# NATURE DISPLAYED 

IN THE

## HEAVENS,

AND
ON THE EARTH,
Acconvime To Thi Latert

## OBSERVATIONS AND DİSCOVERIES.

By SIMEON SHAW, L. L.D.

Fifl Natuge awarms with life; one wondrous mase Of animals, or atoms organized,
Waiting the vital breath, when parent Heaven shall bid his spirit blow. The hoary fen, In putrid streams, emits the living cloud of pestilence. Thru' wubterranean cells,
Where scorching suu-beams scarce can find a way, Earth animated heaves. The flowery leaf Wants not its soft inhabitants. Secure, Within its winding citadel, the stone
Holds multitudes. But chief the forest-bougha, That dunce unnumbered to the playful breeze, The downy orebard, and the melting pulp of mellow fruit, the nameless nations feed Of evanescent insects. Where the pool Stands mautled o'er with green, invisible,


Amid the finating verdure anillions stray.
Each liquid too, whether it pierces, soothes, Inflames, refreshea, or exalls the laste,
With various forms abounds. Nor is the stream
Of parest crystal, nor the lacid air,
Though one transparent vacancy it seem,
Void of their unseen people.
Tmoneons.

## IN SIX PARTS.

PART.III.

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is a sufficiency, it quickly withdraws the tongue, and swallows them at once.

## THE ARMADILLO

Has neither fore nor dog teeth; it is covered with a crustaceoss armour, intersected with distinct moveable zones or bells, covering the head, neck, back, flanku, and extending even to the extremity of the tail ; but the throat, breast, and belly, are covered with a whitish coarse skin, resembling that of a hen after the feathers are pulled off. The shell does not consist of one entire piece, like that of the tortiose; but is divided into separate belts, connected to each other by membranes which enable the auimal to move it, and evell to roll itself up like a hedge-hog.

All the species of this animal were originally natives of America, entirely unknown to the ancients; and modern travellers mention them as peculiar to Mexico, Brazil, and the southern parts of America; though some confound them with the pangolin or manis found in the East Indies; others report that they are natives of Africa, because some of them have been transported from Brazil to the coast of Guinea, where a few have since been propagated. They are all endowed with the faculty of extending and contracting their bodies, and of rolling themselves up like a ball, but not in so complete a sphere as the hedge-hog. They are very inoffensive animals, excepting when they get into gardens, where they devour melons, potatoes, and other roots.

These animals are hunted with small dogs, which are trained by the barbarous Indians for this purpose. The hunters know when they are concealed in their holes, by a swarm of flies hovering round; and the usual mode of forcing them out is by smoking the burrows, or pouring in water. If they begin to dig. the animal digs also; and, by throwing the earth behind it, so effectually closes up the hole, that the smoke cannot perietrate.

## THE RHINOCEROS

Is generally found about twelve feet long, and from five to serem feet high, and the circumference of its body is nearly equal to its length. It is difficult to convey an accurate idea of this animals whape, without referring to the Engraving, and yet there are fey wo remarkably formed. Its head is furuished with a hard and solid horn, projecting from the snout several inches in length; that part resembles the head of a hog; the upper hp, however, is much longer in proportion, and very pliable, serviug to collect its food,
and deliver it into the mouth : the ears are large, erect, and pointed, and the eges small and piercing. The skin is naked, rough, and so extremely thick and hard, as to turn the edge of a acimitar, or to resist a leaden ball; it is of a dirty brown calour, and lies upon the body in folds, after a very peculiar manner. The belly hange low; the legs are short, strong, and thick; and the hoofs are divided iuto three parts, each pointing forward.

The rhinoceros which came to London in the year 1739 was sent from Bengal. He was of a peaceable disposi.tion, and allowed all parts of his body to be tauched When hungry, or struck by any person, he became mischievous, and in both cases was appeased only by food. When enraged, he sprung forward, and nimbly raised himself to a great height, pushing at the same time his head furiously against the walls, which he performed with amazing quickness, notwithstanding his heavy aspect and unwieldy mass. The vivacity and promptitude of his movements led an opinion that he is altogether unconquerable, and that he could easily overtake any man who should offend him.

At the age of two years it was not taller than a heifer; but his body was very long and thick, and his head disproportionally large. From the ears to the horn is a concavity, whowe two extremities, the upper end of the muzzle, and the part near the ears, were considerably raised. The horn, not then above ant inch high, was black, smooth at the top, but full of wrinkles directed backward at the base. The nowtrils.wore very low, about an inch from the opening of the mouth. The toague was soft, like that of a calf. His eyes had no vivacity; in figure they resembled those of the hog, and were situated nearer the nontrils than in any other quadruped. His ears. were large, thin at the extremities, and contracted at their origin by a kind of annular rugosity. Tine neck was short, and surrounded with two large folds of skio. The shoulders were thick, and at their juncture another fold of skin deaceuded upon the fore legs. The body was very thick, and much resembled that of a cow about to bring forth. Between the body and crupper another fold descended upon the hind legs, and another fold transversely surrounded the inferior part of the crupper, at some distance from the tail.

In the year 1790 a rhinoceros was brought in the Melville Castle East Indiaman, and not long afterwards he was purchased by Mr. Pidoock, of Exeter 'Change, for the sum of 700 . This animal exhibited no aymptouns of a ferocious prupensity; and would even al-
low himself to be patted on the back and sides by strangers. His docility was about equal to that of a tolerably tractable pig; he would obey the orders of his keeper, to walk about the room, and exhibit himself to the numerous spectators who came to visit him. He usually ate, every day, twenty-eight pounds weight of clover, besides about the same weight of ship biscuit, and a great quantity of greens. This food was invariably seized in his long and projecting upper lip, and by it was conveyed into his mouth. He was allowed also five pails of water twice or thrice a day ; and he was fond of sweet wines, of which he would often drink three or four bottles in the course of a few hours. His voice was not much unlike the bleating of a calf. This was usually exerted when he observed any person with fruit or other favourite food in his hand ; and in such cases, it seems to have been a mark of his anxiety to have food given him. In October 1792, he dislocated the joint of his right fore-leg. This accident brought on an inflammation, which, about nine months afterwards, occasioned his death, but in the first attempts that were made to recover the animal, the incisions which were formed through his thick and tough hide, were invariably found to be healed in the course of twenty-four hours.

These animals never assemble or march together in troops like elephants. Being more solitary and savage, they are more difficult to hunt and overcome. They never attack men, except when provoked, but then they are very furious and formidable; yet as they see only before them, and not very quick, and as they turn with great difficulty, they may be easily avoided. Their skin is so extremely hard as to resist sabrea, lances, javelins, and even musket balls, the only penetrable parts being the belly, the eyes, and about the ears, and hence the hunters generally attack them when they lie down to sleep. Their flesh is considered as excellent by the Indians and Africans, but especially by the Hottentots ; and if they were trained when young, they might be rendered domestic, in which case they would multiply more easily than the elephant. They inhabit various parts of Asia and Africa, and frequent the banks of rivers and marshy places. The horn of this quadruped is a formidable
weapon, growing from the solid bone, and capable of inflicting the most fatal wounds. The elephant, the bear, and the buffalo, are obliged to strike transversely with their weapons; but the rhinoceros employs all his force with every blow; so that the tiger will more willingly attack any other animal of the forest, than one whose strength is so justly employed.

## THE DOUBLE-HORNED RHINOCEROS

Differs from the preceding animal in the appearance of its skin; which, instead of large and regularly-marked folde, resembling armour, has merely a slight wrinkle acrons the shoulders and on the hinder parts, with a few fainter wrinkles on the sides; so that, when compared with the common rhinoceros, it appears almost smooth. The principal distinction, however, consists in the nose being furnished with two horna, one of which is smaller than the other, and situated above it.

Bruce informs us, that besides the trees that are capable of most resistance, there are, in the vast forests within the rains, trees of a softer consistence, and of succulent quality, which seem to be destined for the principal food of the duuble-horned rhinoceros. 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 it, 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 immerliately abandon it; but, placing his snout as low in the trunk as he finds his horn will enter, he rips up the hody 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 possible in his monstrous jaws, and twists it round with as much ease as an ox would do a root of celery, or any small plant.

When pursued, and in fear, he moves with astonishing swiftness, considering his size, the apparent unwieldiness of his body, his great weight before, and the shortness of his legs. It is not, however, true that, in a plain, his pace is more rapid than that of a horse; for Mr. Bruce has often passed these animals with ease, and seen other persons worse mounted than himself, do the same; but by his cunning he is often able to elude pursuit. He
makes constantly from wood to wood, and forces himself into the thickest parts of the forests. The trees that are dead or dry, are broken down, as if with a cannon shot, and fall behind and on each side of him, in all directions. Others that are more pliable, greener, or fuller of sap, are bent back by his weight, and by the velocity of his motions. And, after he has passed, they restore themselves, like a green branch, to their natural position, and often sweep the incautious pursuer and his horse from the ground, and dash them in pieces against the surrounding trees.
" We were on horseback (says Mr. Bruce) by dawn of day, in search of the rhinoceros, many of which we had heard making a very deep groan and ery as the morning approached. Several of the Agageers, or hunters, then joined us; and after we had searched about an hour in the very thickest part of the wood, a rhinoceros rushed out with great violence, and crossed the plain towards a wood of canes that was about two miles distant. But though he ran, or rather trotted, with surprising speed, considering his bulk, he was, in a short time, transfixed with thirty or forty javelins. This attack so confounded him, that he left his purpose of going to the wood, and ran into a deep hole, or ravine, without outlet, breaking above a dozen of the javelins as he entered. Here we thought he was caught as in a trap, for he had scarcely room to turn; and a servant, who had a gun, standing directly over him, fired at his head, and the animal fell immediately, to all appearance dead. All those on foot now jumped in with their knives to cut him up; but they had scarcely begun, when the animal recovered so far as to rise upon his knees: happy then was the man that escaped first ; and had not one of the Agageers, who was himself engaged in the ravine, cut the sinew of the hind leg as he was retreating, there would have been a very sorrowful account of the foot-hunters that day."-Trazels z̈n Ahyssinia.


## LECTURE LVI.

## THE ELEPHANT.

The superiority of the elephant over other animals, is partly founded in the actual advantages that it has beyond them. The perfection of its organ of touch; the facility it possesses of confirming the organ of sight; the delicacy of its organs of hearing and smelling ; the length of its life, and the experience and habits it derives from this; its strength and power, which prevents it from being attacked by any other animals, procure for it an uninterrupted repose, and constant security. Yet its external organs, (in every respect so advantageous to the animal) are not animated by a nervous system either more poverful or more delicate than that of other quadrupeds. Its brain is small in proportion to the bulk of its body : but the cells before mentioned render the skull of large size, and make it appear almost as prominent as that of man. The result of this conformation of the skull is a grave and serious physiognomy, which probably has contributed, in no slight degree, to produce for the elephant that reputation for reason and intellect which have rendered it so celebrated.

At first view it presents the spectator with an enormous mass of flesh, which seems scarcely animated. Its huge body, covered with a callous hide, without hair; its large mis-shapen legs, that seem scarcely formed for motion; its little eyes, pendulous ears, and long trunk, all concur to give it an air of stupidity. But our prejudice subsides on examining the various advantages it derives from so clumsy a formation.

The eyes of this animal are very small, when compared with the enormous bulk of the body; but though their minutenew may at Girst appear deformed, on a more careful examination they are seen to exhibit a variety of expremion, and to discover the various eeusatious by which they are moved.

The elephant is not less remarkable for the excellence of its hearing. Its ears are extremely large, and usually pendent; but can be raised and moved with perfect facility, and serve to wipe the animal's eyea, well as to protect them from flies, dust, and other annoyances. It appears delighted with music, and readily learns to move in measure, and even to join its voice to the sound of the drum or trumpet.

This quadruped's sense of smelling is not only exquisite, but it is, in a great measure, pleased with the mane odours that delight mankind. The elephant gathers flowers with great pleasure and attention, unites them into a nosegay, and seems charmed with their perfume.

The enormous tusks of this animal, being unserviceable for chewing, may be considered ouly as weapous of defence. They are two in number, proceeding from the upper jaw, of a yellowish colour, and extremely hard; and become so extremely heavy as the animal grows old, that it is sometimes obliged to make holes in the sides of its stall, to rest them in, and case itself of the fatigue of their support.

The elephant is peculiarly distinguished from all other quadrupont bjy its proboscis, a wonderful instrument, which gives to the animal an address, and a nicety of touch superior to that even of the asses, and which is particularly advantageous from the circumstance of its being situated so near the organ of smell ; since the animal can examine objects at the same time by both these senseh and seize or reject them according to the judgment formed from this double examination.

As the bead of the elephant is very heavy, and its long and $80-$ lid tusks, projecting forward, contribute to remove the centre of gravity from its point of support, it could never have been able to elevate this head, if the neck had been at all proportioned to the length of the legs. On the other hand, with a short neck, and Iong legs, the animal would not have been able to procure either the food or liquid necessary to its support, had it not been furnished with a proboscis; which eonsequently is a member indispensable to its existence. This proboscis is formed by a membrase ceous prolongation of the tubes of the nostrils, furnished with muscles, and clad, externathy, with a strong aud flexible skin. The muscles which move it are of two sorts: longitudinal ones, divided into a number of arcs, the convex parts of which are outward, and the two extremities of which adhere to the internal membrane; and iransverse ones, which extend from the internal to the exterual membranca, like the rays of a circle. These last contract the external envelope, without closing the internal canal, which the other muscles would not be able to do: in this action they elongate
the proboecis by forcing the longitudinal mascles to extend themaelves. The latter, in contracting, shorten the proboscis, either entirely, when they all act together, or in part, and this on one or more zides, and in one or more portions of its length, which produces all imaginable curvaturea. The proboscis is therefore a mechanism at the same time the most simple and the most powerful Nsat can be imagined. At its extremity, there is an appendix in form of a finger, which the animal uses chiefly to take hold of very small objects. This proboucis is so strong, that with it the elephaut can tear up even small trees, can shake buildings, fing considerable weights, and with great ease suffocate a man by folding it round his body.

Besides the above singularities of organization, the elephants have several others that are well deserving of notice. Their legs are high and peculiarly strong. The whole sole of the foot is applied to the ground, and is so short in proportion to the animal, that the leg appears to be cut off below, almost like the base of a column. The ears are troad and pendant, very different from those of animals which, from domeatication, have pendant ears, such as the dogs; in the latter, the upper part of the valve falls down and covers even the opening of the meatus anditoriss; but in the elephants, the ear is widened and pendaut by the posterior and inferior part. When the animals are in a wild state, their cars are continually in motion, and are of essential service in defending the eyes from the attacks of noxious insecte.

The skill of the elephant is rough and uneven, or wrinkled in all directions, and granulated almost like shagreen. There is very little hair: iu the full grown animals, this is obwerved only on some particular parts of their body ; but in the young ones, it is thinly scattered over the whole surface. The skin when washed is generally black, more or less deep, but the real colour is almost always concealed by a coat of dirt and scurf which covers it.

The general resemblance betwixt all the elephants, and the difficulty of comparing those of different climates, have, of late years, been the cause of confounding different species under the same name, the Great Elephant. It is, however, now well ascertained that there are, at least, two species which are perfectly distinct; that found along the weat, and the sonthern coast of Africa, and that which is so common in the East Indies. These animals not only differ in the general form of their body, but also very considerably in their habits and inetincta.

The Indian elephant has its head elongated, the forehead flat, or even, somewhat concave; whilat the African elephant has a round licad, and a convex forehead. The ears of the former are of a nsederate size, whilst those of the latter are so enormous, that they
cover the whole shoulder. But whit forms a more decisive chroracter is, that the molir teeth of the African elephant when the upper surface is worn away by mastication, exinibit a lowenge formed surface to each of the partial teeth, whilst the surfaces of these teeth, in the other speciea, are each somewhat in the form of a waved or festooned ribbon. The lusks of the African elephants continue to increase in size during the greater part of their life, and arrive at a much larger size than those of the Indian animals: they are nearly equal io both the sexes; whilat the tusks of the females of India seldom exceed some inches in length. The African ivory is likewise harder, and less liable to become yellow, than that from the East Indies; and almost all the ivory brought into Europe is from Africa. It likewise appears that these elephants differ in the number of their nails: but this is a character which canuot be depended on, since the number of these is not always constant in the same species.

The Malays give to the elephant the same name that they give to man, and which implies a rational being. The ancients were not contented merely to acknowledge its gentleness, the facility with which it was domesticated, its attachment to its master, its sense of benefits conferred, its resentment of injury, qualities which it possesses in a very high degree, but still, in common with the dog and several other quadrupeds, they elevated it to a much higher rank, considered it as an intellectual being, as in some measure capable of religious worship, as possessing virtues very rare among mankind, an unalterable conjuga! fidelity, and an uniform resistance against being the minister of injustice. The Indians believe that they can make the elephants comprehend whatever they say to them ; and that they are influenced by passions similar to those which actuate mankind, such as a love of finery, and even of simple commendation or praise. Travellers, delighted to speak of an animal so woaderful as the elephant undoubtedly is, have adopted much too readily the surprising narrations respecting it of these ignorant people, and naturalists have, in their turn, been too eager and crredulous in copying the accounts of the travellers. It is certain that the elephant, as remarked by the most sagacious obstrvers, falls far short of the station in which it has usually been placed by the accounts of those who considered it possessed of intellectual faculties.

This animal, notwithstanding its enormous bulk, does
not by any means want quickness in its movements. It trots with considerable agility, and can easily overtake a man at his greatest speed; but as it cannot turn very readily, he is able at any time to escape from it by running to one side. The hunters are able to kill it by attacking it from behind, or on the flanks. It moves its ears as it runs, and sometimes employs them to direct its motions, extending the ear on that side to which it would curn, and presenting thereby a greater resistance to the air. It has great difficulty in descending very steep places, and in this act it is obliged to bend considerably its hind legs, since otherwise it would be overbalanced by the enormous weight of its head and tusks.

The body of the elephant being lighter than water, the animal is able, with great ease, to cross rivers by swimming, particularly where the current is not violent. It has thus no need, as the ancients asserted, to walk along the bottom, and elevate its trunk above the surface, in order to respire.

This animal prefers moist and shady situations, in the neighbourhood of rivers, to all other places. It suffers nearly as much from excessive heat, as it does from cold. A continual humidity is necessary, to soften his hard and wrinkled skin, which otherwise is subject to crack and excoriate. The elephant, therefore, not only throws the water over its body by means of its trunk, but likewise experiences great delight in plunging into the waters, and sporting amongst them ; when no water is at hand, it endeavours to supply the place of this by covering its body with dust or herbs.

Its usual food consists of plants, roots, and the young branches of trees. It is particularly fond of the seeds of the bamboo and plantain, of the banana fruit, and sugar canes, which it devours with great avidity. The inhabitants of Sumatra have learned how to profit by the voracity of the elephants for sugar canes. They insert a very active poison into the hollows of the canes nearest to the quarter from whence the elephants usually come; and after the animals have eaten them, they generally fall down on the spot and die.

The natural instincts of the elephants induce them to live in society: they consequently are observed in im-
mense numbers in the interior of the forests: these they seldom leave, except for the purpose of devastating the neighbouring plantations. Their troops or herds consist of from forty to a hundred individuals of both sexes and all ages. They are conducted by one of the oldest fomales, and one of the largest males. When they leave the forests, if there is any appearance of danger, they observe a determined order of progress. The young ones and the females are placed in the middle, surrounded by the old males; and each of the females protects her own offspring by embracing it with her trunk.

Some elephents live in solitude, and entirely apart from society : these are called by the Indians grondahs. They are always males, which, it is believed, have been chased from the herds, by the jealousy of other individuals of their sex. They are, in general, excessively ferocious: they often leave the forests, attack mankind without the least provocation, lay waste the fields, throw down the huts of the peasants, and destroy the cattle. The farmers are frequently compelled to set guards against them, who are posted, for the purpose, in a kind of sentry-boxes, of great strength, furmed of bamboo. When the men perceive one of these elephants approaching, they give the alarm to each other, and drive away the animal by making a great noise, and by firing at it with muskets. When these elephants penetrate into the villages, they commit the most dreadful desolation. The animals that live in troops are not dangerous, unless they are irritated: a man may pass very near them without in the least degree attracting their notice.

The young one, when first produced, is about three feet in height. It sucks with its mouth, and certainly not by means of its trunk, as has been generally believed. In the troops, the young are said to suck, indiscriminately, all the females that have milk in their teats. It has likewise been remarked, that if a young elephant be catried off from its mother, and kept apart from her for only two days, it will not again be able to recognize her, although it seeks for her, and calls eagerly for the teat by its cries. The young elephant sucks for two years, and in the first year, it attains the height of about four feet, in the seeond four and a half, and in the third five It
continues to increase in size till it is twenty or twenty-two years old.

Indian elephants are in general amaller than has usually been asserted: the females being only from seven to eight feet high, and the males from eight to ten or twelve.

Elephants first produce young ones at the age of seven or eight years, or somewhat earlier. The greatest age that these animals attain has not yet been ascertained with any degree of exactness. They have, however, been kept in a state of domestication for about a hundred and twenty or a hundred and thirty years; and, from the slowness of their growth, it is not improbable that, in a wild state, they may not live a couple of centuries.

In India they are taken in two ways, in troops or singly: a whole troop is sometimes caught by surrounding them with a great number of armed men, arranged in two circles, who frighten the animals by shouting, beating a kind of drum called tomtoms, and firing with muskets loaded with powder. By these means they are driven into an inclosure, surrounded by deep ditches, and by palisadoes of suitable strength. The entrance to this inclosure is planted with trees and shrubs, so as to resemble the pathway into a forest. The gate is then closed, fires are lighted, and the same noises are made as before, till the animals have passed through into the interior inclosure. Nourishment is now offered to them, from a scaffold placed near the entrance of a long passage into which they are drawn, one by one, and which is so narrow, that they are not able to turn round. As soon as one of them has entered this passage, the place is closed by a gate, and the animal is now confined to the spot by bars that are passed across both before and behind it, and its feet are secured by ropes, interlaced by a man who approaches from behind. Other men on the scaffold pass strong cords round its head and body, the ends of which are made fast to two domesticated females, properly instructed for the purpose; and it soon becomes perfectly tame and familiar.

It is not necessary to make the above preparation for the taking of single elephants; since, is they are always males which have been driven away from their herds, they are attracted into a snare, without much difficulty, by
tame and well trained females. Men pass between the legs of these females, in order to approach and tie with ropes the legs of the wild animal. If any accident happens to rouse the animal, they mount, as quickly as possible, on the backs of the females, by means of rope ladders, fastened to them for that purpose, and escape. But they are generally able to tie the elephant, and afterwards fasten him to the trunk of some stout tree to which the females have attracted him.

This animal is one of the most useful that has been reduced into the service of mankind. Its strength is so great that it is able to carry a weight of nearly two thousand pounds. It will draw a burthen which six horses are scarcely able to move; and it will travel, without fatigue, fifteen or twenty leagues in a day, and, on an emergency, it may be urged to more than thirty. To these advantages are to be added all those which are the result of its sagacity; as its retracing by itself a road along which it has travelled ; the surprising resources that it adopts in its embarrassments; and those derived from its general quickness and address, and from the peculiarly excelleut formation of the proboscis. Every one knows that formerly it was employed in war, that it charged the soldiers, and, in Eastern countries, had generally an important place assigned to it in battle: but the adoption of fire arms in late centuries, and its natural and unconquerable dread of fire, prevent it from being at present of much further use than in transporting provisions, baggage, and artillery.*

A tame elephant will do more labour than six horses; but then he requires a proportional quantity of food.

[^0]They are the principal beasts of hurden in many parts of Africa and the East Indies. They carry sacks and bundles of all kinds on their neck, back, and tusks. They never lose or damage any thing committed tu their care: they will stand on the edge of a river, take bundles off their necks and tusks, lay them carefully in a boat whereever they are desired, and try with their trunk whether they are properly situated; if they be loaded with casks, they go in quest of stones to proo them and prevent them from rolling

In a state of domestication, the elephant requires for its support about a huridred pounds weight of rice per day, and a considerable portion of fresh vegetables or fruit. A male elephant that was brought to England in the year 1793, and purchased by Mr. Pidcock of Exeta 'Change, London, was usually fed with hay, straw, and vegetables of different kinds. He drank about nine pails of water in the day, besides ale that was given him by different visitors. The two elephants in the Museum of Natural History in Paris, one of which is represented in the Engraving, consumed about a hundred weight of hay, eighteen pounds of bread, several bunches of carrots, and a great quantity of potatoes, every day, without reckoning the food that they receive from the numerous. persons who come to see them. They had no particular hours of eating, but would receive food at all times, except during those of their repose. In summer thev drank nearly thirty pails full of water each.

These animals had the tenderest attachment for each other : whenever either of them testified any degree of alarm, the other immediately hastened to its assistance.

[^1]This was always the case when they were struck by the appearance of any object which was new to them : they then ran from one side to the other, uttered their peculiar kind of noise, and caressed each other with their trunks. On these occasions the male exhibited signs of ardour, to which he was usually a stranger. These emotions were never more striking than when, on their first arrival in Paris, they were put together after a long separation. They immediately rushed towards each other, and sent forth cries of joy so animated and loud as to shake the place into which they were put.

The male elephant, possessed by Mr. Pidcock, the proprietor of the Menagerie at Exeter 'Change, was taught by his keepers to perform a great variety of tricks for the entertainment of the visitors. If a pot of ale was brought to him, he would put the extremity of his trunk into it, and, sucking up the liquor, would afterwards blow it into his mouth: this done, he would make a motion with his head, which the keeper always took care to tell the donor, was the animal's mode of expressing gratitude for the gift; and which probably the major part of the spectators believed to be really the case. He would take up a watch or even the smallest piece of money from the floor, and, on command, would put it again into the owner's hand or pocket. He would take from any person a piece of money, and give it to a boy (who attended for the purpose) for bread, fruit, or vegetables, which he immediately ate. If his keeper ordered him, he would unbolt the door of his den, or untie, with the finger at the extremity of his proboscis, a piece of strong cord that fastened to the door. When the keeper has been engaged in sweeping the den, the imitative animal has not unfrequently taken in his trunk another broom, and has appeared highly delighted in attempting to sweep the place after him.

The elephant that was given by the Grand Turk, in 1745, to the king of Naples, exhibited more than usual intelligence and familiarity. It frequently assisted the nasons who were employed about the house where it was kept, by furnishing them with water, which it drew for the purpose, from an adjacent well, in a large copper vessel. This it carried to them whenever they called for it.

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The animal found one day that something was the matter with the vessel, since the water ran out of it. Having received some instruction, he carried it to the brazier, had it mended, and afterwards went on with his business as usual. This elephant was allowed to wander at large in the streets of Naples. He did no person any injury; and he seemed delighted to play with children, whom he would sometimes place on his back with his trunk, and afterwards, by the same means, place them in safety on the ground.

The elephant is not only the most tractable, but the most intelligent of animals: sensible of benefits, resentful of injuries, and endowed even with a sense of emulation : In India, they were once employed in launching ships; one was directed to force a very large vessel into the water; the work proved superior to his strength : his master, with a sarcastic tone, bidding the keeper take away this lazy beast and bring another : the poor animal instantly repeated his efforts, fractured his skull, and died on the spot. In Delhi, an elephant passing along the streets, put his trunk into a tailor's shop, where several people were at work; one of them pricked the end with his needle ; the beast passed on; but in the next dirty puddle filled his trunk with water, returned to the shop, and spurting every drop among the people who had offended him, spoiled their work.-An elephant in Adsmeer often passed through the bazar or market, and, as he went by a certain herb-woman, always received a mouthful of greens; at length he was seized with one of his periodical fits of rage, broke his fetters, and, running through the market, put the crowd to flight, and among others, this woman, who, in haste, forgot a little child she had brought with her. The animal recollecting the spot where his benefactress was wont to sit, took up the infant gently on his trunk, and placed it in safety on a stall before a neighbouring house.-Another, in his madness, killed his cornac or governor : the wife, seeing the misfortune, took her two children, and flung them before the elephant, saying, "Now you have destroyed their father, you may as well put an end to their lives and mine." It instantly stopped, relented, took the greatest of the children, placed him on its neck, adopted him for his cornac, and never
afterwards would permit any body else to mount it. A soldier at Pondicherry, who was accustomed, whenever he received the portion that came to his share, to carry a certain quantity of it to one of these animala, having one day drank rather too freely, and finding himself pursued by the guards, who were going to take him to prison, took refuge under the elephant's body and fell asleep. In vain did the guard try to force him from this asslum, as the elephant protected him with his trunk. The next morning, the soldier, recovering from his drunken fit, shuddered with horror to find himself stretched under the belly of this huge animal. The elephant, which without doubt perceived the man's embarrassment, caressed him with his trunk, to inspire him with courage and make him understand that he might now depart in safety.

Mr. Forbes, in his Oriental Memoirs, says, "The largest elephants are from ten to eleven feet in height, some are said to exceed it ; the average is eight or nine feet. They are filty or sixty years before they arrive at their full growth; the female goes with young eighteen months, and seldom produces more than one at a birth, which she suckles until it is five years old; its natural life is about one hundred and twenty years. 'The Indiams are remarkably fond of these animals, especially when they have been long in their service. I have seen .un elephant valued at twenty thousand rupees; the common price of a docile well-trained elephant is five or six thousand; and in the countries where they are indigenous, the Company contract for them at five hundred rupees each, when they must be seven feethigh at the shoulders. The mode of catching and training the wild elephants is now well known; their price increases with their merit during a course of education. Some, for their extraordinary qualities, become in a manner invaluable; when these are purchased, no comoensation induces a wealthy owner to part with them.
"The skin of the elephant is generally a dark grey, sometimes almost black; the face frequently painted with a variety of colours; and the abundance and splendour of his trappings add much to his consequence. The

Mogu! princes allowed five men and a boy to take care of each clephant ; the chief of them, called the mahawut, rode upon his neck to guide him; another sat upon the rump, to assist him in battle ; the rest supplied him with food and water, and performed the necessary services. Elephants bred to war, and well disciplined, will stand firm against a volley of musquetry, and never give way unless severely wounded. I have seen one of these animals, with upwards of thirty bullets in the fleshy parts of his body, perfectly recovered from his wounds. All are not equally docile, and when au enraged elephant retreats from battle, nothing can withstand his fury : the driver having no longer a command, friends and foes are involved in undixtinguished ruin.
"The elephants in the army of Antiochus were provoked to fight by shewing them the blood of grapes and mulberries. The history of the Maccabees informs us, that ' to every elephant they appointed a thousand men, armed with coats of mail, and five hundred horsemen of the best ; these were ready at every occasion; wherever the beast was, and whithersoever he went, they went also; and upon the elephants were strong towers of wood, filled with armed men, besides the Indian that ruled them.'
" I performed many long journeys upon an elephant given by Ragobah to Colonel Keating; nothing could exceed the sagacity, docility, and affection of this noble quadruped; if I stopped to enjoy a prospect, he remained immoveable until my sketch was finished; if I wished for ripe mangos growing out of the common reach, he selected the most fruitful branch, and breaking it off with his trunk, offered it to the driver for the company in the houdah, accepting of any part given to himself with a respectful salam, by raising his trunk three tines above his head, in the manner of the oriental obeisance, and as often did he express his thanks by a murmuring noise. When a bough obstructed the houdah, he twisted his trunk around it. and, though of considerable magnitude, broke it off with ease, and often gathered a leafy branch to keep of the sun."


[^0]:    - The Grecians who first saw this great animal were Alexander and the Macedonians, when fighting with Porus. The observations that were made about this time must have been exceedingly good, since Aristotie has given a very complete history of the animal, and much more correct than what even many of the moderns have written. After the death of Alexander, Antigonus, one of his generals, procured and kept several elephants. Pyrrhus was the first who carried an elephant into Italy, in the year of Rome 472, and as it was landed at Tarentnm, the Romans gave to these animals, which till then were unknown to them, the mame of Lucanian exen. Carias Dentatus, who borrowed four elephants of Pyrrhus, carried thens io Rome to increase the magnificence of his triumphal outry: After

[^1]:    this period these animals were by no means uncommon in the Roman empire. Metellus, having conquered the Carthaginians in Sicily, in the year 502, took their elephants to Rome, in number, according to Seneca, a hundred and twenty, and a hundred and forty-two according to Pliny. Claudius Pulcher had combats of elephants, in the Circus, in 665 ; and Lucullus, Pompelas, Cæsar, Clandius, and Ners, had also combats, both of elephants with each other, and of elephants ugainst bulls and men. Pompeins had them yohed to his chariot at tris triumph in Africa. Germanicus exhibited dancing elephants. It was in the reign of Nero that one of these unwieldly animuls is said to have danced ou a rope, while be carried a man on his back I 1

