

THE
TREASURY OF NATURAL HISTORY:
OR,
A Popular Dictionary
OF
ANIMATED NATURE:

IN WHICH
THE ZOOLOGICAL CHARACTERISTICS THAT DISTINGUISH THE DIFFERENT
CLASSES, GENERA, AND SPECIES, ARE COMBINED WITH A VARIETY
OF INTERESTING INFORMATION ILLUSTRATIVE OF THE HABITS,
INSTINCTS, AND GENERAL ECONOMY OF THE ANIMAL KINGDOM.

TO WHICH ARE ADDED,
A SYLLABUS OF PRACTICAL TAXIDERMY,
AND
A Glossarial Appendix.

EMBELLISHED WITH
NINE HUNDRED WOODCUTS, EXPRESSLY ENGRAVED FOR THIS WORK.

BY SAMUEL MAUNDER,

AUTHOR OF
"THE TREASURY OF KNOWLEDGE," "THE SCIENTIFIC AND LITERARY TREASURY,"
ETC. ETC.

"To Thee, whose temple is all space;
Whose altar, earth, sea, skies!
One chorus let all Being raise!
All Nature's incense rise!" POPE.

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work; our figure will show the appearance of this genus. The species represented is often called Neptune's Ruffles, and is the *Retepora cellulosa* of naturalists. It is some of the recent species; there are others found in a fossil state.

RHEA. [See OSTRICH, AMERICAN.]

RHINOCEROS. (*Rhinoceros*.) This large and uncouth-looking Pachydermatous genus inhabits the hotter regions of Asia and Africa, and, next to the Elephant, contains the most powerful of quadrupeds. The common INDIAN RHINOCEROS (*R. unicornis*) is usually about twelve feet long from the tip of the nose to the insertion of the tail; its height is about seven feet; and the circumference of its body is nearly equal to its length. The back, instead of rising, as in the Elephant, sinks in considerably; the head is moderately large and long; the upper lip protrudes considerably, and being extremely pliable, answers the end of a small proboscis; but its most distinguishing mark is the possession of a solid, slightly curved, sharp-pointed horn, which rests on a strong arch



INDIAN RHINOCEROS.
(RHINOCEROS UNICORNIS.)

formed by the nasal bones. This horn is sometimes (but not generally) as much as three feet in length, and eighteen inches in circumference at its base, and is used as a most powerful and effective weapon. The animal is also characterized by having seven molars on each side above and below, with only four incisors, and no canine teeth. The ears are moderately large, upright, and pointed; the eyes small and half closed. The skin is thick and coarse, with a knotty or granulated surface; and so impenetrable on the body and limbs, as to resist either the claws of the lion or the tiger, the sword or the shot of the hunter. About the neck the skin is disposed in several large plaits or folds; another fold passes from the shoulders to the fore legs, and another from the hind part of the back to the thighs. The tail is slender, flattened at the end, and covered on the sides with very stiff and thick black hairs: the belly is somewhat pendulous; the legs very short, strong, and thick; and the feet divided into three large hoofs, all standing forwards. In India the Rhinoceros leads a tranquil indolent life, wallowing on the marshy borders 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, ploughing up the ground with its horn,

and making its way by sheer force through the jungle. It is naturally of a quiet and inoffensive disposition, but very furious and dangerous when provoked or attacked; charging with great impetuosity, and trampling down, or ripping up with its horn, any animal which opposes it. The bones of the Rhinoceros, like those of the Elephant, are often found in a fossil state in various parts of the world; and in the year 1772 an entire Rhinoceros was found buried in the banks of a Siberian river, in the ancient frozen soil, with the skin, tendons, and some of the flesh, in the highest state of preservation.

THE TWO-HORNED RHINOCEROS. (*Rhinoceros bicornis*.) This species is found in various parts of Africa, and seems to have been the kind known to the ancient Romans, and by them exhibited in their public shows and combats of animals. In size it equals the common or single-horned species; and its habits and manner of feeding are the same: but it differs greatly in the appearance of its skin, which, instead of the vast and regularly marked armour-like folds of the former, has merely a slight wrinkle across the shoulders, and on the hinder parts, with



AFRICAN RHINOCEROS.

a few fainter wrinkles on the sides; so that, in comparison with the common Rhinoceros, it appears almost smooth: the skin, however, is rough or tuberculated: but what constitutes the specific or principal distinction is, that the nose is furnished with two horns, one of which is smaller than the other, and situated higher up; and that they are fixed to the nose by a strong apparatus of muscles and tendons, so that they are loose when the animal is in a quiescent state, but become firm and immovable when he is enraged. His manner of feeding, with some other particulars, is thus given by Mr. Bruce, the Abyssinian traveller. He informs us, that, "besides the trees capable of most resistance, there are, in the vast forests within the rains, trees of a softer consistence, and of a very succulent quality, which seem to be destined for his principal food. For the purpose of gaining the highest branches of these, his upper lip is capable of being lengthened out so as to increase his power of laying hold with this in the same manner as the Elephant does with his trunk. With this lip, and the assistance of his tongue, he pulls down the upper branches which have most leaves, and these he devours first; having stripped the tree of its branches, he does not therefore abandon it, but, placing his snout as low in the trunk as he finds his horns will enter, he rips up the body of the tree, and reduces

it to thin pieces, like so many laths; and when he has thus prepared it, he embraces as much of it as he can in his monstrous jaws, and twists it round with as much ease as an ox would do a root of celery. When pursued, and in fear, he possesses an astonishing degree of swiftness, considering his size, the apparent unwieldiness of his body, his great weight before, and the shortness of his legs. He is long, and has a kind of trot, which, after a few minutes, increases in a great proportion, and takes in a great distance; but this is to be understood with a degree of moderation. It is not true that in a plain he beats the horse in swiftness. I have passed him with ease, and seen many worse mounted do the same; and though it is true that a horse can seldom come up with him, this is owing to his cunning, and not his swiftness. He makes constantly from wood to wood, and forces himself into the thickest part of them. The trees that are frush, or dry, are broke down, like as with a cannon shot, and fall behind him and on his sides in all directions. Others that are more pliable, greener, or fuller of sap, are bent back by his weight and the velocity of his motions. And, after he has passed, restoring themselves like a green branch to their natural position, they sweep the incautious pursuer and his horse from the ground, and dash them in pieces against the surrounding trees. The eyes of the Rhinoceros are very small, and he seldom turns his head, and therefore sees nothing but what is before him. To this he owes his death, and never escapes if there is so much plain as to enable the horse to get before him. His pride and fury, then, make him lay aside all thoughts of escaping, but by victory over his enemy. He stands for a moment at bay, then, at a start, runs forward at the horse, like the wild boar, whom, in his manner of action, he very much resembles. The horse easily avoids him, by turning short aside; and this is the fatal instant: the naked man, with the sword, drops from behind the principal horseman, and, unseen by the Rhinoceros, who is seeking his enemy, the horse, he gives him a stroke across the tendon of the heel, which renders him incapable of further flight or resistance."

Another species of Rhinoceros, less powerful and savage, is found in Java; of this we figure the skull, which will serve also to illustrate the structure of the head; a third, which possesses two horns, in Sumatra; and



SKULL OF RHINOCEROS JAVANUS.

three species are said to be known in Africa; but the most formidable are those we have

described. The skin of the Rhinoceros is an article in great demand in several countries of Asia and Africa. It is manufactured into the best and hardest leather that can be imagined; and targets and shields are made of it, that are proof against even the stroke of a scimitar. When polished, the skin is very similar in appearance to tortoise shell. Their horns are manufactured into drinking cups, the hilts of swords, and snuff-boxes, by several oriental nations; and in the palmy days of ancient Rome, we are told, the ladies of fashion used them in their baths, to hold their essence bottles and oils.

In M. de Blainville's great work on the Osteography of the Vertebratæ, he admits five living species as indisputable; two of which are African—the black rhinoceros of the Cape (*R. bicornis*), and the white rhinoceros of Southern Africa, first distinguished by Dr. Burchell (*R. sinuatus*); three are Asiatic—the Rhinoceros of India (*R. unicornis*), the rhinoceros of Java, with one horn (*R. Javanus*), and that of Sumatra, with two horns (*R. Sumatranus*). Dr. Andrew Smith discovered a third species, distinguished, among other peculiarities, by the great length of the second horn. This is the *Rhinoceros Kellia*, described by that distinguished naturalist; a fine specimen of it exists in the collection of the British Museum. Some accounts would likewise lead us to believe in the existence of a rhinoceros in Africa with one horn, which would form another species to be added to the preceding.

Among the fossil rhinoceroses, M. de Blainville admits but three European species as certain. The first is the rhinoceros with partitioned nostrils (*R. tichorhinus*). This species, destitute of incisors, had three toes on each foot, the cranium elongated, the nostrils separated by a bony partition; its nose was provided with two horns; its molars approached those of the *Rhinoceros camus*; its bones were short and strong, and its body covered with hair. On this subject he remarks, that these hairs have sometimes been erroneously described as forming a long and thick fur, but at most they did not exceed three lines in length. *R. tichorhinus* is found in the deposits formed during the diluvian epoch. It is probable that it inhabited Siberia, and the greater part of Europe. This is the species which has been found preserved in the ice of the North of Asia. The second species is the rhinoceros with nostrils not partitioned (*R. leptorhinus*), which had persistent incisors, but concealed in the gums, three toes on each foot, two horns, an elongated cranium, and slender bones. This species, which is not so well characterized as the preceding, has been found chiefly in the superior tertiary of Italy and the south of France. M. de Blainville likewise refers the bones found in caverns in the south of France to *R. tichorhinus*, while those of the north and of Belgium contain only the remains of the preceding species.—The third species is the rhinoceros with incisors (*R. incisus*), characterized by half salient incisors in the two jaws, four toes on the anterior feet, flat metatarsi, &c. It would

appear that the male bore two horns, and that the female was destitute of these appendages. The latter, for this reason, has been made the type of the genus *Acerotherium* of M. Kaup. The *R. incisus* is found in the middle tertiary formations, and has been described under many names. In the Sewalik Hills, in India, Dr. Falconer and Major Cautley have discovered remains of other fossil species; figures of these are given in their *Fauna antiqua Sivalensis*: the originals are preserved in the British Museum.

It appears that rhinoceroses have not existed during the whole commencement of the tertiary epoch, for the eocene formations yield no trace of them. They have appeared, for the first time, in the middle or miocene period, during which the *R. incisus* has inhabited the greater part of Europe. Towards the close of the tertiary epoch this species has been replaced by the *R. leptorhinus*, and during the diluvian epoch, it is the *R. tichorhinus* which has been the most abundant and most widely diffused. In the present day rhinoceroses do not exist in Europe, and are only found in the warmest countries. We find three species in Africa, one species in Continental Asia, and two in the Sunda Islands. America and New Holland have not any at present, and do not appear to have possessed any in the epoch anterior to our own.

RHIPIDURA. [See FANTAIL.]

RHIZOSTOMA. A genus of *Acalephæ*, bearing a close external resemblance to the Medusa.

RHOPALOCERA. The first section of the *Lepidoptera*, in the recent Classification of Insects, corresponding with the genus *Papilio* (Linn.), and deriving its name from generally having the antennæ, which are thin and elongated, terminated by a knob. This section comprises the well-known tribes of Butterflies, whose elegant forms and beautiful colours may be mistaken for "winged flowers or flying gems." They vary greatly in size, as well as in the diversity of their colours; here, in our native fields, we have some species not an inch across the wings, while in India and South America are to be seen, fluttering in the sun's warm rays, gorgeous specimens nine or ten inches in expanse. Their flight is also as varied as that of the feathered tribes, and can as readily be distinguished by the skilful collector. Some skim along the plain with graceful elegance; others fly more slowly, and with an undulating motion; while others, again, rise high into the air, and sail over the topmost branches of the sturdy oak. The prevalence of particular colours in certain groups also deserves mention: thus the *Polyommata* are chiefly blue; among the *Pierides* the colour is either white or orange tipped with black; in the *Hipparchiæ*, dull brown; in *Lycæna*, bright copper colour; while the *Nymphalidæ* have their wings varied with beautiful eyes or spots; and the *Fritillariæ* are fulvous, varied on the under side with pearly patches. — We might extend this article to an indefinite

length were we to attempt to describe the various habits, the distinctive characters, and the transformations, &c. of these beautiful insects; but we trust the reader will excuse us if we at once refer him, for such additional information as our space would allow, to the articles *PAPILIO* and *LEPIDOPTERA*.

RHYNCHŒA. A genus of Grallatorial birds allied to the Snipes. The species *RHYNCHŒA AUSTRALIS*, which is a summer visitant of New South Wales, in its habits and disposition partakes both of the true Snipes and the Sandpipers; running about, like the latter, among the rushes or on the bare ground at the edge of the water. Olive-green, with narrow bars and marblings of dark brown, is the prevailing colour; and a pale buff stripe runs from the bill down the centre of the head to the nape; breast and all the under surface white; legs pale green. The male is much smaller than the female, and has the sides, back, and front of the neck much lighter and mingled with patches of white; wings more olive, the coverts ornamented with numerous large irregular patches of buff, encircled with a narrow line of black; the buff bands on the primaries richer and more distinct; the scapularies speckled with white; the patch on each side of the chest dark olive, with large patches of white surrounded by a line of black. The plumage of the female, contrary to the general rule, is darker, richer, and more distinctly defined. Mr. Gould says that on dissection he observed an anatomical peculiarity of a very extraordinary nature, the more so as it exists in the female alone; namely, the great elongation of the tracheæ, which passes down between the skin and the muscles forming the breast for the whole length of the body, making four distinct convolutions before entering the lungs. This was afterwards examined by Mr. Yarrell, who states that the form and position of the trachea in the *Rhynchæa Australis* is similar to that of the Semipalmated Goose, figured in the 15th volume of the Trans. Linn. Soc. Tab. 14.

RHYNCHOPHORA. An extensive group or subsection of *Coleopterous* insects, distinguished by the front of the head being produced into a long snout or rostrum, at the extremity of which is the mouth. The body is oval or rounded; the antennæ are inserted at the sides of the rostrum, and are short, elbowed, and often terminated in an oval club; the mandibles are small but robust; the palpi short and conical; and the third tarsal joint deeply bilobed. The majority of the species are of small or moderate size; but the elytra of some of them are most brilliantly coloured: they are widely distributed, but abound chiefly in hot countries, and all are herbivorous. The larvae are white and fleshy grubs, with strong and horny jaws, whereby they are enabled to gnaw the harder parts of vegetable food, on which they subsist.

These beetles are often very hurtful to plants, by boring into the leaves, bark, buds, fruit, and seeds, and feeding upon the soft substance therein contained. They are di-