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A POPULAR
INTRODUCTION TO NATURAL HISTORY.

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WITH TWO HUNDRED ILLUSTRATIONS.



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daytime, so that there is little chance of travellers seeing anything more than the footmarks of this largest of the tropical American Mammals. Their flesh is of a very rich flavour, something between pork and beef. The young are speckled with white.

FAMILY IV.

RHINOCEROTIDÆ. THE RHINOCEROSES.

GENERAL CHARACTERISTICS.—Number of teeth varying in different species, the cutting teeth unequal, the anterior grinders small, the posterior increasing progressively in size; one or two horns on the nose; feet three-toed; tail short, with the tip compressed.

The rhinoceroses are large animals, having but three toes on each foot. The bones of the nose are massive and conjoined so as to form a sort of vault of sufficient strength to support one or two solid horns, which are adherent to the skin of the face and constitute formidable weapons either for defence or attack. The structure of these horns is fibrous, as if they were composed of a mass of hairs agglutinated together.

The natural disposition of these animals is stupid and ferocious. They inhabit marshes and other damp localities, and live altogether upon vegetable substances—grass, herbs, or the branches of trees

The best known species—

The **One-horned Rhinoceros** (*Rhinoceros unicornis*)—as its name imports, has but a single horn, which is situated upon the middle of the snout; and as this weapon sometimes measures upwards of two feet in length, tapering gradually from the base to the point, sharp at its extremity, and slightly curved towards the back of the animal, it becomes when wielded by its herculean possessor a very deadly instrument, with which, at a stroke, it rips up the most powerful assailant, and is a formidable antagonist even to the elephant itself. The skin of this species forms a coat of armour, almost impenetrable by a musket-ball; it is in some parts upwards of an inch in thick-

ness, covered externally with warty prominences of more than leather-like hardness, and so inflexible that were it not for the deep natural folds in which it is arranged upon the back, neck, and loins, the movements of the animal would be seriously trammelled, if not impossible; as it is, however, they convert the skin into a sort of armour, jointed together with exquisite art, so that freedom of motion is amply provided for. The one-horned rhinoceros is an inhabitant of the East Indies, more especially of that portion of the country situated beyond the Ganges; its range, indeed, extends from Bengal to Cochin China. Slow and careless in his movements, this animal wanders through his native plains with a heavy step, carrying his huge head so low

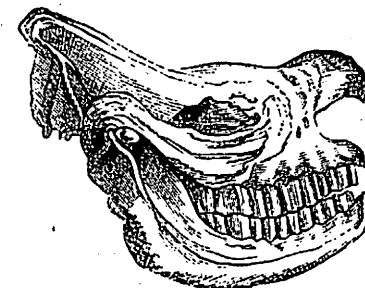


FIG. 134.—SKULL OF RHINOCEROS.

that his nose almost touches the ground, and stopping at intervals, to crop some favourite plant, or in playfulness to plough up the ground with his horn, throwing the mud and stones behind him. The jungle yields before his weight and strength, and his track through it may readily be traced by the devastation that marks his progress. Like many other Pachyderms he delights to roll in the mud till his skin is entirely covered with clay or mire, or to bathe in any pool or river that he may meet with in his peregrinations.

Furious battles sometimes take place between the elephant and rhinoceros, and, though of course the strength of the elephant is infinitely superior to that of the rhinoceros, the latter, on account of his swiftness and sudden movements, is by no means a despicable antagonist; indeed, instances are known where they have perished together. "At Omabonde," says Mr. Andersson, "we were told that a combat of this kind occurred not long before our arrival. A rhinoceros having encountered an elephant, made a furious dash at him, striking his long sharp horn into the belly of his antagonist with such force

as to be unable to extricate himself, and in his fall the elephant crushed his assailant to death."

The Two-horned Rhinoceros (*Rhinoceros bicornis*) is a native of Africa. It differs remarkably from the preceding species, first by the possession of a second horn of smaller size, situated midway between the larger one and the top of its head, and secondly because its skin, more supple than that of the preceding species, is entirely destitute of folds. This animal feeds on small branches and brushwood, "from which circumstance," says Dr. Smith, "it is invariably found frequenting wooded districts, and in these situations its course may be often traced by the mutilations of the bushes; nevertheless, the mass of the vegetable matter consumed does not seem to be in proportion to the bulk of the animal, in fact, it feeds but slowly, and a large portion passes much of their time in idleness."

As these animals depend much upon smell for their existence and safety, it is necessary to advance upon them from the leeward side if the aim be to get close without being discovered. In pursuit they also trust for guidance to the same sense, and may be heard forcibly inspiring the air when they have lost the scent of the object they are following. The ticks and other insects with which they are covered furnish them with another source of intelligence, inasmuch as they attract a number of birds, which sit quietly picking them off when nothing strange is in sight, but fly away when any object excites their fear. So well does the rhinoceros understand this, that he proceeds feeding with the greatest confidence while the birds continue perched upon his back, but the moment they fly, the huge animal raises his head and turns it in all directions to catch the scent. Whether he accomplishes this or not, he generally feels so uncertain of his position that he removes to some other locality.

"A remarkable bird," says Dr. Livingstone, "the *Buphaga Africana*, is a frequent companion of the rhinoceros, to which, besides being of service in ridding him of many of the insects that infest his hide, it performs the important part of sentinel. On many occasions has this watchful bird prevented me from getting at that beast. The moment it suspects danger, it flies almost perpendicularly up into the air, uttering shrill, sharp notes, that never fail to attract the attention of the rhinoceros, who, without waiting, to ascertain the cause, almost instantly seeks safety in a precipitate flight."

According to Mr. Cumming, these birds also attend upon the hippopotamus.

"Whether from a limited sphere of vision arising from the extraordinary minuteness of the eyes, which resembling the pigs in expression, are placed nearer to the nose than in most other animals; or whether from an overweening confidence in its own powers, the rhinoceros will generally suffer itself to be approached within even a few yards before condescending to take the smallest heed of the foe, who is diligently plotting its destruction. At length,

pricking its pointed ears at some unusual sound, it listens with a ludicrous assumption of shrewdness—its elevated snout, armed with a double ploughshare, imparting an inimitable expression of contempt. In an instant the dull and vacant physiognomy has been lighted up with the essence of all that is spiteful and malevolent. Twinkling its hoggish eyes and turning its shapeless head inquiringly from side to side, it trots forward a few paces with the vivacity and mincing gait of a French dancing-master, wheeling presently to the right-about, to reconnoitre the enemy. Then uttering a great blast or snort of defiance, and lowering its armed muzzle almost to the ground, grunting and trumpeting, on comes the villain with reckless impetuosity, displaying a degree of activity but ill according with such unwieldly proportions. Once roused from his apparent lethargy, throwing down the gauntlet, he charges with blind fury to the onslaught, aided no less by the length of his stride, than by the propelling impetus of his body. Yet his rush is invariably a straight one; and his awkward structure preventing him from turning with facility, it is only necessary to step on one side to be perfectly secure—a bullet, hardened either with tin or with quicksilver, and thrown in behind the elbow at the proper moment being almost sure to prove fatal after a race of three or four hundred yards. But though glorying not in the panoply of plate armour which encases the ribs of his Asiatic brother, the stupid and vicious beast is nevertheless enveloped in a suit of mail which will successfully repel any ordinary bullet—one of unadulterated lead, far from penetrating, most frequently falling flattened from his hide."—HARRIS: "*Portraits of Game and Wild Animals of Southern Africa.*"

FAMILY V.

SUIDÆ. THE HOGS.

GENERAL CHARACTERISTICS.—All the feet provided with four toes, of which the two central ones are armed with large and strong hoofs; lateral toes short, scarcely touching the ground; the incisor teeth vary in their number, but those of the lower jaw are always laid flat and directed forwards; canines large and tusk-shaped, projecting from the mouth; snout prolonged, cylindrical, and flattened at its extremity; stomach simple.

The members of this extensive family are distinguished by having four hoofs upon each foot; but of these the two middle ones are much the largest, giving the foot much the appearance