## LEAVES

## FROM THE NOTE BOOK

OF A

## NATURALIST.

BY

W. J. BRODERIP, ESQ., F.R.S.

ETC. ETC. ETC.

AUTHOR OF 'ZOOLOGICAL RECREATIONS,' ETC. ETC.

Farewell, farewell! but this I tell To thee, thou Wedding-Guest: He prayeth well, who loveth well Both man and bird and beast.

THE ANCIENT MARINER.

## LONDON:

JOHN W. PARKER AND SON, WEST STRAND.

MDCCCLII.

189. h. J.

the Zoological Society have been enabled to make for the current year. They state that they have already received advice of collections of various importance, which are in progress of formation, or already shipped from:—

Singapore—by Capt. the Hon. H. Keppel, R.N.

Ceylon—by A. Grant, Esq. M.D., and A. Grace, Esq. Deputy Queen's Advocate.

Bombay—by Alexander Elphinston, Esq., and A. Shaw, Esq. H.E.I.C. Civ. S.

Whydah—by J. Duncan, Esq. H.B.M. Vice-Consul.

Sta. Lucia—by Lieutenant Tyler, R.E.

South Carolina—by J. Davis, Esq. M.D.

As long as the president and council do their duty in this way, and consider the instruction and amusement of thousands, as they have done, by lowering the price of admission on Mondays to sixpence, they will receive the support of the public; and they deserve it.

Of the African form of rhinoceros, three species—Rhinoceros bicornis, Rhinoceros keitloa, and Rhinoceros simus—are preserved in the well-arranged zoological collection of the British Museum, which owes so much to the energetic care of Mr. Gray; nor do we despair of seeing some, if not all, of these great pachyderms in life and health in the Regent's Park. Last year the Asiatic rhinoceros (Rhinoceros Indicus) died there, after a healthy existence of fifteen years in the Garden. The cause of death, apparently, was inflammation of the lungs,—a disease which, assisted by the damp and foggy atmosphere arising from the undrained clay soil, carries off so many of the animals confined there. When will the Government take in hand the long-promised work of draining that park? All ye dwellers in that captivating, but—during certain months, when moisture is most prevalent-dangerous locality, read the well-written and well-considered report of Mr. Donaldson. The comfortable dowagers now take their airings without fear of the dashing, well-mounted highwaymen, who formerly took toll in Marylebone Fields; but malaria still lurks there, shrouded in the mist that rises from the marshy ground and that ornamental but unblessed lake—for no stagnant water resting upon a basin of clay can ever carry healing on the wings of its evaporation.

But to return to the deceased rhinoceros. On dissection it was manifest that the animal had broken a rib, probably in throwing itself heavily down to rest in its uncouth manner. This fracture might have injured the lungs at the moment, and the subsequent anchylosis probably produced a pressure which accelerated the disease. Shortly before death the animal strained to vomit, without effect, with the exception of some froth tinged with blood at the mouth; and soon afterwards bloody matter was discharged at the nose. These are not pleasant particulars; but these lines may meet the eyes of some of those interested in the management of the animals, and may afford hints for the future.

Poor fellow, he was stupidly good-natured in the main, and would let the visitors rub his nose or his horn -which, by the way, he never permitted to grow, but kept it constantly rubbed down-or tickle him about the eye, or place their hands in the folds of his stout mail-like buff coat, where the skin, as we heard an honest yeoman, who was making the experiment, say, was 'as soft as a lady's!' He was very good friends with poor old Jack the elephant, now dead and gone, notwithstanding the stories of the violent antipathy which the two huge beasts bear to each other, and how the rhinoceros runs his horn at last into the elephant's belly, and how the blood of the elephant runs into the eyes of the rhinoceros and blinds him, when the roc, or ruk, pounces upon the combatants, and carries them both off in his claws. Our elephant used to tickle the

rhinoceros with his trunk, and stroke the long ears of his playmate right handily, now and then giving his friend's tail a sly pull; upon which the rhinoceros would cut a clumsy caper, wheel round, and nibble the elephant's trunk with his huge flexible lips. He was fond of going into the capacious tank, which served as a bath for him and the elephant, who were alternately let out into the enclosure; the gambols before-mentioned having been played through the iron railing, when the elephant was expatiating in the great enclosure, and the rhinoceros was out in the small space before its apartment.

When the rhinoceros first took to the water, there was a marked difference between his obstinate stupidity and the sagacity of the elephant, under the same circumstances. The bottom of the tank, which is surmounted by an elevated coping, gradually inclines from the entrance, till, at the opposite extremity, it is deep enough to permit an elephant of full height, and of the massive proportions of poor Jack, to submerge the whole of its gigantic body; and most gratifying it was to see Jack enjoy the cooling comforts of an entire submersion, now dipping his huge head beneath the surface, and presently raising it again, again to plunge it out of sight. The rhinoceros walked in well enough down the gradual descent, and when he got out of his depth swam boldly to the opposite extremity. Once there, however, he seemed to have no idea of the possibility of returning, but remained plunging and making fruitless efforts to get out over the raised coping while he was in the deep water, where the wall went sheer down and there was no foothold. It was rather a nervous time for those who witnessed the violent and ungainly efforts of the brute; for it was feared that he would then and there tire himself out, and sink exhausted. At last, when almost overworn by his useless toil, he was half-forced, half-coaxed round, and when his head was turned towards the entrance, he swam thither till he found footing, and then walked out.

His muscular power was prodigious. The iron railing of the enclosure was strengthened by great iron spurs at regular distances. He would insert the anterior part of his enormous head between the spur and the upright, and then give powerful lateral wrenches till he fairly prized it off. Once he got out, and, without doing further mischief, terminated his ramblings with a pas seul in a bed of scarlet geraniums: the condition of the parterre after the performance may be imagined. He was then secured, and led back to his place of confinement.

There was a tortoise-like look about him that was very striking. The curiously-formed upper lip, the testudinous look of his thick armour-like skin, his legs and feet, all favoured the notion of a huge warm-blooded creature made after the pattern of the cold-blooded testudinata, with improvements. For he was active in his way, and when excited his rush was terrific. The noise of the roller, when the gardeners were rolling the gravel-walk that flanks the place where he was suffered to go at large, had the most exciting effect upon him. He would be standing perfectly still at the further end of the enclosure, and the moment he heard the noise of the roller in motion, round he would turn, and rush down towards it in a rampant state, till he was brought up by the strong iron railing, which those who saw these paroxysms began to think must go down like reeds before him.

If we have no immediate prospect of beholding the living forms of the African species of this genus, we have a very fair chance of soon seeing the two other pachyderms mentioned above; and a slight sketch of their habits and history may not come amiss to those who are

not merely content with sight-seeing, but like to know something about what they see.

To begin, then, with the African elephant—Elephas Africanus. Notwithstanding the accounts which we read relative to the enormous stature of this species in the narratives of travellers who have come suddenly upon them, the better opinion is that it is smaller than the Asiatic elephant. The principal differences are visible in the head, ears, and nails of the feet. The contour of the head is round, and the forehead is convex instead of concave: the ears are considerably longer than those of its Asiatic congener, and on each hind foot the African elephant has only three nails, while the Asiatic has four.

The following dimensions of a male elephant, which was killed near Bru, some ten miles from Kouka, are given by Major Denham, who arrived at the place where the huge quarry lay just as the elephant, which was not more than twenty-five years old, had breathed his last:—

									ft.	in.
Length from	the	pr	obo	scis	to	the	tail		25	6
Proboscis .									7	6
Small teeth						•			2	10
Foot longitu	dine	lly							1	7
Eye										
From the foot to the hip-bone									9	6
From the hi	p-bo	ne	to	tĥe	ba	ck			3	0
Ear	٠.								2	2 by 2 6

But he says that he had seen much larger elephants than this alive; some, he adds, he should have guessed to be sixteen feet in height, and with tusks probably exceeding six feet in length. Major Denham, however, acknowledges that the elephant whose measurement is above given, which was the first he had seen dead, was considered of more than common bulk and stature.

This unfortunate animal was brought to the ground by

hamstringing, and was eventually despatched by repeated wounds in the abdomen and proboscis: five leaden balls had struck him about the haunches in the course of the chase, but they had merely penetrated a few inches into his flesh, and appeared to give him but little uneasiness. The whole of the next day the road leading to the spot where he lay was like a fair, from the numbers who repaired thither for the sake of bringing off a part of the flesh, which, Major Denham observes, is esteemed by all, and even eaten in secret by the first people about the sheikh. 'It looks coarse,' adds the major, 'but is better flavoured than any beef I found in the country.' Upon this occasion whole families put themselves in motion to partake of the spoil.

The manner of hunting the elephant (says Major Denham) is simply this:-From ten to twenty horsemen single out one of these ponderous animals, and, separating him from the flock by screaming and hallooing, force him to fly with all his speed; after wounding him under the tail, if they can there place a spear, the animal becomes enraged. One horseman then rides in front, whom he pursues with earnestness and fury, regardless of those who press on his rear, notwithstanding the wounds they inflict on him. He is seldom drawn from this first object of pursuit; and at last, wearied and transfixed with spears, his blood deluging the ground, he breathes his last under the knife of some more venturesome hunter than the rest, who buries his dagger in the vulnerable part near the abdomen: for this purpose he will creep between the animal's hinder legs, and apparently expose himself to the greatest danger: when this cannot be accomplished, one or two will hamstring him while he is baited in the front; and this giant of quadrupeds then becomes comparatively an easy prey to his persecutors.

In one of his hunting expeditions while at Kouka, Major Denham was shooting wild-fowl, when one of the sheikh's people came galloping up with the information that three very huge elephants were grazing close to the water. When he and his party came within a few hun dred yards of them, all the persons on foot, and Major Denham's servant on a mule, were ordered to halt, while

the major and three others rode up 'to these stupendous animals.'

The sheikh's people began screeching violently; and although the beasts at first appeared to treat the approach of the cavalcade with great contempt; yet, after a little, they moved off, erecting their ears, which had till then hung flat on their shoulders, giving a roar that shook the ground under the horsemen.

One (says the major) was an immense fellow, I should suppose sixteen feet high; the other two were females, and moved away rather quickly, while the male kept in the rear, as if to guard their retreat. We wheeled swiftly round him; and Maramy (a guide sent by the sheikh), casting a spear at him, which struck him just under the tail, and seemed to give him about as much pain as when we prick our finger with a pin, the huge beast threw up his proboscis in the air with a loud roar, and from it cast such a volume of sand, that, unprepared as I was for such an event, nearly blinded me. The elephant rarely, if ever, attacks; and it is only when irritated that he is dangerous; but he will sometimes rush upon a man and horse, after choking them with dust, and destroy them in an instant.

Cut off from his companions, the elephant took the direction leading to where the mule and the footmen had been left. They quickly fled in all directions; and the man who rode the mule, which was not inclined to increase its pace, was so alarmed that he did not get the better of the fright for the whole day. The major and his companions pressed the elephant very close, riding before, behind, and on each side of him; and his look sometimes, as he turned his head, had the effect of checking instantly the speed of the major's horse. His pace never exceeded a clumsy rolling walk, but was sufficient to keep the horses at a short gallop. Major Denham fired a ball from each barrel of his gun at the beast, and the second, which struck his ear, seemed to give him a moment's uneasiness only. The first, which struck him on the body, failed in making the least impression; and,

after giving him another spear, which flew harmless off his tough hide, he was left to pursue his way.

Eight elephants were soon afterwards reported as being at no great distance, and coming towards the party; and they all mounted for the purpose of chasing away the beasts, which appeared to be unwilling to go, and did not even turn their backs till the horsemen were quite close, and had thrown several spears at them. The flashes from the pan of the gun seemed to alarm them more than anything; but they retreated very majestically, first throwing out, like the elephant first encountered, a quantity of sand. On their backs were a number of birds called tuda (a species of buphaga, probably), described as resembling a thrush in shape and note, and represented as being extremely useful to the elephant, in picking off the vermin from those parts which it is not in his power to reach.

In his excursion to Munga and the Gambarou, Major Denham and his party came, just before sunset, upon a herd of fourteen or fifteen elephants. These the negroes made to dance and frisk like so many goats by beating a brass basin with a stick; and in the neighbourhood of Bornou these animals were so numerous as to be seen near the Tchad in herds of from fifty to four hundred.

In temper the African elephant is considered to be more ferocious than the Asiatic, which may be one reason that it is not now tamed. But it is clear that the Carthaginians availed themselves of its services in war; and it can hardly be doubted that the elephants which Cæsar and Pompey exhibited in the amphitheatre came from Africa.

The tusks of this species are of grand dimensions, and form a lucrative branch of trade. The ivory of them being as much prized in modern times as it was by the ancients for furniture, ornamental purposes, and, above all, for the chryselephantine statues, such as those of the

Minerva of the Parthenon, and of the Olympian Jupiter, in the creation of whose forms Phidias surpassed himself.

Regard being had to the ears, the shape of the African species appears to have been that chosen by Belial,

A fairer person lost not heav'n,

in which to present himself to Faust:

Le gouverneur et principal maître du Docteur Fauste, vint vers le dit Docteur Fauste, et le voulut visiter. Le Docteur Fauste n'eut pas un petit de peur, pour le frayeur qu'il lui fit; car en la saison qui étoit de l'été, il vint un air si froid du diable, que le Docteur Fauste pensa être tout gelé.

Le diable, qui s'appelloit Belial, dit au Docteur Fauste: Depuis le Septentrion, où vous demeurez, j'ai vû ta pensée, et est telle, que volontiers tu pourvois voir quelqu'un des esprits infernaux, qui sont princes, pourtant j'ai voulu m'apparoître à toi, avec mes principaux conseillers et serviteurs, à ce que vous aussi aiez ton désir accompli d'une telle valeur. Le Docteur Fauste répond: Orsus, où sont ils?

Mark the courage of Faust under the influence of this Sarsar, this 'icy wind of death.' The devil was conscious that the great magician quailed not.

Or Belial étoit apparu au Docteur Fauste en la forme d'un éléphant, marqueté, et aiant l'épine du dos noire, seulement ses oreilles lui pendoient en bas, et ses yeux tous remplis de feu, avec de grandes dents blanches comme neige, une longue trompe, qui avoit trois aunes de longueur demesurée, et avoit au col trois serpens volans.

Ainsi vindrent au Docteur Fauste les esprits, l'un après l'autre, dans son poisle : car ils n'eussent peu être tous à la fois.

Or Belial les montra au D. Fauste l'un après l'autre, comment ils étoient, et comment ils s'appelloient. Ils vinrent devant lui les sept esprits principaux, à sçavoir; le premier, Lucifer, le Maître Gouverneur du Docteur Fauste, lequel se décrit ainsi. C'étoit un grand homme, et étoit chevelu, et picoté, de la couleur comme des glandes de chêne rouges, qui avoient une grande queue après eux.

And so that damned spirit passed by.

Après venoit Belzebub, qui avoit les cheveux peints de couleurs, velu par tout le corps; il avoit une tête de bœuf avec deux oreilles

effroiables, aussi tout marqueté de hampes, et chevelu, avec deux gros floquets si rudes comme les charains du foulon qui font dans les champs, demi verd et jaune, qui flottoient sur les floquets d'en bas, qui étoient comme d'un four tout de feu. Il avoit un queue de dragon.

This apparition seems to have suggested that which so terribly disturbed poor old Trunnion; but the next evil spirit is at Faust's study door:—

Astaroth; celui-ci vint en la forme d'un serpent et alloit sur la queue tout droit: il n'avoit point de pieds, sa queue avoit des couleurs comme de bliques changeantes, son ventre étoit fort gros, il avoit deux petits pieds fort cours, tout jaunes, et le ventre un peu blanc et jaunâtre; le col tout de chastain roux, et une pointe un façon de piques et traits, comme le Hérisson, qui avançoient de la longueur des doigts.

No naturalist could have given a more precise description of this devilish Pict.

Après vint Satan, tout blanc et gris, et marqueté; il avoit la tête d'une asne, et avoit la queue comme d'un chat, et les cornes des pieds longues d'une aune!

And so he vanished.

Suivit aussi Anubry. Il avoit la tête d'un chien noir et blanc, et des mouchetures blanches sur le noir, et sur le blanc des noires; seulement il avoit les pieds et les oreilles pendantes comme un chien, qui étoient longues de quatres aunes.

This must have been the 'dog of Nile, Anubis.'

Après tous ceux-ci venoient *Dythican*, qui étoit d'une aune de long, mais il avoit seulement le corps d'une oiseau, qui est la perdrix : il avoit seulement tout le col verd et moucheté ou ombragé.

Were it not for the green neck and the bizarre quality of the plumage, we have here the very familiar that tripped along at the feet of Charles V. Titian has immortalized both.\*

<sup>\*</sup> In his full-length portrait of the emperor, with a tame partridge at his feet,

Le dernier fut *Drac*, avec quatre pieds fort courts, jaune et verd, le corps par-dessus flambant brun, comme du feu bleu, et sa queue rougeâtre.

This last grovelling spirit must have been the red-tape devil of the party.

Ces sept avec Belial, qui sont ces conseillers d'entretien, étoient ainsi habillez de couleurs et façons, qui ont été recitées.

Then came a rabble of fiends, some in the shapes of unknown creatures; others less ambitious, taking the forms of frogs, fallow deer, red deer, bears, wolves, apes, hares, buffaloes, horses, goats, boar-pigs, and the like: but are they not pictured in the fearful nightmare of Walpurgis night by the hand of Retszch, under the inspiration of Goethe?

We must lay down this fascinating old book,\* even though we shut it in the face of our reader, albeit the indomitable Faust, no whit abashed, bids his friend 'go on;' and stands undaunted the infernal battle wherein all these diabolical forms eat each other up, after changing to as many shapes as the Princess in the Arabian story, without even leaving their tails, to say nothing of the plague of insects which afterwards comes upon him and drives him almost mad; till bitten, stung, and blistered all over by the vilest vermin, he leaves the enchanted atmosphere of Belial and his study—not beaten, mind you—and coming forth into the blessed air of nature, finds that it is all a diabolical delusion, and that his skin is unsullied by a single insect, parasitic or predatory.

When Faust has Mephistopheles, thereafter, assigned to him, what adventures! But we must not be tempted further, though Alexander the Great himself is made to appear to the emperor, Charles V., as vividly as the



<sup>\*</sup> Histoire prodigieuse et lamentable de JEAN FAUST, Grand Magicien, avec son testament, et sa vie épouvantable. A Cologne, chez les Héritiers de Pierre Marteau.

phantoms to the Deformed transformed, upon the adjuration of the Stranger to the

Demons heroic—
Demons who wore
The form of the Stoic
Or Sophist of yore—
Or the shape of each victor
From Macedon's boy.

We must leave the magic land of apparitions for the realities of nature, and introduce such of our readers as feel inclined to the introduction, to the other pachydermatous form, which we hope soon to behold alive in the flesh, the "Ιππος ποτάμιος of the Greeks.

What an uncouth form it is, propped upon four short huge legs, looking like a gigantic wine-skin fit for the revels of Polyphemus!

'The Hippopotamus'—are there not more than one species?

That there are several fossil species\* there is no doubt; but whether more than one species now exists is a vexed question.

M. Desmoulins names two—Hippopotamus Capensis, and H. Senegalensis—resting his distinction, as he says, on osteological discrepancies as strong as those on which Cuvier depended, when he separated the great fossil hippopotamus from the recent species existing at the Cape. Nay, M. Desmoulins goes farther, not only expressing an opinion that it is not impossible that the hippopotamus of the Nile differs from the two above mentioned, but hinting that there may be two species in that river. The difference of colour observed by M. Caillaud, who found among forty hippopotami living in the Upper Nile two or three of a bluish-black hue, while the rest were reddish, seems to be the foundation on which M. Desmoulins built his last-named suggestion.

<sup>\*</sup> Hippopotami major, minutus, medius, for example.

But colour is often a treacherous guide when specific character is the question; and to say nothing of differences due to sex and age, the alteration of colour in the same individual when its skin is dry, when it is moist, and when the river-horse is taking his subaqueous walk, has been remarked by more than one observer. Vaillant, for instance, watched the progress of one at the bottom of Great River, from the top of an elevated rock, which advanced into the stream, and he remarked that its colour—which is gravish, he says, when the animal is dry, and bluish when the skin is only moist -as it walked along under the water, appeared to be of a deep blue. After the French traveller had satisfied his curiosity by looking over this unconscious peripatetic, as a certain personage, not to be named to ears polite, is said to look over Lincoln, he watched the moment when it came to the surface to breathe, and killed it with a well-directed bullet, to the great joy of his Hottentots, who, in their surprise at the feat, and delight at the size of the beast, called it, 'The grandmother of the river.'

In its osteological organization, the hippopotamus approaches in some degree that of the ox and the hog. The skull, especially, exhibits much similarity in the connexion of its bones, and the figures of its sutures, to that of the Suidae; but, at the same time, it bears the impress of its own peculiarity.

The teeth are very remarkable, and, especially the molars, vary much in form, number, and position, according to the growth and age of the animal. The long subcylindrical incisors, and the canines—the latter being enormous tusks terminating in a sharpened edge, which reminds the observer of that of a chisel—of the lower jaw, give a terrific aspect to the mouth when it is open. This tremendous apparatus, formed principally for tearing and bruising more than grinding, is a fit crushing mill

for the coarse, tough plants which are transmitted to a stomach capable of containing, in a full-grown hippopotamus, five or six bushels, and a large intestine some eight inches in diameter. Three bushels, at least, of half-masticated vegetables have been taken from the stomach and intestines of one half-grown. But it is impossible to look upon these fearful teeth without thinking of defensive and offensive weapons, fit to correct. or even attack a crocodile, if it should venture to take liberties, or approach too near, in its plated armour. is on record that, when irritated or exasperated by wounds, the bite of the hippopotamus has sunk a boat. Nor would we rely so much upon its abstinence from animal food (though we do not give implicit credit to the lamentable statement in Alexander's letter to Aristotle, that the hippopotami, rushing from the depths of the river, devoured the light troops which he had sent to swim across), as to feel quite certain that if such luckless wanderers were to come in its way when it was hungry, it would not give a zest to its salads with a tender young crocodile or two. Major Denham states that the flesh of the crocodile is extremely fine, that it has firm green fat resembling the turtle, and that the callipee has the colour, firmness, and flavour of the finest veal. Mr. Bullock gave me the same account of the flesh of the alligator, as far as the similitude to veal goes. I presume both travellers were speaking of young saurians; for the patriarchs give out a very strong musky smell.

The formidable teeth of the hippopotamus are masked, when the animal is not excited, by immense lips, and the body is wrapped in a coating of fat, which, in its turn, is shielded by a thick, smooth, tough hide—of which more anon.

The longest of the two hippopotami measured by Zerenghi was sixteen feet nine inches in length, its

girth was fifteen feet, its height six feet and a half, the aperture of the mouth two feet four in width, and the tusks above a foot long, clear of the sockets.

About the same period is required to complete the gestation of the hippopotamus as that necessary for the production of man: at least, so it is said, and probably with truth. The female calves on land; and both mother and offspring take to the water on the slightest alarm. This renders the capture of the young exceedingly difficult. An eye-witness assured Thunberg that he watched a female hippopotamus which had gone up from a neighbouring river, and lay motionless with his company till the calf was brought forth, when one of the party shot the poor mother dead. Up sprang the Hottentots from their hidden lair, and rushed forward to secure the new-born creature; but its instinct did more for it than their reason for them-it gained the bank, threw itself into the bosom of the friendly river, and escaped.

Another calf, surprised by Sparrman's party, was not so fortunate. On the 28th January, 1766, after sunrise, just as he and his Hottentots were thinking of leaving their posts for their waggons, a female hippopotamus, with her calf, came from some other pit or river, to take up their quarters in that which Sparrman was then blockading. While she was waiting at a rather steep part of the river's bank, and looking after her calf, which was lame, and consequently came on but slowly. she received an ill-directed shot from a Hottentot rejoicing in the name of 'Flip'-whom Sparrman, in his wrath, designates as the drowsiest of all sublunary beings, declaring he was half asleep when he firedand immediately plunged into the river. One of the Hottentots then seized the calf, and held it by its hind legs till the rest of the party came to his aid; when it was fast bound and borne in triumph to the waggons,

making a noise much like a hog that is going to be killed, but more shrill and harsh. It struggled hard, and was very unmanageable; and, though the Hottentots were of opinion that it was not more than a fortnight, or at most three weeks old, it was three feet and a half in length, and two feet high. When it was let loose it ceased crying; and after the Hottentots had passed their hands several times over its nose, in order to accustom it to their effluvia, it directly began to take to them; and in its hunger, poor thing, devoured the droppings of the oxen. While it was alive, Sparrman made a drawing of it, from which the plate in The Swedish Transactions for 1778, and that in his own Voyage, was taken; and then the hapless orphan was killed, dissected and eaten, in less than three hours. Sparrman found four stomachs—the first nearly empty, containing only a few lumps of cheese or curd; in the second were several clots of caseous matter, and a great quantity of sand and mud; the third contained lumps of caseous matter of a yellow colour, and harder consistence than the others, together with several leaves, quite whole and fresh, and some dirt; in the fourth was. a good deal of dirt, with a small quantity of curds. which were whiter than those in any of the other stomachs. The intestinal canal was 109 feet long.

This, be it remembered, was a baby. What a supply must be requisite for the full-grown animal!

Bitterly does the husbandman, whose cultivated fields lie in the neighbourhood of a hippopotamus-haunted river, rue its voracity, and describe it, unconsciously, in terms long ago recorded by Nicander\* and Diodorus,†



<sup>&</sup>quot;Η ίππου τὸν Νεῖλος ὑπὲρ Σαϊν αἰθαλοέσσαν Βοσκει, ἀρουρησιν δὲ κακὴν ἐπιβάλλεται ἄρπην.—Theriac.

<sup>†</sup> Diodorus says, that if the fecundity of the beast were greater, it would be ruinous to the agriculture of Egypt; and Sonnini

expressive of the ruin occasioned to his crops by these enormous reapers. They were regarded as the symbol of the destruction-dealing Typhon, and were worshipped, as some nations worship the devil, from the terror which they inspired. In modern times, every settler and every native makes war upon them. Pit-falls, ambushes, the rifle, are ready for them wherever they make their appearance; to say nothing of the old and somewhat apocryphal story of laying lots of dried peas in their way-rather an expensive proceeding one should think—which these gluttonous giants devour, and then drinking copiously the peas swell within them till they burst. The beast had his revenge sometimes; and Sparrman was in such a parlous fear, when one came out of the stream upon his party, with a hideous cry, and 'as swift as an arrow from a bow,' that he thought the river had overflowed its banks, and that he should be drowned. After this confession, he thus endeavours to account for the strange impression:—'As the hippopotamus,' says he, 'when it is newly come up out of the water, and is wet and slimy, is said to glisten in the moonshine like a fish, it is no wonder that as soon as I took my handkerchief from before my eyes, it should appear to me, at so near a view as I had of it, like a column of water, which seemed to threaten to carry us off and drown us in a moment.

The voice of the animal is described as something between grunting and neighing; the words hëurh, hurh, heoh-heoh, are used by Sparrman to give some idea of its cry; the two first words being uttered in a hoarse, but sharp and tremulous sound, resembling the grunting of other animals, while the third or compound word is



states, in the same spirit, that these animals devastated whole tracts of country, and were as formidable enemies to man as the crocodile.

sounded extremely quick, and is not unlike the neighing of a horse. Others describe the sound as more resembling the bellowing of a buffalo than the neighing of a horse—at least, just before death. Some call it snorting, some neighing, and others again grunting; and it has been likened to the deep creaking of a very heavy gate or door on its hinges.

Neither of these similes conveys the idea of anything very melodious, but there can be no doubt that this clumsy creature has some music in his soul.

Major Denham relates, that during the excursion to Munga and the Gambarou the party encamped on the borders of a lake frequented by hippopotami, and intended to shoot some of the huge inmates. A violent thunderstorm prevented their sport; but next morning they had a full opportunity of convincing themselves that these uncouth animals are not only not insensible to musical sounds, but strongly attracted to them, as seals are said to be, even though the music should not possess the softness and sweetness of the Lydian measure. As the major and his suite passed along the borders of the Lake Muggaby at sunrise, the hippopotami followed the drums of the different chiefs the whole length of the water, sometimes approaching so close to the shore that the water they spouted from their mouths reached the persons who were passing along the banks. Major Denham counted fifteen at one time sporting on the surface; and his servant Columbus shot one of them in the head, when he gave so loud a roar as he buried himself in the lake that all the others disappeared in an instant.

But whatever may be thought of the snortings and neighings of this *See-pferd*, all agree that it deserves the more appetizing name of *Wasser ochs*, when the sapid excellence of its flesh is considered. The *Sea-cow's speck*, in other words, the layer of fat which lies immediately below the skin, salted and dried, is highly prized by the

Cape Town epicure. Of the teeth, Odoardus Barbosa justly saith, 'Hanno gli ippopotami i denti, come gli elefante piccoli et e migliore avorio di quello de gli elefanti, e più bianco, e più forte, e di maniera che non perde il colore.' For this last reason the ivory of the canine teeth is highly valued by the manufacturers of those pearly rows which the artist knows so well how to form when he makes the beautiful dental series of rosy eighteen appear between the withered lips of eighty. Nor were the ancients ignorant of its value in a somewhat higher branch of art. Pausanias relates that the face of Cybele was formed of the teeth of these animals.

The tough skin in ancient times was fashioned into helmets and bucklers. 'The skin or hide of his backe is unpenetrable (whereof are made targuets and headpieces of doubty proof that no weapon wil pierce), unlesse it be soked in water or some liquor,' saith the worthy Philemon Holland, in his translation of Pliny. It is, in these modern days, made into whips, and with these instruments terrible punishments, not unfrequently fatal, like the Russian knout, are inflicted.

Major Denham makes one shudder when he describes the execution of one of those wickedly hypocritical judgments, which, affecting to avoid a sentence of death, inflicts it in one of its most agonizing forms.

Oppressively hot as the weather was, the sheikh, he states, admitted of no excuse for breaking the Rhamadan, and any man who was caught suffering his thirst to get the better of him in an African June, or visiting his wives between sunrise and sunset, was sentenced to 400 stripes with one of these deadly whips.

A wretched woman bore two hundred stripes—the number to which she was sentenced—within the court-yard of the palace, and was afterwards carried home senseless.

Her paramour received his punishment in the dender

or square, suspended by a cloth round his middle—his only covering-and supported by eight men. An immense whip of one thick thong cut from the skin of the hippopotamus was first shown to him, which he was obliged to kiss and acknowledge the justice of his sentence. The fatah was then said aloud, and two powerful slaves of the sheikh inflicted four hundred stripes, relieving each other every thirty or forty strokes. 'They strike,' says the major, 'on the back, while the end of the whip, which has a knob or head, winds round and falls on the breast or upper stomach: this it is that renders these punishments fatal. After the first two hundred ----' here the dreadful details become too horrible. '\* \* \* In a few hours after he had taken the whole four hundred he was a corpse. The agas, kashellas, and kadis attend on these occasions. I was assured the man did not breathe a sigh audibly. Another punishment succeeded this, which, as it was for a minor offence-namely, stealing ten camels and selling them—was trifling, as they only gave him one hundred stripes, and with a far less terrific weapon.'

In ancient history the hippopotamus figures under many shapes; some giving it the mane of a horse and the hoofs of an ox, and others the tail of the last-named animal. Whether it be the behemoth of Job\* is doubtful, many asserting that it is, and as many thinking that it is not: among the last Milton must be reckoned,—

Scarce from his mold,
Behemoth biggest born of earth upheav'd
His vastness; fleec'd the flocks and bleating rose,
As plants: ambiguous between sea and land
The river horse and scaly crocodile.†

It is remarkable that the accounts of the ancients, from Herodotus and Aristotle down to Pliny and subse-



<sup>\*</sup> Chap. xl. 10-19.

<sup>†</sup> Paradise Lost, vii. 470.

quent writers, should be so extremely inaccurate, while the representations which have come down to us are comparatively correct. Take, for example, the coin of Hadrian, with a crocodile at the side of Nilus and a hippopotamus looking up at the river god; the coin of Marcia Otacilla Severa; and the sculpture on the plinth of the statue of the Nile, with a crocodile or scink—probably the former—in its mouth.

Besides, one should think that some had seen the animal itself. 'Marcus Scaurus was the first man, who in his plaies and games that he set out in his ædileship, made a show of one water-Horse and foure Crocodiles swimming in a poole or mote made for the time during those solemnities.'\* One, also, swelled the triumphal pomp of Augustus after his victory over Cleopatra. The later emperors exhibited them frequently, and there is every reason for concluding that they were shown, no longer as mere objects of curiosity, but matched with men. The bestiarius must have thought he had an ugly customer when the lanista first introduced a hippopotamus to him as the antagonist against which he was pitted. The third Gordian gratified the people with the display of thirty-two elephants, ten elks, ten tigers, sixty tame lions, thirty tame leopards, ten hyænas, a thousand pair of gladiators, one hippopotamus, one rhinoceros, and ten cameleopards. These gigantic 'games' as they were called, had almost always a bloody termination; and the gifted author of The Last Days of Pompeii caught the spirit of the savage populace when he made one of them shout in joyous anticipation,-

> Ho! ho! for the merry merry show, With a forest of faces in every row; Lo! the swordsmen bold as the son of Alcmæna Sweep side by side o'er the hush'd arena.



<sup>\*</sup> Holland's Pliny.

Talk while you may, you will hold your breath When they meet in the grasp of the glowing death! Tramp! tramp! how gaily they go! Ho! ho! for the merry merry show!

The ancients believed that great enmity existed between the hippopotamus and the crocodile; and that they bear no very good will to each other may be very possible; but near neighbours as they are, dangerous enough perhaps, Nature has so provided for them, offensively and defensively, that they, most probably, maintain an armed neutrality.

The hippopotamus did not escape the medical practitioners of old. Pliny and others show how it enriched the pharmacopæia. We spare our readers the various prescriptions, merely observing, that the teeth were famous against the toothache, and that the mother who could procure some of the brain had only to rub the gums of her infant with it to deliver the poor dear baby from the torments of teething. We must not omit that the animal was considered a master of the art of healing, from his alleged habit of letting blood by pressing the vein of his leg against a sharp stake, or stout, broken, sharp-pointed reed, when his constitution required it.

If we are so fortunate as to overcome the difficulties of rearing and of the passage, and lodge the young hippopotamus, now sojourning in Egypt, safely in the Regent's Park, how different will the spirit of the British people who will crowd to see it be from that with which the sanguinary Romans, high and low, beheld the same form! We shall have the privilege of peaceably enjoying the sight of this peaceable animal, anxious, in its uncouth way, to show its good will to those who show good will to it, instead of lusting for the terrible excitement of the amphitheatre.

Commodus, on one occasion, exhibited five; and descending into the arena butchered some of these wretched

beasts with his own imperial hand. Queen Victoria, accompanied by her consort and their children, the hopes of Britain, will graciously look upon the unmolested creature.

April, 1850.