

THE  
POLAR AND TROPICAL  
WORLDS:

A DESCRIPTION OF MAN AND NATURE  
IN THE  
Polar and Equatorial Regions of the Globe.

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TWO VOLUMES IN ONE.

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EMBRACING ALSO AN ACCOUNT OF THE EXPEDITIONS OF ALL THE ARCTIC EXPLORERS FROM THE  
DISCOVERY OF ICELAND, OVER ONE THOUSAND YEARS AGO, TO HALL'S LAST EXPEDITION  
IN THE NORTHERN WORLD, TOGETHER WITH THE WONDERFUL DISCOVERIES  
AND ADVENTURES OF AGASSIZ, LIVINGSTONE, WALLACE, AND OTHER  
DISTINGUISHED TRAVELERS IN THE TROPICAL COUNTRIES.

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BY DR. G. HARTWIG,

*Author of "The Sea and its Living Wonders," and "The Harmonies of Nature,"*

EDITED, WITH ADDITIONAL CHAPTERS, BY

DR. A. H. GUERNSEY.

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would utterly ruin the best constructed roads, it is very doubtful whether his services are in proportion to his cost, and Sir Emerson Tennent is of opinion that two vigorous dray horses would, at less expense, do more effectual work than any elephant. Most likely from a comparative calculation of this kind, the strength of the elephant establishments in Ceylon has been gradually diminished of late years, so that the government stud, which formerly consisted of upwards of sixty elephants, is at present reduced to less than one-quarter of that number.



A LITTLE HEAD WORK.

The Rhinoceros has about the same range as the elephant, but is found also in the island of Java, where the latter is unknown. Although not possessed of the ferocity of carnivorous animals, the rhinoceros is completely wild and untamable; the image of a gigantic hog, without intelligence, feeling or docility; and if in bodily size and colossal strength it, of all other land animals, most nearly approaches the elephant, it is infinitely his inferior in point of sagacity. The latter, with his beautiful, good-natured, intelligent eye, awakens the sympathy of man; while the rhinoceros might figure as the very symbol of brutal violence and stupidity.

It was formerly supposed that Africa had but one rhinoceros, but the researches of modern travelers have discovered no less than four different species, two white and two black, each of them with two horns. The black species are the Borelo of the Bechuanas, and the Keitloa, which is longer, with a larger neck and almost equal horns. In both species the upper lip projects over the lower, and is capable of being extended like that of the giraffe, thus enabling the animal to pull down the branches on whose foliage he intends to feast. Both the Borelo and the Keitloa are extremely ill-natured, and, with the exception of the buffalo, the most dangerous of all the wild animals of South Africa. The white species are the Monoho (*R. simus*) and the Kobaaba (*R. Oswellis*.) which is distinguished by one of its horns attaining the prodigious length of four feet.

Although the black and white rhinoceros are members of the same family, their mode of living and disposition are totally different. The food of the former consists almost entirely of roots, which they dig up with their larger horn, or of the branches



and sprouts of the thorny acacia, while the latter exclusively live on grasses. Perhaps in consequence of their milder and more succulent food, they are of a timid unsuspecting nature, which renders them an easy prey, so that they are fast melting away before the onward march of the European trader ; while the black species, from their great ferocity and wariness, maintain their place much longer than their more timid relations. The different nature of the black and white rhinoceros shows itself even in their flesh, for while that of the former, living chiefly on arid branches, has a sharp and bitter taste, and but little recommends itself by its meagerness and toughness—the animal, like the generality of ill-natured creatures, being never found with an ounce of fat on its bones—that of the latter is juicy and well-flavored, a delicacy both for the white man and the negro.

The shape of the rhinoceros is unwieldy and massive ; its vast paunch hangs down nearly to the ground ; its short legs are of columnar strength, and have three toes on each foot ; the mis-shapen head has long and erect ears, and ludicrously small eyes ; the skin, which is completely naked, with the exception of some coarse bristles at the extremity of the tail, and the upper end of the ears, is comparatively smooth in the African species, but extremely rough in the Asiatic, hanging in large folds about the animal like a mantle ; so that, summing up all these characteristics, the rhinoceros has no reason to complain of injustice, if we style it the very incarnation of ugliness. From the snout to the tip of the tail, the African rhinoceros attains a length of from 15 to 16 feet, a girth of from 10 to 12, a weight of from 4,000 to 5,000 pounds ; but in spite of its ponderous and clumsy proportions, it is able to speed like lightning, particularly when pursued. It then seeks the nearest wood, and dashes with all its might through the thicket. The trees that are dead or dry are broken down as with a cannon shot, and fall behind it and on its sides in all directions ; others that are more pliable, greener, or full of sap are bent back by its weight and the velocity of its motions, and restore themselves like a green branch to their natural position, after the animal has passed. They often sweep the incautious pursuer and his horse from the ground, and dash them in pieces against the surrounding trees.

The rhinoceros is endowed with an extraordinary acuteness of smell and hearing ; he listens with attention to the sounds of the desert, and is able to scent from a great distance the approach of man ; but as the range of his small and deep-set eyes is impeded by his unwieldy horns, he can only see what is immediately before him, so that if one be to the leeward of him, it is not difficult to approach within a few paces. The Kobaaba, however, from its horn being projected downwards, so as not to obstruct the line of vision, is able to be much more wary than the other species. To make up for the imperfection of sight, the rhinoceros is frequently accompanied by a bird (*Buphaga africana*) which seems to be attached to it like the domestic dog to man, and warns the beast of approaching danger by its cry. It is called Kala, by the Bechuanas, and when these people address a superior, they call him “ My Rhinoceros ” by way of compliment, as if they were the birds ready to do him service.

The black rhinoceroses are of a gloomy, melancholy temper, and not seldom fall into paroxysms of rage without any evident cause. Seeing the creatures in their wild haunts, cropping the bushes, or quietly moving through the plains, you might take them for the most inoffensive, good-natured animals of all Africa, but when roused to passion there is nothing more terrific on earth. All the beasts of the wilderness are



afraid of the uncouth Borelo. The lion silently retires from its path, and even the elephant is glad to get out of the way. Yet this brutal and stupidly hoggish animal is distinguished by its parental love, and the tenderness which it bestows on its young is returned with equal affection. European hunters have often witnessed that when the mother dies, the calf remains two full days near the body.

Although not gregarious, and most generally solitary or grazing in pairs, yet frequently as many as a dozen rhinoceroses are seen pasturing and browsing together.\* As is the case with many other inhabitants of the tropical wilderness, the huge beast awakens to a more active life after sunset. It then hastens to the lake or river to slake its thirst or to wallow in the mud, thus covering its hide with a thick coat of clay, against the attacks of flies; or to relieve itself from the itching of their stings, it rubs itself against some tree, and testifies its inward satisfaction by a deep-drawn grunt. During the night, it rambles over a great extent of country, but soon after sunrise seeks repose and shelter against the heat under the shade of a mimosa, or the projecting ledge of a rock, where it spends the greater part of the day in sleep, either stretched at full length or in a standing position. Thus seen from a distance, it might easily be mistaken for a huge block of stone.

The rhinoceros is hunted in various manners. One of the most approved plans is to stalk the animal, either when feeding or reposing. If the sportsman keep well under the wind, and there be the least cover, he has no difficulty in approaching the beast within easy range, when, if the ball be well directed, it is killed on the spot. But by far the most convenient way of destroying the animal is to shoot it from a cover or a screen, when it comes to the pool to slake its thirst. Occasionally it is also taken in pitfalls. Contrary to common belief, a leaden ball (though spelter is preferable) will easily find its way through the hide of the African rhinoceros, but it is necessary to be within thirty or forty paces of the brute, and desirable to have a double charge of powder. The most deadly part to aim at is just behind the shoulder; a ball through the center of the lobes of the lungs is certain to cause almost instantaneous death. A shot in the head never or rarely proves fatal, as the brain, which, in proportion to the bulk of the animal, does not attain the three-hundredth part of the size of the human cerebrum, is protected, besides its smallness, by a prodigious case of bone, hide, and horn. However severely wounded the rhinoceros may be, he seldom bleeds externally. This is attributable in part, no doubt, to the great thickness of the hide and its elasticity, which occasions the hole caused by the bullet nearly to close up, as also from the hide not being firmly attached to the body, but constantly moving. If the animal bleed at all, it is from the mouth and nostrils, which is a pretty sure sign that it is mortally hurt, and will soon drop down dead. It is remarkable that the rhinoceros, when hit by a fatal bullet, does not fall upon one side, but generally sinks on its knees, and thus breathes its last.

From what has been related of the fury of the rhinoceros, its pursuit must evidently be attended with considerable danger, and thus the annals of the wild sports of Southern Africa are full of hair breadth escapes from its terrific charge. The rhinoceros is hunted for its flesh, its hide (which is manufactured into the best and hardest leather that can be imagined), and its horns, which, being capable of a high polish, fetch at the Cape a higher price than ordinary elephant ivory. It is extensively used in the manufacture of sword-handles, drinking-cups, ramrods for rifles, and a variety of other



purposes. Among Oriental princes, goblets made of rhinoceros-horn are in high esteem, as they are supposed to have the virtue of detecting poison by causing the deadly liquid to ferment till it flows over the rim, or, as some say, to split the cup. The number of rhinoceroses destroyed annually in South Africa is very considerable. Captain Harris, who once saw two-and-twenty together, shot four of them one after the other to clear his way. Messrs. Oswell and Varden killed in one year no less than eighty-nine; and in one journey, Andersson shot, single-handed, nearly two thirds of this number. It is thus not to be wondered at that the rhinoceros, which formerly ranged as far as the Cape, is now but seldom found to the south of the tropic. The progress of African discovery bodes no good to him or to the hippopotamus.

The single-horned Indian rhinoceros was already known to the ancients, and not unfrequently doomed to bleed in the Roman amphitheatres. One which was sent to King Emanuel of Portugal in the year 1513, and presented by him to the Pope, had the honor to be pictured in a wood cut by no less an artist than Albrecht Dürer himself. Latterly, rhinoceroses have much more frequently been sent to Europe, particularly the Asiatic species, and all the chief zoölogical gardens possess specimens of the unwieldy creature.

In its native haunts, the Indian rhinoceros leads a tranquil, indolent life, wallowing on the marshy border of lakes and rivers, and occasionally bathing itself in their waters. Its movements are usually slow, and it carries its head low like the hog, plowing up the ground with its horn, and making its way by sheer force through the jungle. Though naturally of a quiet and inoffensive disposition, it is very furious and dangerous when provoked or attacked, charging with resistless impetuosity, and trampling down or ripping up with its horn any animal which opposes it.

Besides the single-horned species which inhabits the Indian peninsula, Java, and Borneo, Sumatra possesses a rhinoceros with a double horn, which is, however, distinguished from the analogous African species by the large folds of its skin, and its smaller size. It is even asserted that there exists in the same island a hornless species, and another with three horns. There surely can be no better proof of the difficulties which Natural History has to contend with in the wilder regions of the tropical zone, and of the vast field still open to future zoölogists, than that, in spite of all investigations and travels, we do not yet even know with certainty all the species of so large a brute as the rhinoceros.

In Java, this huge pachyderm is met with in the jungles of the low country, but its chief haunts are the higher forest-lands, which contain many small lakes and pools, whose banks are covered with high grasses. Here and there, also, the woods are interspersed with dry pasture-grounds, and even in the interior of the forests, numerous species of gramineæ are found increasing in number as they rise above the level of the sea. In these solitudes, which are seldom visited by man, the rhinoceros finds all that it requires for food and enjoyment. As it is uncommonly shy, the traveler rarely meets it, but sometimes, while threading his way through the thicket, he may chance to surprise wild steers and rhinoceroses grazing on the brink of a pool, or quietly lying in the morass. The grooved paths of the rhinoceros, deeply worn into the solid rock, and thus affording proof of their immemorial antiquity, are found even on the summits of mountains above the level of the sea. They are frequently used for the destruction of the animal, for in the steeper places, where, on climbing up or down, it is obliged



to stretch out its body, so that the abdomen nearly reaches the ground, the Javanese fix large scythe-like knives into the rock, which they cover with moss and herbage, thus forcing the poor rhinoceros to commit an involuntary suicide, and teaching him, though too late to profit by his experience, how difficult it is to escape the cunning of man, even on the mountain peak.

“Behold now Behemoth, which I made with thee ; he eateth grass as an ox ; his bones are as strong pieces of brass ; his bones are like bars of iron ; he lieth under the shady trees in the covert of the reed and fens. The shady trees cover him with their shadow ; the willows of the brook compass him about. Behold he drinketh up a river ; he trusteth that he can draw up Jordan into his mouth.” Thus, in the book of Job, we find the Hippopotamus portrayed with few words but incomparable power. How tame after this noble picture must any lengthened description appear ! \*

According to the inspired poet, the hippopotamus seems anciently to have inhabited the waters of the Jordan, but now it is nowhere to be found in Asia ; and even in Africa the limits of its domain are perpetually contracting before the persecutions of man. It has entirely disappeared from Egypt and the rivers of the Cape Colony, where Le Vaillant found it in numbers during the last century. In many respects a valuable prize ; of easy destruction, in spite, or rather on account of its size, which betrays it to the attacks of its enemies ; a dangerous neighbor to plantations, it is condemned to retreat before the waves of advancing civilization, and would long since have been extirpated in all Africa, if the lakes and rivers of the interior of that vast den of barbarism were as busily plowed over as ours by boats and ships, or their banks as thickly strewn with towns and villages.

For the hippopotamus is not able, like so many other beasts of the wilderness, to hide itself in the gloom of impenetrable forests, or to plunge into the sandy desert, traversed by the Bedouin on his dromedary ; it requires the neighborhood of the stream, the empire of which it divides with its amphibious neighbor the crocodile. Occasionally during the day it is to be seen basking on the shore amid ooze and mud, but throughout the night the unwieldy monster may be heard snorting and blowing during its aquatic gambols ; it then sallies forth from its reed grown coverts to graze by the light of the moon, never, however, venturing to any distance from the river, the stronghold to which it betakes itself on the smallest alarm.

In point of ugliness the hippopotamus, or river-horse, as it has also very inappropriately been named, might compete with the rhinoceros itself. Its shapeless carcass rests upon short and disproportioned legs, and, with its vast belly almost trailing upon the ground, it may not inaptly be likened to an overgrown “prize pig.” Its immensely large head has each jaw armed with two formidable tusks, those in the lower, which are always the largest, attaining at times two feet in length ; and the inside of the mouth is said to resemble a mass of butcher’s meat. The eyes, which are placed in prominences like the garret windows of a Dutch house, the nostrils, and ears, are all on the same plane, on the upper level of the head, so that the unwieldy monster,

\* It should be noted, however, that it is not altogether certain that the Hippopotamus is really the Behemoth of Job. Dr. Thomson, than whom there can hardly be better authority, in his admirable work “The Land and the Book,” argues plausibly that Behemoth is the Syrian Buffalo.