period have been an extensive one. Their range must also have been a much wider one than it is at present, for in a former epoch these animals were well distributed over the world's surface; but at the present day they only inhabit two comparatively small areas, widely separated, one in Asia and the other in Africa. The structural affinity of the various species peculiar to either of these quarters of the globe is unmistakable, and the distinctions between the Asiatic and African animals are well defined and easily discernible. The race to which an animal belongs is therefore to be determined at a glance.

The Asiatic rhinoceros, of which four species are recognized, form a distinct group, distinguishable from their African brethren by the thick folds in the skin, and the presence of incisor teeth. They are known as follows:—The Indian rhinoceros (*R. Indicus*); the Javan rhinoceros (*R. Javanicus*); the Sumatran rhinoceros (*R. Sumatranus*), and the hairy-eared rhinoceros (*R. Lasiotis*).

The African species are all found in Africa proper, that is south of the Sahara; none are found in north Africa, and they fall naturally into two groups—those which browse on trees, and those that graze, distinguished readily by the prehensile or non-prehensile upper lip.¹ Zoologists have subdivided these animals

¹ "Geographical Distribution of Animals."

again into five species, three black ones and two white. The two white rhinoceroses (*R. Simus*) and (*R. Osweillii*); the black rhinoceros (*R. Bicornis*); the keitloa rhinoceros (*R. Keitloa*), and another (*R. Cucullatus*). The adult animals have no incisor teeth, and scarcely any appearance of the peculiar folds of the integument which is such a characteristic feature of the Indian species.

The rhinoceros has a large, unwieldy body, supported on short, thick legs, and its appearance in consequence is clumsy and uncouth. The legs terminate with large callous pads, divided into three toes, which are covered with broad, hoof-like nails. The tail is short, and has a small tuft at the end. The whole body, head, and limbs are covered with an extremely hard and thick skin, which in none of the existing animals exhibits more than mere traces of hair, although there is evidence that some of the extinct species were covered with fur.

The head of a rhinoceros is large and surmounted by moderately long ears. The eyes are very small. The muzzle is prolonged, and the fleshy covering of the upper lip can be protruded so much that the animal employs it to collect and draw its food into the mouth. Their senses of hearing and scent appear to be acute, but their sight is somewhat limited, for the position of the eyes, which are set far back, prevents them from clearly discerning objects that are exactly in front of them.

The nasal bones curve into an arch that forms the support for a horn, or in some instances two, which is the most remarkable peculiarity of these strange beasts, and one that is unique in mammalia. It is from this feature of the animal the name rhinoceros has been given it, a word derived from two Greek ones, meaning nose and horn.

In neither species does the horn connect directly with the skull-bones, but it simply grows from the skin, and can easily be removed from the hide by separating it with a sharp knife.

From the very earliest times many superstitions have existed among the natives in India regarding the horn of the rhinoceros. It was supposed that water drunk from a cup made from it had wonderful medicinal qualities; but the idea most firmly rooted in the Aryan mind is that the horn is an antidote to poison, and

is not only useful in curing a person who may be its victim, but efficacious in detecting its presence. Indian rulers have for centuries used drinking-cups made of it, under the notion that "it sweats at the approach of any kind of poison whatever." Upon this subject Thunberg writes: "It is generally believed that goblets made of the horns, in a turner's lathe, will discover any poisonous draught that is put into them by making the liquor ferment till it runs quite out of the goblet. Such goblets are frequently set in gold and silver, and are regarded as suitable presents to kings, persons of distinction, and particular friends; or else they are sold at a high price, sometimes at the rate of fifty-six dollars a goblet. When I tried these horns, both wrought and unwrought—both old and young horns—with several sorts of poison, weak as well as strong, I observed not the least motion or effervescence; and when a solution of corrosive sublimate, or other similar substance, was poured into one of these horns there arose only a few bubbles, produced by the air that had been enclosed in the pores of the horn, and which was now disengaged from them."

The horn is a very remarkable structure, for it is not a bony formation like the horns of deer, antelope, or oxen, but is composed simply of agglutinated hairy filaments, rigidly compressed into a dense substance. When this fact is taken into account, its weight appears astonishing. The tip becomes polished and smooth from use. The animal employs this weapon to dig up roots and loosen things in the earth that it may require for its sustenance.

All natural history books describe the horn as being employed also for a weapon of offence or defence, and the way in which it is attached to the head—namely, in such a manner that it has no direct connection with the skull, is said to be a beautiful arrangement of nature to prevent the injurious consequences to the brain that might otherwise result from the violent concussions it would undoubtedly be subject to when so used.

Of all large animals the rhinoceroses in their wild state are the ones about which there exists the smallest amount of information. The salient features of their appearance, peculiarities, and habits have been frequently described, but there is ample room

for more accurate and closer study of these creatures in their native haunts. Upon this subject of their using the horn for combative purposes opinions are divided, and no positive statement can be made. That they may occasionally have to so use it is quite probable, but that they invariably do so is open to doubt. That hard blows can be struck with it is obvious, but that it is used to rip up their opponents in the same way as the wild hog uses his tusks is the point upon which more information is required. Its large circumference, and the loose way in which it is attached to the animal, would hardly allow it to be driven in with any force, or it could not be withdrawn, and would be torn from its roots. One of the animals in the Zoological Gardens, in 1870, was the victim of self-mutilation by using his horn for work beyond its capacity. He was let out for exercise in the paddock provided for the purpose, and tried to upheave the massive iron railings that divide the enclosure by placing his horn underneath. It, of course, resisted his efforts, but he kept on making repeated attempts until at last the thick, massive horn was torn away from the head and fell into the yard. At first there was considerable loss of blood, and the animal roared lustily for a few minutes, but soon became quiet. The wound was doctored by Mr. Bartlett, who applied some neat's-foot oil to keep away the flies, and in a short time his patient was as well as ever. A new horn began to appear shortly afterwards.

Colonel Kinlock, who is an authority on Indian sport, in the new edition of his work,² when describing the great Indian rhinoceros remarks: "Contrary to general belief the rhinoceros does not make use of his horn as a weapon of offence; the wounds which it occasionally inflicts on elephants are caused by its long, sharp incisors, with which it can give a very formidable bite."

Captain Williamson³ describes the rhinoceros as being the inveterate enemy of the elephant, which he attacks whenever he can get a favourable opportunity, ripping without mercy. "The apparent bluntness of the horn," he writes, "which is about as broad at the base as it is high, would appear to render it an

² "Large Game Shooting," Calcutta, 1885.

³ "Oriental Field Sports," 1807.

insignificant weapon, and inadequate to penetrate any hard or tough substance." That this, however, is not the case, he thinks proved by the fact that elephants have often been found dead, obviously from wounds received from the horn of a rhinoceros. This evidence rests only on native statements, for Williamson himself does not state he ever saw a dead elephant so wounded. He mentions, however, that Major Lally, an officer of the Indian army, whose veracity was beyond question, while engaged in a hunting expedition, saw a desperate encounter between a rhinoceros and a large male elephant, in which the latter animal was beaten ; but the method of attack adopted by the rhinoceros in this fight is not stated, and the narration only proves that these two animals are natural enemies and occasionally fight.

All varieties of the rhinoceros are subject to violent fits of temper, which are frequently exhibited, even when they have not received any apparent provocation. Their strength and the power of uprooting fences, or attacking animals, make them dangerous and troublesome at such periods, and care has to be exercised to prevent them from committing serious damage, for they appear to have but little method in their madness, judging from the extraordinary series of antics they indulge in, such as rushing about with the horn in the earth, making deep furrows as though cut with a plough, or with loud grunts commencing to rip or trample some bush or other object against which they appear to take a spite, or other equally meaningless proceedings. When in a wild state when in this condition they will furiously attack any object they may see moving.

These beasts appear to be fond of haunting river-banks and wallowing in the mud. They generally have their hide well coated with a thick layer of this substance, for it is surmised that in this way they endeavour to shield themselves from the attack of the flies which plague the animal world of Asia and Africa. Thick-skinned animals, through having such large pores, are particularly vulnerable and sensitive to these stinging insects.

The best known animal of the family is the large Indian rhinoceros (*R. Unicornis*, called by some naturalists *R. Indicus*).

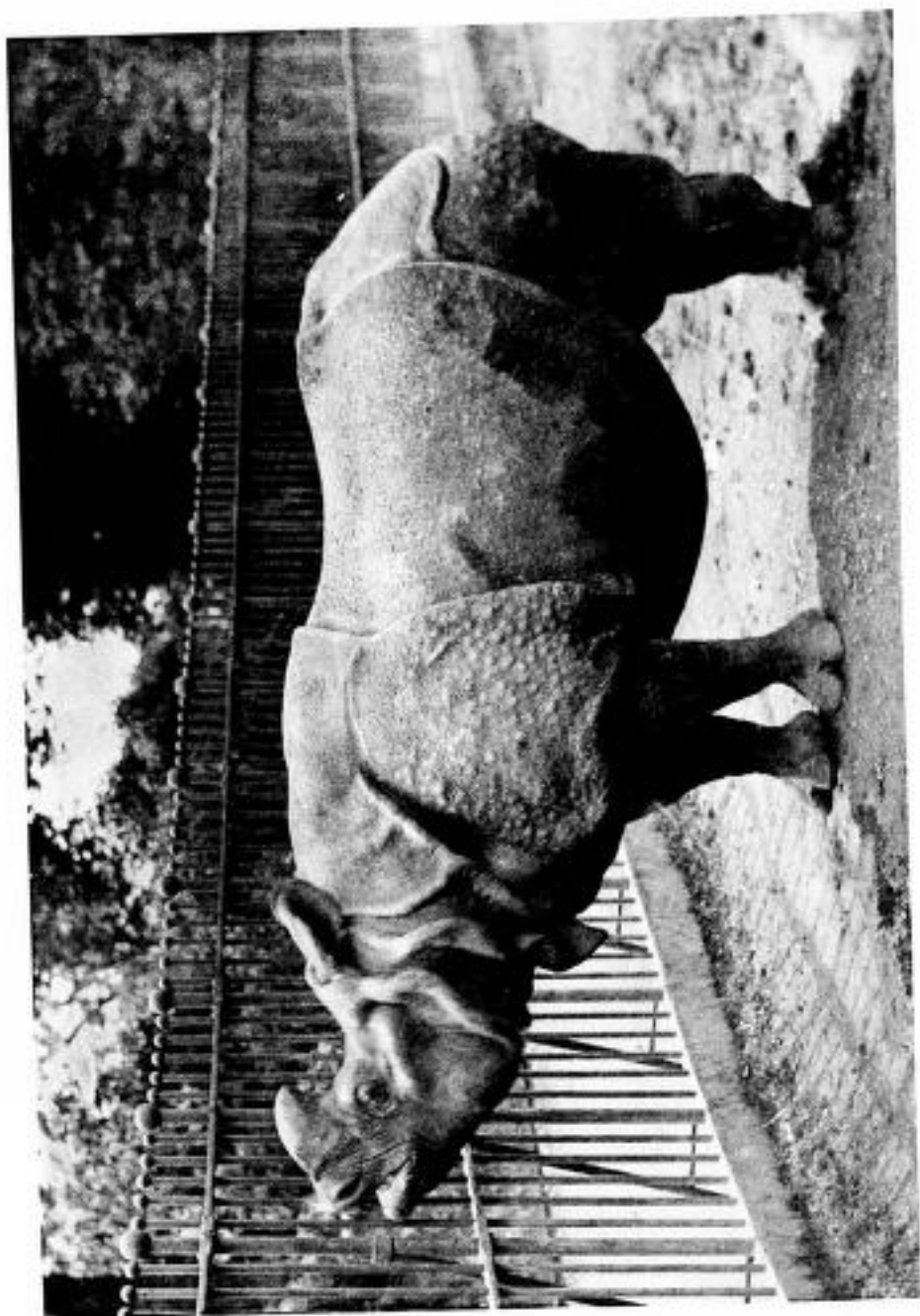
In fact, until a comparatively short time ago, it was the only species with which Europeans were acquainted.

It inhabits the regions of the East Indies beyond the Ganges, and the open valley along the base of the Himalayas from Bhotan to Nepal, and is found in the province of Assam along the valley of the Brahmapootra; it is also reported as having been seen in Bengal, Siam, and Cochin China. These animals appear in former times, according to Kinlock, "to have inhabited the Terai throughout its whole length, but it has been gradually driven eastwards, until at the present day the Nepal Terai is its western limit. Even there its numbers have been much thinned, and it has lately been so highly prized that it has been reserved as Royal game; the late Sir Jung Bahádoor permitting no one to shoot it but himself.

"Many rhinoceros have been shot within the last few years in the vicinity of Julpigoree; but there, partly owing to being constantly hunted, and partly owing to the clearance of large tracts for tea cultivation, they are rapidly becoming scarcer, and the sportsman must travel still further east before he finds them at all plentiful. In the eastern portion of the Bhútán Dooárs, and in Assam, wherever there are heavy reed jungles on the banks of rivers or on the margin of swamps, rhinoceros may be met with, and occasionally several congregate in one covert. I have myself known six to be roused in a belt of 'nul' not more than half a mile long and three or four hundred yards wide."

This species has a single horn on the nose, which is pointed and slightly curved backwards. This horn sometimes measures two feet in length, but the average size it attains is some inches less.

The skin of the Indian rhinoceros constitutes one of its most striking peculiarities. It is very dense and hard, so much so that it has not pliancy enough to permit the movements of the animal, but has to be in a manner jointed by means of folds behind the shoulders, in front of the thighs on the limbs, and these creases are very ample around the neck where it joins the head. These massive folds and the hard appearance of the hide were so frequently described as the well-adjusted pieces of a complete suit of armour, that nearly all the ancient illustrations of the animal,



AN INDIAN RHINOCEROS.

(R. Indicus.)

actually portray it as covered with such a defensive covering. The hide is said to be exceedingly easy to detach from the body, as the quality is so hard and stiff that it separates from the flesh like the peel of a ripe orange. The skin is of a deep purplish-grey colour, and is nearly if not perfectly bare, except on the tail and the ears which have a few coarse and stiff hairs. Each shield of the hide is thickly studded with slightly raised tubercles, nearly circular in shape, and which again convey the idea of armour by giving the skin the appearance of being covered with innumerable bolts whose heads are visible.

The skin, from having these thick and tough-looking folds, is generally described as being nearly invulnerable, even to modern weapons, and that it is only by firing at the joints in the harness that a bullet can be made to penetrate.

Colonel Kinlock refutes this idea by the narration of the following incident: "I recollect," he writes, "an amusing story of a soldier in the Mutiny, who was placed in the guard-room for shooting a tame rhinoceros which had been captured by his regiment. His defence was that he had read in a book that the hide of the animal was bullet-proof, and being of an inquiring turn of mind, had determined to put the theory to the test; as the shot was well directed, the unfortunate subject of the experiment fell dead, and the prize fund was several thousand rupees the poorer.

"As a matter of fact the skin is quite soft when fresh; a bullet will penetrate anywhere with the greatest ease, and a hunting knife can be driven through it with the slightest amount of force. When dried, of course, it becomes extremely hard, and used to be in great request for the manufacture of shields. The hide when polished is very handsome and semi-transparent, and when held up to the light looks exactly like tortoise-shell, the tubercles giving it a beautiful mottled appearance."

This well-known sportsman gives several other interesting particulars regarding the animal. He states that, despite it being such an ungainly beast, it is possessed of considerable speed, and although its usual gait when disturbed is a long, swinging trot, it occasionally breaks into a lumbering gallop, the pace of which is surprising.

“Owing to their formation rhinoceros do not readily roll over on their sides, and when shot they almost always die in a recumbent position, as if they had quietly sunk down to sleep.

“The flesh is excellent, and cannot easily be distinguished from beef; indeed it is better than most beef one sees in India.

“The following are the measurements of an old male which I shot, but larger specimens are to be met with:—

Height at withers	5 feet 9 inches, or 17 hands 1 inch.
Length from nose to root of tail	10 „ 6 „
Length of tail	2 „ 5 „
Girth	9 „ 8 „
Girth of fore-arm	3 „ 2 „

It is a question that has often been discussed whether the animal designated unicorn in the Bible and other ancient writings is not intended for the one-horned rhinoceros; but it has never been satisfactorily settled.

Agatharchides, the Greek peripatetic philosopher, who lived about 130 B.C., was the first writer who described the animal under the name rhinoceros; he speaks of it ripping up the belly of an elephant.

Athenæus, in “The Deipnosophists,” speaks of a rhinoceros figuring in that marvellous procession of Ptolemy Philadelphus (king of Egypt, B.C. 285—247) to which previous reference has been made. It was an Ethiopian animal, and appears to have marched last in the line of wild animals; it has been surmised that this was probably on account of its superior rarity. It came immediately after the camelopard, and before the wain bearing the image of Bacchus, wearing a golden crown, fleeing to the altar of Rhea from the persecution of Juno.

Pliny states the one-horned rhinoceros was first exhibited at the games of Pompeius Magnus, and afterwards was frequently seen in Rome. A rhinoceros and a hippopotamus were killed in the circus as part of the show given by Augustus to celebrate his victory over Cleopatra. From a statement made by Dion Cassius we are led to infer that this animal was of the one-horned species. Martial speaks of Domitian having one with two horns, which was evidently an African animal. This writer seems also to have been acquainted with the single-horn species, for he alludes to it in one

place. Pausanias also speaks of the two-horned animal; but he calls it an *Æthiopian bull*. The Romans must frequently have seen these animals, for we read that the Emperors Antonius, Heliogabalus, and Gordian III., all exhibited them at the various periods of their reigns.

Although their strength and blind ferocity must make these animals terrific opponents of other large and savage beasts when actually engaged in combat, yet when kept in captivity they require urging and angering before they will attack, and if left to themselves seem only to act on the defensive. It is not upon record whether the Romans managed to get more excitement out of these animals than their sporting imitators the princes in India do, for according to accounts given by several writers of the animal combats, that used frequently to be seen at the native courts, the rhinoceros is not a satisfactory beast. Captain Mundy⁴ in his description of the wild animal contests witnessed by him in 1827 in the King of Oude's park in Lucknow, writes: "A rhinoceros was next let loose in the open courtyard and the attendants attempted to induce him to pick a quarrel with a tiger who was chained to a ring. The rhinoceros appeared, however, to consider a fettered foe as quite beneath his enmity; and having once approached the tiger and quietly surveyed him as he writhed and growled, expecting the attack, turned suddenly round, and trotted awkwardly off to the yard-gate, where he capsized a palankeen which was carrying away a lady fatigued with the sight of these unfeminine sports."

For centuries after the downfall of the Roman empire no specimen of a rhinoceros of either the Asian or African species was brought to Europe. The first that was again seen was an animal that was sent from India to Emanuel, King of Portugal, in the year 1513. It was subsequently sent by Emanuel as a present to the Pope, but during the journey the animal became so furious and ungovernable that it absolutely sunk the vessel on which it was being transported.

A sketch of this creature was sent from Lisbon to Nuremberg for Albert Dürer, who made an engraving from it, and this was

⁴ "Pen and Pencil Sketches."

copied generally in works on natural history of subsequent date, notwithstanding the absurd way it was represented—among other monstrosities it was depicted as having a small horn projecting from the top of the shoulders, and appears to be absolutely clad in a loose kind of apparently forged mail armour.

In 1684 one of these beasts was brought to England, and was advertised in the *London Gazette* of October 12th in that year as the first rhinoceros that had ever been brought to Great Britain. Evelyn says in his diary, under date the 22nd of October: "I went with Sir William Godolphin to see the rhinoceros, or unicorn, being the first that I suppose was ever brought into England. He belonged to some East India merchants, and was sold (as I remember) for above 2000*l*."

Roger North⁵ relates an anecdote about this animal and the Lord Keeper, Guilford, which is given in the racy language peculiar to this author:—

"To show that his lordship's (the Lord Keeper Guilford's) Court enemies, the Earl of Sunderland in particular, were hard put to it to find, or invent, something to report tending to the diminution of his character, I shall give an account of the most impudent buffoon lie raised upon him, and with brazen affirmations of truth to it, dispersed from the Court one morning, that ever came into fools' heads; and Satan himself would not have owned it for his legitimate issue. It fell out thus: a merchant of Sir Dudley North's acquaintance had brought over an enormous rhinoceros, to be sold to showmen for profit. It is a noble beast, wonderfully armed by nature for offence; but more for defence, being covered with impenetrable shields, which no weapon would make any impression upon; and a rarity so great, that few men, in our country, have in their whole lives opportunity to see so singular an animal. This merchant told Sir Dudley North that if he, with a friend or two, had a mind to see it, they might take the opportunity at his house, before it was sold. Hereupon Sir Dudley North proposed to his brother, the Lord Keeper, to go with him upon this expedition; which he did, and came away exceedingly satisfied with the curiosity he had seen. But whether he

⁵ North's "Lives," 1744.

was dogged, to find out where he and his brother housed in the city, or flying fame carried an account of the voyage to Court, I know not; but it is certain that, the very next morning, a bruit went from thence all over the town, and (as factious reports used to run) in a very short time, viz. that his lordship rode upon the rhinoceros; than which a more infantine exploit could not have been fastened upon him. And most people were struck with amazement at it; and divers ran here and there to find out whether it was true or no. And soon after dinner some lords and others came to his lordship to know the truth from himself; for the setters of the lie affirmed it positively, as of their own knowledge. That did not give his lordship much disturbance, for he expected no better from his adversaries. But that his friends, intelligent persons, who must know him to be far from guilty of any childish levity, should believe it, was what roiled him extremely; and much more, when they had the face to come to him to know if it were true. I never saw him in such a rage, and to lay about him with affronts (which he keenly bestowed upon the minor courtiers that came on that errand) as then; for he sent them away with fleas in their ear. And he was angry with his own brother, Sir Dudley North, because he did not contradict the lie in sudden and direct terms, but laughed, as taking the question put to him for a banter, till, by iterations, he was brought to it. For some lords came, and because they seemed to attribute somewhat to the avowed positiveness of the reporters, he rather chose to send for his brother to attest, than to impose his bare denial. And so it passed; and the noble earl, with Jeffries, and others of that crew, made merry, and never blushed at the lie of their own making; but valued themselves upon it, as a very good jest."

The rhinoceros has been used for riding purposes, however, for Bishop Heber, in his "Indian Journal," describing the sights of Lucknow, writes: "There is a menagerie, with a great number of scarce and curious animals, but in far worse order than that at Barrackpoor; and on the other side of the river Goomty, in a well-wooded park, is a large collection of different varieties of cows, camels, and deer, and five or six very large rhinoceroses, the first animals of the kind I ever saw, and of which I found prints and

drawings had given me a very imperfect conception. They are more bulky animals and of a darker colour than I had supposed, and the thickness of the folds of their impenetrable skin much surpasses all which I had expected. These at Lucknow are gentle and quiet animals, except that one of them has a feud with horses. They seem to propagate in captivity without reluctance, and I should conceive might be available to carry burthens as well as the elephant, except that, as their pace is still slower than his, their use could only be applied to very great weights, and very gentle travelling. These have sometimes had howdahs on them, and were once fastened to a carriage, but only as an experiment, which was never followed up."

Again, when he was in Baroda, he saw while passing through the city two very fine hunting tigers in silver chains, and a rhinoceros (the present of Lord Amherst to the Guecwar), which was so tame as to be ridden by a mahout, quite as patiently as an elephant.

A specimen of the Indian rhinoceros was brought from Bengal and exhibited in London in 1739, and afterwards travelled throughout a great part of Europe, where it was considered an extraordinary curiosity. It was only a young animal, but an expensive one for its owners, for it was recorded at the time that the outlay for its food and voyage amounted to nearly 1000*l.* In 1749 a female rhinoceros was seen in Paris, and was the subject of a painting by Oudri, and some engravings by other artists. The menagerie at Versailles contained a rhinoceros that was kept there from 1771 to 1793, and formed the subject of Buffon's notes.

In the year 1790 a rhinoceros was presented to Mr. Dundas, it having been sent from the East Indies for that purpose. Not being prepared for the reception of gifts that took this form, he was glad to pass it on to some one else. Subsequently Piddock purchased it for 700*l.*, and used it for exhibition purposes. When not being engaged in travelling about the country for the edification of the gaping rustic, it was kept at Exeter Change.

Even in captivity, and after they have been to some extent tamed, all species of the rhinoceros are unsafe animals to handle. Their strength being so great, their temper so uncertain, and

their dispositions lacking the docility which is generally displayed under similar circumstances by the majority of quadrupeds, render them the most dangerous of beasts. They evince a disposition on all occasions to attack their keepers as readily as strangers. In the gardens of the Zoological Society the Indian rhinoceros was some years ago nearly the cause of a serious calamity by charging suddenly into his compartment at some of the men who were engaged in cleaning it. He knocked them right and left, but fortunately, although one man was badly hurt, no fatality resulted from this attack. It, however, taught the men the necessity of exercising great caution when having in any way to deal with these animals.

The first rhinoceros which was exhibited in the United States broke loose, and, besides making great havoc in a circus, killed two men. The following account of this affair is taken from an American paper. The accident happened in the summer of 1872: "A letter from Red Bird, a small town in Monroe county, Illinois, gives a thrilling account of the escape from its keepers of the rhinoceros belonging to Warner and Co.'s menagerie and circus on the occasion of its being brought into the ring for the first time. The showmen had prepared the animal for exhibition by attaching to a ring on its nose two strong wire ropes, and twenty-four men were deemed sufficient to control the beast. It submitted quietly to being led from the cage, but on entering the arena suddenly threw up its head, and plunging madly to the right and left, broke loose from the men and dashed forward through the tents. Its first victim was a canvas-man, who was knocked down, and the beast trampling upon his breast he was killed instantly. It next ran its nose against another canvas-man, striking him in the stomach, ripping out his bowels, and killing him on the spot. It then made a dash in the direction of the seats, which by this time were cleared by the frightened spectators, and knocked down nearly all of the seats on one side of the tent, dislocating the shoulder of one of the employés, and breaking the arm of a spectator. Running next into the menagerie tent, it upset Mr. Forepaugh's den of performing animals, after which it struck the centre-pole with its head, bringing it down with a crash upon

the cages of the tiger and leopard, but not breaking them so as to allow the animals to escape. Dashing into the museum tent, it broke all the curiosities, frightened all the people in the neighbourhood, and rushed out through the canvas into the street, finally stopping in a vacant house, the door of which stood open. Here the men succeeded in capturing the animal and getting it into a cage. The damage to the show was about 3000 dollars."

The *Javan Rhinoceros* (*R. Javanicus*). This is a much smaller animal than the Indian species. Its head and limbs are longer and more slender in their proportions, and the folds of the skin are fewer and are not so prominent. The hide is not so thickly covered with tubercles, and they are proportionately smaller in diameter, being square and angular. In length this animal is between seven and eight feet, and in height about three and a half to three and three-quarters.

Jerdon calls it the lesser Indian rhinoceros, and says it is found in the Bengal Sunderbunds, and a few individuals are stated to occur in the forest tract along the Mahanuddy river, and extending northwards towards Midnapore; and also on the northern edge of the Rajmahal hills near the Ganges. It occurs also more abundantly in Burmah, and thence, through the Malayan peninsula, to Java and Borneo. Several have, he states, been killed quite recently within a few miles of Calcutta.

Animals of this species are frequently to be seen in India, taken about the country as a show. In 1874 the Zoological Society succeeded in procuring a specimen, and their visitors have ever since had the opportunity of studying the difference between the two varieties.

In many places this animal is gregarious. Dr. Horsfield⁶ states that it is not limited to a particular region or climate, but that its range extends from the level of the ocean to the summit of mountains of considerable elevation. He noticed it on Tangung, near the confines of the southern ocean, in the districts of the native princes, and on the summit of the high peaks of the Priangan regencies. It is reported to prefer high situations. Dr. Horsfield, while residing at Surakarta, the capital of the Javanese Empire, had

⁶ "Zoological Researches in Java."

many opportunities of studying a specimen of this species, for one which appears to have grown into a very large animal of its kind, was kept there in confinement, or rather in a state of domestication. It was taken while very young in the forests of the province of Keddu, and was conveyed to the residency at Magellan in the year 1815 or 1816. It was afterwards removed to the capital of Surakarta, where it was confined in the large area or square which bounds the entrance to the royal residence. "A deep ditch," says the doctor, "about three feet wide, limited its range, and for several years it never attempted to pass it. It was perfectly reconciled to its confinement, and never exhibited any symptoms of uneasiness or rage, although on its first arrival harassed in various ways by a large proportion of the inhabitants of a populous capital, whose curiosity induced them to inspect the stranger of the forest. Branches of trees, shrubs, and various twining plants were abundantly provided for its food; of these, the species of *cissus*, and the small twigs of a native fig-tree were preferred. But plantains were the most favourite food, and the abundant manner in which it was supplied with these by numerous visitors tended greatly to make the animal mild and sociable. It allowed itself to be examined and handled freely, and the more daring of the visitors sometimes mounted on its back. It required copious supplies of water, and when not taking food, or intentionally roused by the natives, it generally placed itself in the large excavations which its movements soon caused in the soft earth that covered the allotted space. Having considerably increased in size, the ditch of three feet in breadth was insufficient for confining it, but, leaving the enclosure, it frequently passed to the dwellings of the natives, destroying the plantations of fruit-trees and culinary vegetables which always surround them. It likewise terrified those natives that accidentally met with it, and who were unacquainted with its appearance and habits. But it showed no illnatured disposition, and readily allowed itself to be driven back to the enclosure, like a buffalo. The excessive excavations which it made by continually wallowing in the mire, and the accumulation of putrefying vegetable matter, in process of time became offensive at the entrance of the palace, and its

removal was ordered by the Emperor to a small village near the confines of the capital, where, in the year 1821, it was accidentally drowned in a rivulet."

The Sumatrian rhinoceros (*R. Sumatranus*) is a two-horned animal, and a native of Sumatra, and the whole range of the Malay peninsula as far as Chittagong. It is the smallest of existing rhinoceroses; its skin, which is comparatively a delicate one, and almost destitute of the folds peculiar to the one-horned animals, is slightly covered with stiff brown hairs. Its head is elongated in shape, and the upper lip pointed and curved downwards. The first horn is the larger one, and is bent backwards; the second one, which is situated a little in front of the eyes, is erect and smooth. Although this animal has two horns, it is not otherwise related to the African species, for it has the incisor teeth and other cranial characters of the Asiatic division.

These animals are, like all their brethren, very fond of wallowing in the mud. A curious result sometimes follows from this habit, as may be seen from the following extract from the *Journal of the Indian Archipelago*. The extreme cruelty of the natives of these islands is also forcibly illustrated. "This animal, which is of solitary habits, is found frequently in marshy places, with its whole body immersed in the mud, and part of the head only visible. The Malays call the animal 'Badak-Tapa,' or the recluse rhinoceros. Towards the close of the rainy season they are said to bury themselves in this manner in different places; and upon the dry weather setting in, and from the powerful effects of a vertical sun, the mud becomes hard and crusted, and the rhinoceros cannot effect its escape without considerable difficulty and exertion. The Semangs prepare themselves with large quantities of combustible materials, with which they quietly approach the animal, who is aroused from his reverie by an immense fire over him, which, being kept well supplied by the Semangs with fresh fuel, soon completes his destruction, and renders him in a fit state to make a meal of."

In 1872, an animal, classified as one of this species, which had been captured at Chittagong in January, 1868, was purchased by the Zoological Society for 1250*l.*, the largest sum ever given for

any one animal. Soon after this expensive quadruped took up his residence in the gardens alongside his Sumatran brother already there, Dr. Sclater recognized the fact that they were specifically distinct, and he called the new animal the hairy-eared rhinoceros (*R. lasiotis*). It had long hairy fringes on the ears, and the body was covered with long, fine, reddish hair. The tail was shorter, and the skin finer, than the Sumatran animal. These, however, are only outward differences, and it has yet to be proved whether there is any anatomical distinction that will justify the separation.

The singular circumstances attending the capture of this animal were narrated by a Calcutta newspaper.⁷ "The quiet station of Chittagong," the article stated "has been lately enlivened by the presence of a rhinoceros. It appears that some natives came into Chittagong, and stated that a rhinoceros had been found by them in a quicksand, and was quite exhausted with the efforts to relieve herself. They had attached two ropes to the animal's neck, and, with the assistance of about 200 men, dragged her out, and, keeping her taut between two ropes, they eventually made her fast to a tree. The next morning, however, they found the rhinoceros so refreshed, and making such efforts to free herself, that they were frightened, and made application to the magistrate of Chittagong for protection. The same evening Captain Hood and Mr. H. W. Wickes started with eight elephants to secure the prize, and, after a march of about sixteen hours to the south of Chittagong, they came up with the animal. The elephants, at the first sight of the rhinoceros, were very much afraid, and bolted one and all, but, after some exertion, they were brought back, and made to stand by. A rope was now, with some trouble, attached to the animal's hind-leg, and secured to an elephant. At this juncture the rhinoceros roared; the elephants again bolted, and, had it not been for the rope slipping from the leg of the rhinoceros, that limb might have been pulled from the body. The rhinoceros was, however, eventually secured with ropes between elephants, and marched into Chittagong in perfect health. Two large rivers had to be crossed; first, the Sungoo river, where the animal was towed between elephants, for

⁷ See "Proc. Zoological Society," 1872.

she could not swim, and could only just keep her head above water by paddling with the fore-feet like a pig; and secondly, the Kurnafoolie river, when the ordinary cattle ferry-boat was used. Thousands of natives thronged the march in, which occupied a few days, the temporary bamboo bridges on the Government road invariably falling in with the numbers collected thereon to watch the rhinoceros crossing the stream below, and sometimes the procession was at least a mile in length. The 'Begum,' as the rhinoceros has been named, is now free from all ropes, and kept within a stockade enclosure, having therein a good bath excavated in the ground, and a comfortable covered shed attached. She is already very tame, and will take plantain leaves or chuppattees from the hand, and might almost be led about by a string."

About the same time that "Begum" arrived in England, the Hamburg Zoological Society procured a specimen of a similar beast. It was landed in England and transhipped. A paragraph in the *Times*, referring to this animal, says: "Although it is only two years old, it is about the height of a small horse, but is more bulky. It is," the writer continues, "apparently so healthy, happy, and tame that any one having the courage may safely not only place his hand in its huge, ungainly-looking mouth, but may leisurely take it out again. We saw this demonstrated."

As before stated, the animals known to inhabit Africa have been divided into five species, but the slight differences existing between them barely warrant this separation, for many of them are only individual variations. However, it may truly be said that several varieties have been recognized, and that on this vast continent there may be others not yet described is within the bounds of probability. In Capello and Ivens' ³ book there is the following paragraph: "*Appropos* of the rhinoceros, our entertainers furnished us with such extraordinary information that we took note of it, and record it here, but we of course do so with the utmost reserve. According to their account there are no fewer than five (some said six) varieties of the animal upon the African continent. Two black, with one or two horns, which of course are the *R. bicornis* and the *R. queitloa*; two dark grey, some of which possess two

³ "From Benguela to the Territory of Yacca."



THE HAIRY-EARED RHINOCEROS.

(*R. lasiotis.*)

"Begum," captured in Chittagong.

horns, one very large and another small, probably the *R. simus*; and two other smaller ones, quite unknown to us. Several of the hunters spoke of an ash-coloured beast with three horns, and a black one without any!" However, these varieties differ only in certain ways that are of interest to zoologists, but for non-scientific readers it is sufficient to bear in mind that there are only two well-defined species, which differ entirely in their habits, appearance, and food, and are commonly known as white rhinoceros and black rhinoceros, from the prevailing colour of their skins, which, as Dr. Sclater remarks, "although by no means strictly white and black respectively, are, according to those authorities who have become acquainted with them in their native wilds, strongly contrasted in hue, and render the two varieties easily recognizable. Another trenchant difference between these forms is in the shape of the upper lip. This, in the white rhinoceros, is quite short and rounded, being formed for grazing, like that of a cow. From this feature Dr. Burchell, the first scientific traveller who met with the white rhinoceros, named the animal *Rhinoceros simus*. In the black rhinoceros, on the contrary, the upper lip is long and prehensile, forming a short proboscis, well fitted for taking hold of the small branches of trees, upon which it subsists. Besides this there is a great difference between the horns of the black and white rhinoceroses. In the white rhinoceros the front horn is enormously produced in the adult, reaching in old individuals to three and a half or four feet in length, and curving gently backwards, but the hinder horn always remains small and slightly developed. In the black rhinoceroses the front horn never attains anything like this length, but the hinder horn is longer—in some cases nearly as long as the front one. There are also well-marked characters in the bones of the cranium, which render the white and black rhinoceroses readily distinguishable, so that no doubt can remain as to the perfect distinctness of *Rhinoceros simus* from the *Rhinoceros bicornis* of Linnæus, or black rhinoceros."

The white rhinoceros (*R. simus*) is probably the best known animal to African hunters, but, strange to say, is not known to Europeans, for a specimen has never yet been exhibited by any zoological society or menagerie.

This animal measures a little over twelve feet in length and stands about five feet ten inches in height. The skin is smooth and has none of the folds conspicuous in the large Asiatic rhinoceros. In a limited extent these beasts are gregarious, for they are frequently seen congregated in small herds. Their chief food is grass.

The nose is square, and supports two large, rounded horns. The average length of the front one is about two and a half feet, but is sometimes even a foot longer than these figures; the other one, however, hardly ever exceeds fifteen inches, and generally measures a little under a foot in length.

Both the white varieties of the rhinoceros attain an enormous size. They feed on grass, and get very fat on it, and their flesh is in consequence preferable to that of any of the other species, and considered by some hunters to be better than beef. They are of a milder and more inoffensive disposition than the black varieties, and are described as dangerous only under exceptional circumstances.

These animals are found in the country south of the Zambesi, but are gradually becoming scarce in certain districts. In the Mopane country, Dr. Livingstone writes: "We observed the foot-prints of a black rhinoceros (*R. bicornis*) and her calf. We saw other foot-prints among the hills of Semalembue, but the black rhinoceros is remarkably scarce in all the country north of the Zambesi. The white rhinoceros (*R. simus*, Burchell), or Mohóhu of the Bechuanas, is quite extinct here, and will soon become unknown in the country to the south. It feeds almost entirely on grasses, and is of a timid, unsuspecting disposition: this renders it an easy prey, and they are slaughtered without mercy on the introduction of fire-arms. . . . The white rhinoceros is not always quite safe, for one, even after it was mortally wounded, attacked Mr. Oswell's horse, and thrust the horn through to the saddle, tossing at the time both horse and rider. I once saw a white rhinoceros give a buffalo which was gazing intently at myself a poke in the chest, but it did not wound it, and seemed only a hint to get out of the way."

The black, or African rhinoceros (*R. bicornis*), is also a resident of southern Africa. Captain Harris, writing about the valley of

the Limpopo, says: "The country now literally presented the appearance of a menagerie; the host of rhinoceros in particular that daily exhibited themselves, almost exceeding belief. Whilst the camp was being formed an ugly head might be seen protruded from every bush, and the possession of the ground was often stoutly disputed. In the field these animals lost no opportunity of rendering themselves obnoxious—frequently charging at my elbow, when in the act of drawing the trigger at some other object—and pursuing our horses with indefatigable and ludicrous industry, carrying their noses close to the ground, moving with a mincing gait, which ill-beseemed so ungainly and ponderous a quadruped, and uttering the while a sound between a grunt and a smothered whistle. In removing the horn with an axe, the brain was discovered, seated in a cavity below it, at the very extremity of the snout—a phenomenon in the idiosyncrasy of this animal, which may in some measure account for its want of intelligence, and piggish obstinacy, as well as for the extraordinary acuteness of smell with which it is endowed. Irrascible beyond all other quadrupeds, the African rhinoceros appears subject even to unprovoked paroxysms of reckless fury; but the sphere of vision is so exceedingly limited, that its attacks, although sudden and impetuous, are easily eluded, and a shot behind the shoulder, discharged from the distance of twenty or thirty yards, generally proves fatal."

Dr. Livingstone describes this animal as possessing a more savage nature than the white rhinoceros, and," he continues, "like the ill-natured in general, is never found with an ounce of fat in its body. From its greater fierceness and wariness, it holds its place in a district much longer than its more timid and better-conditioned neighbour. Mr. Oswald was once stalking two of these beasts, and as they came slowly to him, he, knowing that there is but little chance of hitting the small brain of this animal by a shot in the head, lay expecting one of them to give his shoulder, till he was within a few yards. The hunter then thought that by making a rush to his side he might succeed in escaping, but the rhinoceros, too quick for that, turned upon him, and though he discharged his gun close to the animal's head he was

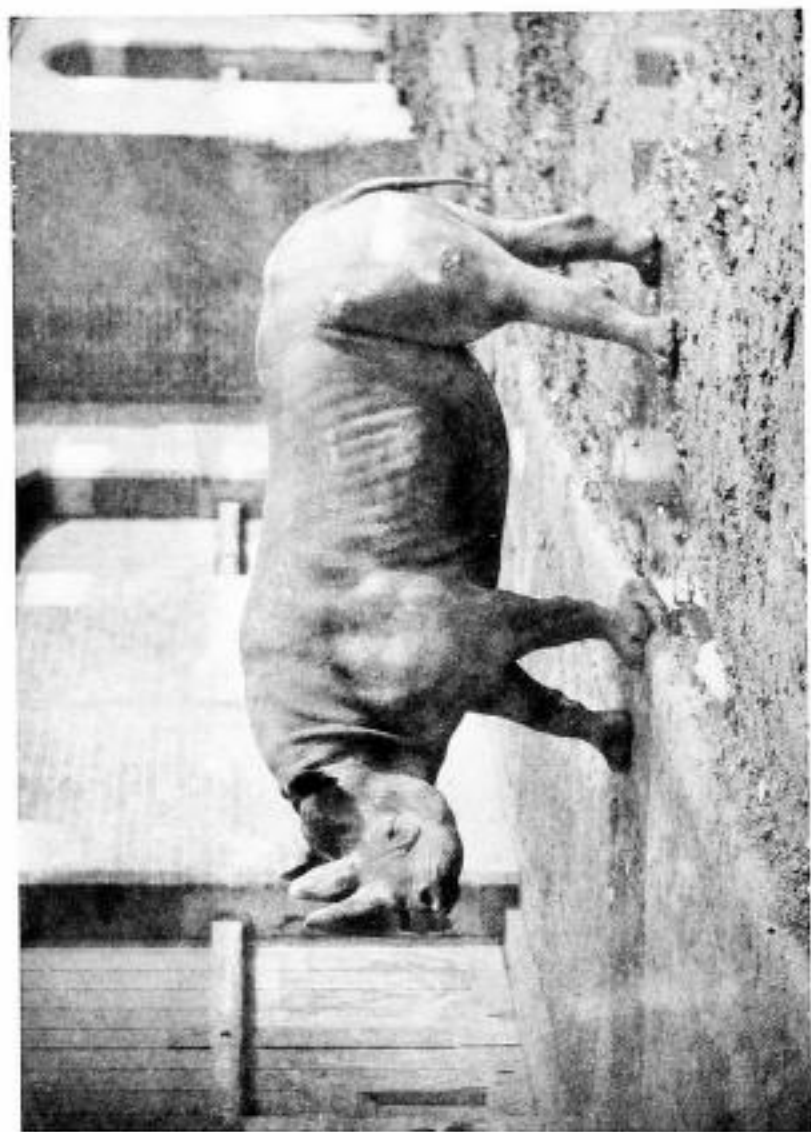
tossed in the air. My friend was insensible for some time, and on recovering found large wounds on the thigh and body. I saw that on the former part, still open, and five inches long."

The Hon. W. H. Drummond⁹ states that "sufficient anecdotes of the ferocity, chronic bad temper, and cunning of *R. bicornis* might be related of themselves to fill a volume. In most, if not all, cases they will at once charge on getting the wind of a human being, and if they cross his track they will often follow it up like a dog, making none of the puffing sound natural to them when angry, till they absolutely see him. . . . They will wait with the utmost patience concealed in thick jungle, until you almost touch them, and then rush out at you. When they do catch an unfortunate being they knock him down and knead him with their feet, returning again and again, until nothing but a shapeless mass remains, uttering all the day their shrill squeal of rage. This I once saw myself." He, together with three native hunters and his gun-bearer, came across a rhinoceros, which he wounded in the shoulder, and then sprang away from the infuriated animal into a tree. His unlucky companion came running towards the shots, and absolutely met the creature face to face; "he at once fired and turned to run, but it was too late, and he was caught on the spot, thrown up with a single toss, which must probably have stunned him, and was then trampled out of all semblance to humanity by the bloodthirsty brute."

Sir Samuel Baker also describes this animal as being exceedingly vicious: "It is one of the very few animals that will generally assume the offensive; it considers all creatures to be enemies, and although it is not acute in either sight or hearing, it possesses so wonderful a power of scent that it will detect a stranger at a distance of five or six hundred yards should the wind be favourable.

"I have observed that a rhinoceros will generally charge down upon the object that it smells, but does not see; thus, when the animal is concealed either in high grass or thick jungle, should it scent a man who may be passing unseen to windward, it will rush down furiously upon the object it has winded with three loud whiffs, resembling a jet of steam from a safety-valve. As it

⁹ "The Large Game and Natural History of South and South-East Africa," 1875.



AN AFRICAN RHINOCEROS.

(*R. bicornis.*)

is most difficult and next to impossible to kill a rhinoceros when charging, on account of the protection of the brain afforded by the horns, an unexpected charge in thick jungle is particularly unpleasant, especially when on horseback, as there is no means of escape but to rush headlong through all obstacles.

“The teeth of this animal are very peculiar. The molars have a projecting cutting edge on the exterior side: thus the jaws when closed form a pair of shears, as the projecting edges of the upper and lower rows overlap. This is a favourable arrangement of nature to enable the animal to clip off twigs and the branches on which it feeds, as, although it does not absolutely refuse grass, this rhinoceros is decidedly a wood-eater. There are particular bushes which form a great attraction; among these is a dwarf mimosa with a reddish bark; this tree grows in thick masses, which the rhinoceros clips so closely that it frequently resembles a quickset-hedge that has been cut by the woodman’s shears. These animals are generally seen in pairs, or the male, female, and calf. The mother is very affectionate, and exceedingly watchful and savage. Although so large an animal, the cry is very insignificant, and is not unlike the harsh, shrill sound of a penny trumpet.”

This so-called black rhinoceros is not in reality black, but has a flesh-coloured skin. It is a smaller animal than the white species, being only about eleven feet in length, and stands about five feet high. The head is slightly more elongated, and the horns are shorter but thicker in proportion to the length. It feeds on leaves and small branches.

THE KEITLOA (*R. Keitloa*) has the two horns nearly equal in length, the anterior one cylindrical, and the posterior one compressed, and they measure generally three or four inches under two feet. The head is shorter and broader, and the prehensile capabilities of the lip are less; otherwise it differs but little from the previously described animal. In fact there is not enough distinction to justify this variety being regarded as specifically distinct from the *R. bicornis*.

Gordon Cumming¹ gives some interesting details about these

¹ “Hunter’s Life in South Africa.”

African animals, which are worth quoting: "Of the rhinoceros there are four varieties in South Africa, distinguished by the Bechuanas by the names borèlé, or black rhinoceros; the keitloa, or two-horned black rhinoceros; the muchocho, or common white rhinoceros; and the kobaoba, or long-horned white rhinoceros. Both varieties of the black rhinoceros are extremely fierce and dangerous, and rush headlong and unprovoked at any object which attracts their attention. They never attain much fat, and their flesh is tough, and not much esteemed by the Bechuanas. Their food consists almost entirely of the thorny branches of the waitabit thorns. Their horns are much shorter than those of the other varieties, seldom exceeding sixteen inches in length. They are finely polished with constantly rubbing against the trees. The skull is remarkably formed, its most striking feature being the tremendously thick ossification in which it ends above the nostrils. It is on this mass that the horn is supported. . . . During the day the rhinoceros will be found lying asleep, or standing indolently in some retired part of the forest, or under the base of the mountains, sheltered from the power of the sun by some friendly grove of umbrella-topped mimosas. In the evening they commence their nightly rambles, and wander over a great extent of country. They usually visit the fountains between the hours of nine and twelve o'clock at night, and it is on these occasions that they may be most successfully hunted and with least danger. The black rhinoceros is subject to paroxysms of unprovoked fury, often ploughing up the ground for several yards with its horn, and assaulting large bushes in the most violent manner. On these bushes they work for hours with their horns, at the same time snorting and blowing loudly, nor do they leave them in general until they have broken them in pieces. All the four varieties delight to roll and wallow in the mud, with which their rugged hides are generally encrusted. Both varieties of the black rhinoceros are much smaller and more active than the white, and are so swift that a horse with a rider on his back can rarely overtake them."

This same writer states that both the rhinoceros and hippopotamus are generally attended by small birds known as rhinoceros

birds, "their object being to feed upon the ticks and other parasites that swarm upon these animals. They are of greyish colour, and are nearly as large as a common thrush. Their voice is very similar to that of the mistletoe thrush. Many a time have these ever-watchful birds disappointed me in my stalk, and tempted me to invoke an anathema upon their devoted heads. They are the best friends the rhinoceros has, and rarely fail to awaken him, even in his soundest nap. 'Chukuroo' perfectly understands their warning, and springing to his feet, he generally first looks about him in every direction, after which he invariably makes off. I have often hunted a rhinoceros on horseback, which led me a chase of many miles, and required a number of shots before he fell, during which chase several of these birds remained by the rhinoceros to the last. They reminded me of mariners on the deck of some bark sailing on the ocean, for they perched along his back and sides, and as each of my bullets told on the shoulder of the rhinoceros, they ascended about six feet into the air, uttering their harsh cry of alarm, and then resumed their position. It sometimes happened that the lower branches of a tree, under which the rhinoceros passed, swept them from their living deck; but they always recovered their former station. They also adhere to the rhinoceros during the night. I have often shot these animals at midnight when drinking at the fountains, and the birds, imagining they were asleep, remained with them till morning; on my approaching, before taking flight, they exerted themselves to the utmost to awaken Chukuroo from his deep sleep."

The only specimens of the rhinoceros that were brought to Europe since the days of the Roman amphitheatre until 1869, were of the Asiatic species, and one-horned; but on the 11th of September of that year, an African animal (*R. bicornis*) arrived in London. It had been purchased by the Zoological Society from Mr. Carl Hagenbeck, the well-known dealer in living animals at Hamburg, and the price paid was 1000*l.* Mr. Hagenbeck bought it from Herr Casanova of Vienna, who imported it from Eastern Africa, where he had obtained it from the Hamram Arabs, who inhabited the district to the south of Cassala, in Upper Nubia.

Dr. Sclater, in an article contributed to *The Student and Intellectual Observer*, for 1870, writes:—" 'Theodore,' as our African rhinoceros has been named, after his famous but ill-fated compatriot, is now about four feet in height, but still growing fast. He consumes daily about three-quarters of a truss of the best clover hay, six quarts of oats, mixed with three pecks of bran, seven pounds' weight of biscuit, and the best part of a truss of straw, so that his board costs the Society from six to seven shillings a day."

The illustrations accompanying this chapter will enable the reader to see some of the distinctions between the huge Indian rhinoceros and the African two-horned animal. They are both photographs of the specimens belonging to the Zoological Society and the originals are still to be seen in their gardens.