ENCYCLOPÆDIA LONDINENSIS;

or,

UNIVERSAL DICTIONARY

OF

ARTS, SCIENCES, AND LITERATURE:

COMPREHENDING,

UNDER ONE GENERAL ALPHABETICAL ARRANGEMENT,

ALL THE WORDS AND SUBSTANCE OF

EVERY KIND OF DICTIONARY EXTANT IN THE ENGLISH LANGUAGE:

IN WHICH THE IMPROVED DEPARTMENTS OF

THE MECHANICAL ARTS, THE LIBERAL SCIENCES, THE HIGHER MATHEMATICS, AND THE SEVERAL BRANCHES OF POLITE LITERATURE,

ARE SELECTED FROM THE

ACTS, MEMOIRS, AND TRANSACTIONS, OF THE MOST EMINENT LITERARY SOCIETIES IN EUROPE, ASIA, AND AMERICA,

FORMING A COMPREHENSIVE VIEW OF THE RISE, PROGRESS, AND PRESENT STATE, OF HUMAN LEARNING IN EVERY PART OF THE WORLD.

EMBELLISHED WITH A MOST

MAGNIFICENT SET OF COPPER-PLATE ENGRAVINGS,

ILLUSTRATING, AMONGST OTHER INTERESTING SUBJECTS,

THE MOST CURIOUS, RARE, AND ELEGANT, PRODUCTIONS OF NATURE, IN EVERY PART OF THE UNIVERSE;

AND ENRICHED WITH

PORTRAITS OF EMINENT AND LEARNED PERSONAGES, IN ALL AGES OF THE WORLD.

PROJECTED AND ARRANGED

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the department, about 1900 square miles, is diversified with hills, forests, and small vallies, all picturesque, and in general well cultivated. On the mountains, the soil is bare and stony; in the vicinity of the Rhine it is in certain places marshy, but in general it is fertile, and the average produce of corn exceeds the consumption of the inhabitants, whose number, however, is nearly 40,000. Agriculture is less backward here than in most parts of France. The products are wheat, barley, oats, hemp, flax, tobacco, madder, and rape-seed. In the mountains are mines of iron, copper, coal, and salt. The pastures are extensive, and on the warmer exposures vines are cultivated. Of the manufactures, the chief are hardware and linen. Cotton has been introduced since the close of the 18th century, and there are likewise fabrics of pottery, glass, china-ware, paper, &c. all affording materials for a considerable export. This department, situated to the east of the Vosges, the natural limit of France, is inhabited by Germans, and French is spoken only in the large towns. In regard to religion, the Lutherans are computed at 160,000, the Calvinists at 25,000, and the rest, with the exception of the Jews, are Catholics. This department is divided into four arrondissements, viz. Strasburg the capital, Saverne, Bar, and Weissemburg. The treaty of Paris in 1815 curtailed it of Landau, and of a track of country to the north of Weissemburg

RHINE, UPPER, Haut Rhin, another department in the north-east of France, which, like the preceding, is of an oblong form, the Rhine flowing along its eastern limit, and the long chain of the Vosges extending on its western side, in a course nearly parallel to that river. Its extent is about 1700 square miles. It contains the southern division of Alsace, and like the northern, has a stony soil on the mountains, but in the plains and vallies, a rich and fertile Laber, the Lauch, and the Largue. It has likewise several canals, and two small lakes. Agriculture is less backward here than in the interior of France; corn, hemp, flax, rape-seed, also wines and tobacco, being raised in large quantities. Cherries are so abundant, that the liquor called cherry water forms a considerable article of export. The mineral products are iron, coal, and, in a small degree, copper, lead, and antimony. Of coal, the quantity annually extracted from the mines is about 1000 tons; but of iron, above 5000 tons. Linen, woollen, and latterly cottons, are made in quantities; and on a smaller scale, paper, leather, and glass. Placed, like the preceding department, beyond the natural limit of France, the inhabitants (in number 320,000), are almost all of German descent, and French is spoken only in the towns. The Protestant part of the inhabitants are computed at 57,000; the Jews at 10,000; the Anabaptists at 3000; the Catholics at 250,000. The department is divided into the four arrondissements of Colmar, Altkirch, Neufbrisach, and Befort.

RHINE, a name given by Aristotle, Appian, and most of the Greek writers, to that species of the squalus, which we usually call the squatina: the squatus of Isidore and Pliny. Artedi has distinguished this from all the other species of the squalus, by the having no pinna ani, and the mouth in the extremity of the snout.

RHINEBECK, a township of the United States, in Dutchess county, New York, on the east side of the Hudson;

67 miles south of Albany.

RHINE-GRAVE, in Germany, a count palatine of the Rhine.

RHINE-LAND Rod, in Fortification, &c. a measure of two fathom, or twelve feet, used by the Dutch and German engineers, &c.

RHINESTOWN, a township of the United States in

Cumberland county.

RHINGAU, the name given by some authors to the lavaretus, a small fish caught in the German lakes, and sent in pickle into many parts of the world.

the squatina or monk-fish kind, but differing from it in this, that the body is proportionably longer, and the head is more pointed; and the mouth is a great way beyond the end of the snout, and placed under the head. It is from three to four feet long, and is common in the Mediterranean, and brought to market in some parts of Naples. This is a species of ray in the Linnæan system. See RAIA.

RHINO'CEROS, s. [ριν and κερας, Gr.] A vast beast in the East Indies, armed with a horn on his nose.

Approach thou like the rugged Russian bear, The arm'd rhinoceros, or Hyrcanian tyger; Take any shape but that, and my firm nerves Shall never tremble.

Shakspeare.

The RHINOCEROS is a genus of animals of the class mammalia, order brutæ, and is distinguished into two species by the number of the horns: both species have the hoof cleft into three.

1. Rhinoceros unicornis, or one-horned rhinoceros. This animal is among the largest of quadrupeds. His body equals the bulk of the elephant; and, were not his legs shorter, he would exhibit a no less stately figure. A single, black, smooth horn, sometimes three feet and a half long, and situated near the extremity of the nose, constitutes his specific character: the upper lip is disproportionably large, hanging over the lower, and terminating in a point: it is furnished with muscles, which enables the animal to move it with great dexterity in collecting his food, and introducing it into the mouth: the nostrils are in a trasverse direction: the ears are large, erect, and pointed: the skin is naked, rough, and extremely thick: about the neck it is gathered into enormous folds; a fold extends between the shoulders and the fore legs, and another from the hinder part of the back to mould. Its chief rivers, after the Rhine, are the Ill, the the thighs: the tail is slender, flat at the end, and covered on the sides with very stiff, black, hairs. In consequence of the vast bulk of the body, and the disproportionate shortness of the legs, the belly hangs low. The breadth of the feet does not exceed the circumference of the legs.

This animal was well known to the ancients. Several of the sacred writers make frequent allusions to him, as an animal familiarly known to the people to whom their writings were directly addressed. They have not indeed condescended to a minute description; but the terms in which they have mentioned it sufficiently indicate the species. Pliny mentions the rhinoceros as an animal that appeared in the Roman circus, in games exhibited by Pompey. He was opposed to the elephant, and shewed himself no unequal antagonist. Though not described by Aristotle, the rhinoceros is mentioned by the historians of Alexander, as one of the strange animals discovered by his army in their

progress into India.

The rhinoceros is a native inhabitant of Bengal, Siam, Cochinchina, Quangsi in China, and the isles of Java and Sumatra. He is a solitary, stupid, animal. Shady forests adjoining to rivers, and miry, marshy plains, are his favourite haunts. Unless provoked by injuries, he is commonly mild and inoffensive: his rage is desperate and dangerous. The mode in which copulation takes place between the two sexes is backwards; the female produces only one at a birth. During the first month of its age, the young . rhinoceros does not rise above the size of a large dog: the horn is at first almost imperceptible, and increases by slow gradations: the bulk of the animal is indeed but very slowly enlarged; at the age of two years he has scarcely attained half his full height: his eyes are small, and his sight dull: but he possesses the senses both of hearing and smelling in high perfection; thorns and prickly shrubs are his chief food; his tongue was once said to be rough and hard; but, from later and more accurate observation, we learn, that it is as smooth and soft as the tongue of any other animal. It has been conjectured, that sixty or seventy years may be the natural term of the life of the rhinoceros. His skin has been represented as impenetrable, even by balls; but we now RHINOBATOS, the name of a flat cartilaginous fish, of find that this vast animal is liable to be mortally wounded

by missile weapons of all kinds. The flesh is not unlike

pork; but of a coarser grain, and a stronger taste.

The species we have described is usually supposed to represent the unicorn of Scripture; it would appear, however, that another animal exists far more closely resembling the common idea of a unicorn, than the R. unicornis. The annexed engraving, fig. 2, represents the head of this animal, which was seen by Mr. Campbell, at Mashow, in South Africa, the skull of which is now in the Museum of the Missionary Society in London. When shot it was called a rhinoceros, but the head being brought in, it was found to be

different from all the others that had been killed.

"The common African rhinoceros," continues Campbell, "has a crooked horn resembling a cock's spur, which rises about nine or ten inches above the nose and inclines backwards; immediately behind this is a short thick horn; but the head they brought had a straight horn projecting three feet from the forehead, about ten inches above the tip of the nose. The projection of this great horn very much resembles that of the fanciful unicorn in the British arms. It has a small thick horny substance, eight inches long, immediately behind it, which can hardly be observed on the animal at the distance of a hundred yards, and seems to be designed for keeping fast that which is penetrated by the long horn; so that this species of rhinoceros must appear really like a unicorn when running in the field. The head resembled in size a nine-gallon cask, and measures three feet from the mouth to the ear, and being much larger than that of the one with the crooked horn, and which measured eleven feet in length, the animal itself must have been still larger and more formidable. From its weight, and the position of the horn, it appears capable of overcoming any creature hitherto known. Hardly any of the natives took the smallest notice of the head, but treated it as a thing familiar to them. As the entire horn is perfectly solid, the natives, I afterwards heard, made from one horn four handles for their battle-axes. Our people wounded another, which they reported to be much larger."

It has been further stated in No. XV. of the Missionary Sketches, that "the head measured from the ears to the nose three feet: the length of the horn, which is nearly black, is also three feet, projecting from the forehead, about ten inches above the nose. There is a small horny projection, of a conical shape, measuring about eight inches, immediately behind the great horn, apparently designed for keeping fast or steady whatever is penetrated by the great horn. This projection is scarcely observed at a very little distance. The animal is not carnivorous, but chiefly feeds on grass and

bushes."

Mr. Campbell was very desirous to obtain as adequate an idea as possible of the bulk of the animal killed near Mashow, and with this view questioned his Hottentots, who described it as being much larger than the Rhinoceros, and

equal in size to three oxen or four horses.

2. Rhinoceros bicornis: in size, form, and manners, and almost all other characteristics, this species appears nearly allied to the former. The only, or at least the chief, distinction is an additional horn. The former rhinoceros bears only one horn on his nose; but this species are furnished with two, one standing strait behind the other. We know not whether the unicorn and the bicorn copulate and breed together indifferently. It has even been doubted, whether all animals of the rhinoceros character may not naturally possess two horns; and an unicorn appear only in consequence of an accidental loss.

The anterior is always larger than the posterior. Both horns are universally of a conical shape, with the tips reclining somewhat backwards. The posterior horn of an old rhinoceros has always the appearance of being worn away. Dr. Sparrman relates, from the information of the Hottentots and colonists at the Cape, that the horns are remarkably loose on the nose of the living rhinoceros; he moves them backwards and forwards at pleasure; as he walks carelessly, they shake and clatter against each other; and in digging roots, which he eats, as well as prickly shrubs, he reclines the anterior horn, and, employing only the posterior, thus wears

the latter by degrees to a stump, while the former remains entirely uninjured. The tips of both horns are slightly bent backwards: their texture seems composed of parallel horny fibres: near the root, the surface of the horn is rough and unequal; towards the point smooth and plain like the horns of oxen. The anterior horn of a rhinoceros of moderate size, shot by Dr Sparrman, was a foot in length, and five inches in circumference at the base. The anterior horn of a larger rhinoceros was a foot and an half in length, and seven inches in circumference at the base: the posterior horn stands

rather on the forehead than on the snout.

Dissecting the smaller rhinoceros, Sparrman found its stomach filled with masticated roots and branches of trees, and succulent plants, several of which seemed to be prickly. It had no fore-teeth; but the lips were of so hard a texture, that they might easily serve to perform all the same functions as the fore-teeth of other animals. The jaws of a full-grown rhinoceros are furnished with four-and-twenty grinders: the anterior part of the os palati exhibits a tooth-like process; but so distant from the lower jaw, that it can scarcely serve any of the purposes of a tooth: the skin is hard and thick in proportion to the bulk of the animal; but not proof against the impression even of blunt-pointed weapons: on the feet, the skin is thicker, and more callous than on the other parts: the skin is not gathered into folds, as that of the former species: it is smooth and flesh-coloured between the legs; a few stiff bristles are thinly scattered over the other parts of the body; they are most numerous about the ears and the end of the tail: the skin is of a deep cinereous grey colour; and numerous warts appear all over the body: the foot is divided into three parts, the hoofs of which project but a little beyond the leg. Such, according to Dr. Sparrman, are the more remarkable external characteristics of the rhinoceros with two horns.

Mr. Bruce represents the rhinoceros of Abyssinia as having his skin gathered into folds, on the neck, the shoulders, the buttocks, and some other parts of his body. His mouth he describes as furnished with twenty-eight teeth: the upper lip he allows to be remarkably large: the skin is always smooth, except when flies and other troublesome insects have broken it, so as to produce pustules; a distress to which the animal is very liable: the tongue of the young rhinoceros is indeed 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 flat and straight; and behind this have been observed the rudiments of a third.

It is only in Africa that this animal has been discovered in modern times. In the southern parts of the African continent, the species are well known. The Europeans, who have penetrated into Abyssinia, represent them as not less numerous in that country. From an epigram of Martial, and some coins of Domitian, we learn that the rhinoceros with two

horns was not unknown to the Romans.

The manners and economy of this species differ but little from those of the last. But the bicorn has been more accurately observed than the unicorn. He resides almost constantly in deep forests: he 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. The 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 softer consistency, and peculiarly succulent; which he eats in preference to others: his upper lip is his chief instrument in collecting his food: he extends and twists 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 appearsometimes 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 sometimes short stumps, of which the leaves, branches, and trunks, have been devoured.

RHINOCEROS.



J. Pass sc.

1. R. Unicornis. 2. A new species. (Anomatous)

devoured. The horns of the rhinoceros suffer 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, that he saw 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 displays astonishing swiftness. He moves with a sort 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 seldom suffers a hunter, mounted on horseback, 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 enterprise; and, in this case, the animal does not long survive. As he moves through the forest, the trees are crushed under his weight, like so many dry reeds. His eyes are so small, and his sight so feeble, that he sees only a very short way before him. The Abyssinians pursue him, two on a horse; and, as he seldom looks behind him, commonly overtake him before he is aware. The one, armed with a sword, then drops down; and, cutting the hams of the rhinoceros, the vast animal falls to the ground, alike incapable of flight and of resistance. 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 Shangalla, the favourite abode of this species, in Abyssinia, is, for six 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 acquires a crust of dirt, which may, for some 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 through 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 insects upon his body; such as millepedes, scolopendræ,

worms, and snails.

The rhinoceros, though next in size, yet in docility and ingenuity greatly inferior, to the elephant, has never yet been tamed, so as to assist the labours of mankind, or to appear in the ranks of war. Thus, Job asks, "Will the unicorn be willing to serve thee or abide by thy crib? can'st thou bind the unicorn with his band in the furrow? or will he harrow the valleys after thee?"

RHINOCEROS Avis, the name of a species of Buceros,

which see, vol. iii. p. 478.

RHINOCEROS an insect of the genus scarabæus or

beetle. See SCARABÆUS.

RHINOCOLURA, or RHINOCORURA, a town of Syria, 22 miles from Raphia, and which formed a kind of boundary between Syria and Egypt. Strabo attributes it to Phœnicia; and Pliny calls the sea, on a strait of which this place is situated, the "Sea of Phœnicia." Diodorus Siculus mentions this town, as destitute of all the conveniences of life; that VOL. XXII. No. 1484.

its water was bitter and noxious, and that it was surrounded with salt marshes.

RHINOMACER, in Entomology, a genus of insects of the order Coleoptera. The generic character is, antennæ setaceous, seated on the snout; four feelers, growing thicker towards the end; the last joint is truncate. There are three species, none of which are found in this country.

1. Rhinomacer Curculioides. This is grey and downy; the antennæ and legs are black. It inhabits Italy. It resembles a curculio. The antennæ are setaceous and black, and as long as the thorax; the last joint is sharp; the snout is flat,

and impressed in the middle.

2. Rhinomacer Attelaboides. This is piceous -downy; the antennæ and legs are testaceous. It is found in divers parts of Sweden. The snout is elevated and projected; the body is cinereous.

3. Rhinomacer Cæruleus. This species is of a blueish colour, and it is subvillous; the base of the antennæ and legs are yellow. It inhabits Calabria, and has been thought to be a species of the Attelabus.

RHINOPTES, a word used by the ancients to express a person, who, from an ulcer in the inner corner of the eye, laying open the passages to the nose, could see through his

nostril.

RHINSBERG. See REINSBERG.

RHINSBERGERS. See COLLEGIANTS.

RHIPSALIS, Gærtner's name for the Cacrus pendulus.

See vol. iii. p. 581.

RHIPTASMOS, a word used by the ancients to express a restlessness and frequent tossing about, a very common symptom in fevers.

RHISOPHAGI, a people of Ethiopia, in the vicinity of the isle of Meroe, upon the banks of the rivers Astaboras and

Astapas, according to Diodorus Siculus.

RHISPIA, a town of the Higher Pannonia, at a distance from the Danube, and situated between Savaria and Vincendria. Ptolemy.

RHISUS, a town of Greece, on the coast of Thessaly, according to Strabo and Steph. Byz. Pliny mentions a town of this name in Magnesia.

RHITHYMNA, a town situated on the northern coast of

the isle of Crete. Ptolemy.

RHITIA, a town of Africa, in Mauritania Cæsariensis; placed by Ptolemy in the interior of the country between Arina and Victoria.

RHITTIUM, a town of Lower Pannonia, upon the banks of the Danube, between Acumincum Legio and Taururum,

according to Ptolemy.

RHIUM, a promontory on the north east part of Achaia: it formed with Anti-Rhium, another promontory opposite to it, and more northerly, the strait by which the Ionian sea communicated with the gulf of Corinth.—Also, a town of the Peloponnesus, in Messenia, upon the gulf of Thuriates, opposite to the promontory Tanarus, according to Strabo. - Also a promontory on the east side of the island of Corsa, between mount Rhætius and the town Urcipium. Ptolemy.

RHIUSIAVA, a town of Germany, on the banks of the Danube, between Aræ Flaviæ and Alcimænis. Ptolemy.

RHIW, a mountain in Wales, in Caernarvonshire, 1013 feet in height.

RHIZAGRA, an old instrument for extracting the stumps of teeth.

RHIZANA, a town placed by Ptolemy in the interior of Dalmatia.—Also, a town of Asia, in Gedrosia, upon the seacoast near Coiamba. Ptol.—Also, a town placed by Ptolemy in Arachosia, between Alexandria and Arbaca.

RHIZINIUM, or RHISINUM, or Rhison, a town of Dalmatia, on a gulf to which it gave the name of Rhisonicus

Sinus. Ptol.

RHIZIUM, RHIZE, a town of Asia, in the Colchide, on the coast of the Euxine sea, and west of the mouth of the small river "Rhizius."

RHIZOBOLUS, [from ρίζα, a root; and βολη from βαλλω, to throw; because it throws out many roots,] in botany, a genus of the class polyandria, order tetragynia. - Generic Charac-

ter.