NATURAL HISTORY

OF THE

BIBLE:

OR A DESCRIPTION OF

ALL THE

Beasts, Insects, Plants, Metals, Fishes, Trees, Precious Stones, &c.

Mentioned in the Sacred Scriptures.

Collected from the best Authorities,

And Alphabetically Arranged.

BY THADDEUS M. HARRIS, A. M. LIBRARIAN OF HARVARD UNIVERSITY, Cambridge.

1713-1345

"He spake of trees, from the cedar tree that is in Lebanon, even unto the hysfop that springeth out of the wall. He spake also of beasts, and of souls, and of creeping things, and of fishes."

**Exings*, iv. 33.



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fider the ravens, for they neither fow nor reap, neither have flore house, nor barn; and GOD feedeth them. How much better are ye than the fowls. Luke, xii. 24.

Many have thought that the prophet Elijah was in his retirement fed by this bird. But a writer in the memoirs of literature, for April 1710, proves from many authors, that there was in the country of Bethschan, in Decapolis, by the brook Cherith or Carith, a little town called Aorabi or Orbo: And he therefore explains the word orbin, which in 1 Kings, xvii. 4. we translate ravens, of the inhabitants of that village, some of whom, he contends, daily carried bread and flesh to Elijah, who was retired to and laid in a cave in the neighbourhood. And he supports this interpretation by the opinions of Chaldee, Arabic, and Jewish writers.

The blackness of the raven has long been proverbial. It is alluded to in Cantic. v. 11.

Solomon, speaking of the peculiar regard and veneration due to the worthy persons and salutary instructions of parents, observes that an untimely fate and the want of decent interment may be espected from the contrary: And that the seering eye which throws wicked contempt on a good father, and insolent distain on a tender mother, shall be dug out of the unburied exposed corpse by the ravens of the valley, and eaten up by the young eagles. Prov. xxx. 17.

REED. A plant growing in fenny and watery places: Very weak and slender, and bending with the least breath of wind.

REEM. The Hebrew name of the rhinoeeros, but by our translators rendered unicorn.

"It is very remarkable, fays Mr. Bruce, that two fuch animals as the elephant and thinoceros should have wholly escaped the description of the sacred writers. Moses, and the children of Israel, were long in the neighbourhood of the countries which producduced them, both while in Egypt and in Arabia. The classing of the animals into clean and unclean, feems to have led the legislator into a kind of necessity of describing, in one of the classes, an animal which made the food of the principal Pagan nations in the neighbourhood. Considering the long and intimate connection Solomon had with the fouth coast of the Red Sea, it is next to impossible that he was not acquainted with them, as both David his father, and he, made plentiful use of ivory, as they frequently mention in their writings, which, along with gold, came from the same part. Solomon, besides, wrote expressly on zoology, and we can scarce suppose was ignorant of two of the principal articles of that part of the creation, inhabitants of the great continent of Asia, east from him, and that of Africa on the south, with both which territories he was in constant correspondence...

"There are two animals named frequently in scripture without naturalists being agreed what they are. The one is the behemoth; the other the reem; both mentioned as types of strength, courage, and independence on man; and as such exempted from the ordinary lot of beasts, to be subdued by him, or reduced under his dominion. Though this is not to be taken in a literal sense, for there is no animal without the fear or beyond the reach of the power of man; we are to understand it of animals possessed what they are.

and fize so superlative as that in these qualities other beasts bear no proportion to them.

"The behemoth, then, I take to be the elephant; his history is well known, and my only business is with the reem, which I suppose to be the rhinoceros. The derivation of this word, both in the Hebrew and Ethiopic, seems to be from erectness, or standing itraight. This is certainly no particular quality in the animal itself, who is not more, nor even so much, erect as many other quadrupeds, for its knees are rather crooked; but it is from the circumstance and manner in which his horn is placed. The horns of all other animals are inclined to some degree of parellelism with the nose, or os frontis. The horn of the rhinoceros alone is erect and perpendicular to this bone, on which it stands at right angles; thereby possessing a greater purchase or power, as a lever, than any horn could possibly have in any other position.

"This fituation of the horn is very happily alluded to in the facred writings: My horn shalt thou exalt like the horn of a reem*: And the horn here alluded to is not wholly figurative, but was really an ornament worn by great men in the days of victory, preferment, or rejoicing, when they were anointed with new, sweet, or fresh oil; a circumstance which David joins with that of erecting the horn.†

"Some authors, for what reason I know not, have made the reem, or unicorn, to be of the deer or antelope kind, that is of a genus, whose very character is sear and weakness, very opposite to the qualities by which the reem is described in scripture: Besides, it is plain

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⁺ Pfal. xcii. 10.

⁴ See this illustrated in Bruce's tray, v. 3. p. 220. 4to.

the reem is not of the class of clean quadrupeds; and a late modern traveller, very whimfically, takes him for the leviathan, which certainly was a fish. It is impossible to determine which is the filliest opinion of the two. Balaam, a priest of Midian, and so in the neighbourhood of the haunts of the rhinoceros, and intimately connected with Ethiopia, for they themselves were shepherds of that country, in a transport, from contemplating the strength of Israel whom he was brought to curse, says, they had as it were the firength of the reem.* Job makes frequent allusion to his great strength, ferocity, and indocility.+ He asks will the reem be willing to serve thee, or abide by thy crib ? That is, ¿ will he willingly come into thy stable, and eat at thy manger? and again, a canst thou bind the reem with a band in the furrow, and will he harrow the vallies after thee? In other words, i canst thou make him to go in the plow or harrows?

"Isaiah‡ who of all the prophets seems to have known Egypt and Ethiopia the best, when prophecying about the destruction of Idumea, says, that the reem shall come down with the fat cattle; a proof that he knew his habitation was in the neighbourhood. In the same manner as when foretelling the desolation of Egypt, he mentions, as one manner of effecting it, the bringing down the fly from Ethiopias to meet the cattle in the desart and among the bushes, and destroy them there, where that insect did not ordinarily come but on command, and where the cattle sled every year to save themselves from that insect.

"The rhinoceros in Geez is called arwe harish, and in the Amharic auraris, both which names fignify the large

^{*} Numb. xxiii. 22. † Ch. xxxix. 9, 10. ‡ xxxiy. 7. § Ch. vii. 18, 19. || Exod. viii. 22.

large wild beast with the horn. This would seem as if applied to the species that had but one horn. On the other hand, in the country of the Shangalla, and in Nubia adjoining, he is called girnamgirn, or horn upon horn, and this would seem to denote that he had two. The Ethiopic text renders the word reem, arwé harish, and this the Septuagint translates monoceros, or unicorn.

"If the Abyssinian rhinoceros had invariably two horns, it seems to me improbable the Septuagint would call him monoceros, especially as they must have seen an animal of this kind exposed at Alexandria in their time, then first mentioned in history, at an exhibition given to Ptolemy Philadelphus at his accession to the crown, before the death of his father.

"The principal reason for translating the word reem, unicorn, and not rhinoceros, is from a prejudice that he must have but one horn. But this is by no means so well founded as to be admitted as the only argument for establishing the existence of an animal which never has appeared after the search of so many ages. Scripture speaks of the horns of the unicorn*, so that even from this circumstance the reem may be the rhinoceros, as the Asiatic and part of the African rhinoceros may be the unicorn."†

RHINOCEROS: The animal of which we have last spoken. In size he is only exceeded by the elephant; and in strength and power is inseriour to no other creature. He is at least twelve feet in length from the extremity of the snout to the insertion of the tail; six or seven feet in height, and the circum-

ference.

^{*}Daut. xxxiii. 17. Pfal. xxii, 21.

⁴ Bruce's trav. v. 5. p. 89,

farence of the body is nearly equal to its length. He is particularly diffinguished from the elephant and all other animals by the remarkable and offensive weapon he carries upon his nose. This is a very hard horn, solid throughout, directed forward, and has been seen feen four seet in length.

His body and limbs are covered with a thick black skin, which he cannot contract. It is only folded in large wrinkles on the neck, the shoulders, and buttocks, to facilitate the motions of the head and legs: The former is larger in proportion than the elephant, the latter are massive and terminated into large feet, armed with three great toes, or claws. His eyes are quite small, and he never opens them entirely. His sight is dull: But he possesses the senses of hearing and smelling in high perfection.

The upper jaw of the animal projects above the lower; and the upper lip has a motion, and may be lengthened fix or feven inches. This feems to be his only organ of feeling. It is equally calculated for strength and dexterity. He can direct and double it in turning it round a stick, and by it seize the bodies he wants to bring to his mouth.

Without being carnivorous, or even extremely wild, the rhinoceros is nevertheless fierce, brutal, and indocile. This fierceness indeed may be conquered, and we see with a moderate degree of attention, he is brought to be quiet enough; but it is one thing to conquer or tame his fierceness, and another to make him capable of instruction; and it seems apparently allowed to be his case, that he has not capacity. He must ever be subject to fits of sury which nothing will calm. When angry, he leaps forward with im-

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petuosity to a great height, which is done with prodigious quickness, notwithstanding his heavy appearance and corpulence. These are circumstances which did not escape the notice of the sacred writers.† They do not herd together, nor march in troops like the elephant; they are more wild, more solitary, and indocile. They never attack men unless provoked; but then they become furious and are very sormidable. They feed upon herbs, thistles, shrubs, the young branches, and the bark of trees.— They do not molest the small animals, nor fear the large ones; but live in peace with them all, even with the tiger, who often accompanies without daring to attack them.

They are of the nature of the hog; blunt and grunting, without sentiment and without discretion: Inclined to wallowing in the mire, fond of damp and marshy places, and seldom quitting the banks of rivers.—Their slesh also much resembles pork.

Mr. Bruce has very particularly described the two horned rhinoceros of Abyssinia. His mouth he describes as furnished with twenty eight teeth. The upper lip he allows to be remarkably large. The skin is always smooth, excepting when slies and other troublesome insects have broken it, so as to produce pustles; a distress to which the animal is very liable. The tongue of the young rhinoceros is smooth; but as he grows old it becomes very rough. The anterior horn is round, and bends slightly back at the point; behind it appears the second, which is slat and straight; and behind this have been observed the rudiments of a third.

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^{*} Alluded to in Pfal. xxix. 6.

[†] Pfal. xxii. 13, 22. Job, xxxix. 9.

The manners and economy of this species differ but little from those of the former. But the bicorn has been more accurately observed than the unicorn. He refides almost constantly in deep forests. never eats hay or grass. Large succulent plants, prickly shrubs, the branches, and even the trunks of trees, are the articles of food which he prefers. strength of his jaws and teeth enables him to break off and masticate the thickest branches of the hardest and toughest trees. But the forests of Abyssinia afford trees of a fofter confistency, and peculiarly succulent; which he eats in preference to others. upper lip is his chief instrument in collecting his food. He extends and twifts it, so as to perform with it many of the functions which the elephant performs with his proboscis. After stripping a tree of its branches, a rhinoceros often applies his horn to the trunk, and splitting it into so many lathes, devours it with as much ease and avidity, as an ox would eat up a bunch of celery. In the forests inhabited by animals of this species, there appear sometimes trees divested of their leaves and branches, sometimes a trunk divided into lathes, a part of which have been eaten, and another part left for a future repast, and fometimes short stumps, of which the leaves, branches, and trunks have been devoured. The horns of the rhinoceros fuffer greatly in the preparation of his food; he often leaves a part of a horn either fixed in a tree, which he has in vain attempted to tear, or lying beside it on the ground. The sensibility of the rhinoceros in this part, must render such an accident as the breaking of a horn, if not fatal, at least extremely painful and dangerous. Mr. Bruce relates*,

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that he faw a rhinoceros so affected, on having the point of his foremost horn broken off by a musket ball, as to appear, for an instant, absolutely incapable of sense and motion.

However unwieldy his form, the rhinoceros difplays astonishing swiftness. He moves with a lort of trot; quickening his pace by degrees, as he runs, His speed is not equal to that of a swift and vigorous horse; but, between speed and cunning, he seidom fuffers a hunter, mounted on horse back, to overtake him. The Hottentot and Caffrarian hunters are accustomed to steal upon the rhinoceros when asleep, and gore him with several deep wounds. After which, they follow his footsteps, even for several days, till he drops down of weakness, or dies of his wounds. But they commonly poison their darts immediately before the enterprize: And in this case, the animal does not long survive.* As he moves through the forest, the smaller trees are crushed under his weight, like so many dry reeds. His eyes are so small, and his fight fo feeble, that he fees only a very short way before him. The Abyssinians pursue him, two on a horse; and, as he seldom looks behinds him, commonly overtake him before he is aware. The one, armed with a fword, then drops down; and cutting the hams of the rhinoceros, the vast animal falls to the ground, alike incapable of flight and of refistance. Although naturally peaceable, he is disposed as well as other animals, to defend himself when attacked. His rage is impetuous, and generally ill directed; he injures himself as readily as an antagonist; he knocks his head against a wall or manger; strikes against a

tree with as much satisfaction as against the hunter who attacks him.

It may be naturally conceived, that so large an animal as the rhinoceros must require a considerable quantity of water to macerate his food. The tracts of country which he inhabits, are interspersed with marshes, lakes and rivers. The district of the Shangalla, the favourite abode of this species, in Abysfinia, is, for fix months in the year, deluged by constant rains, and overspread with woods which prevent evaporation. The rhinoceros, as well as most other species, is pestered by flies. Being destitute of hair, he is peculiarly exposed to the persecution of these insects. Nature has taught him, however, to roll occasionally in the mire, till he acquire a crust of dirt, which may for a time at least, protect him from their stings. But this dries, cracks, and falls off in pieces. The flies then renew their attacks, and often pierce his skin; so that his body is at length covered over with pustules. It is in the night chiefly, that he rolls in the mire; and the hunters often steal on him at that period, while he is enjoying one of his favourite pleasures, and stab him with mortal wounds in the belly, before he is aware of their approach. By wallowing in the mire, he often gathers reptiles and infects upon his body; such as millepedes, scolopendræ, worms and snails.*

The rhinoceros, though next in fize, yet in docility and ingenuity, greatly inferiour to the elephant, has never yet been tamed, so as to affist the labours of mankind, or to appear in the ranks of war. The

Romans

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Romans introduced him on the amphitheatre, and opposed him to the elephant: It is even prefended, that he appeared no unequal match. The bear was a contemptible antagonist to the rhinoceros. The flesh of this animal, though by no means a delicate dish, is, with the Shangalla, and a great part of the inhabitants of lower Abyssinia, a principal article of food. The foles of his feet, confifting of a griftly substance, foft like the foles of a camel, are the most delicate part. The rest of the flesh is said to taste like posk; but is much coarser, and smells of musk. The negro hunters of Abyfinia eat it without salt. The hairs about the tail are for thick and strong, that with ten of them a whip may be made, which will draw blood at every stroke. The skin cut into thongs forms excellent whips. The horns are made into cups, which have been fancied to act as antidotes against poisons. In Abystinia, the handles of daggers are always made of the horn of the rhinoceros. The second horn is scarce ever applied to any use. The surface is susceptible of a perfect polish; and beautiful sniff boxes might be formed of this material, were it not that it is a substance easily scratched, and extremely liable to crack or splinter.

RICE. A plant very much resembling wheat in its snape and colour, and in the sigure and disposition of its leaves; but it has a thicker and stronger stalk. Its seed is extremely sarinaceous. It thrives only in low, damp, and marshy lands, when they are even a little overflowed.

It has been wondered why rice, which, as Dr. Arbuthnot observes, is "the seed of two thirds of man-