draw and take the dimensions of the lesser of these animals December. in this position, which I afterwards, from several others that I had an opportunity of seeing alive, altered to the attitude of walking.



In order the more readily to form an idea of the shape of this animal, and the mutual proportion of its parts, the reader may turn to the figure annexed in Plate III. Vol. II. To this purpose he must represent to himself the lesser of these beasts, eleven feet and a half long, seven feet high, and twelve feet in the girt. And when besides this he confiders, that, with respect to size, it ranks among fourfooted animals the third from the elephant; and, excepting the horns, has been hitherto absolutely unknown, with other circumstances which will readily occur to his reflection, he will, perhaps, in some measure, be able to conceive, what a feast the fight and examination of this creature must have been to a naturalist.

The circumstance which first and chiefly excited my attention was, that in the hide of this beast there were none of those plaits and folds, which we find in the descriptions and figures published of the rhinoceros bicornis, and which give it the appearance of being covered with a harness. It was only on the hide of the lesser of these animals that we could observe a small fold or plait, and that merely at the nape of the neck; but this feemed to proceed from the position that we found it in, viz. with the head leaning against the ground, by which means this part was thrown fomewhat backwards.

Confidering it in other respects, the hide was an inch and a half thick on the back, but fornewhat thicker on the Vol. II. fides,



sides, though less compact there. The surface of it was feabrous and knotty, and not much differing from that of the elephant, but of a closer texture; and when it is dry, extremely hard. It was of an ash-colour, excepting about the groin, where the skin is not near fo thick, but is almost quite smooth, and of the colour of a man's flesh.

> The muzzle or nose converges to a point, not only above and beneath, but likewise very visibly on the sides, nearly as it does in the tortoife. The upper lip is somewhat longer than the lower. The eyes are small, and sunk in the head.

> Though the horns have been diffusely described by others, yet, in order that the reader may form a just and adequate idea of them, it is requisite in this place to make various additions to the descriptions already given. They are of the same shape, and in some measure of the same size in both sexes; yet it appeared to me, that the size of them was not always in proportion to the body. Neither, indeed, is there any constant proportion observable between the foremost horn and the hindmost, though the foremost is always the larger of the two.

> The hindmost, especially in the older animals, is most commonly observed to be worn away in different parts, which is never the case in the foremost and larger one. This, in some measure, confirms the affertion of the Hottentots and the colonists, that the rhinoceros makes use of the shorter one only for the digging up of the various roots, which are faid to compose great part of its food; it being endued with the power of turning the larger horn at that time, on one fide out of the way. I was even informed,

that in the live rhinoceros the horns were so loose and move- 1775. able, that when the animal walks carelessly along, one may see its horns waggle about, and hear them clash and clatter against each other. What seems to add farther confirmation to this account, concerning the truth of which, however, I am not without my doubts in many respects, is an excavation or cavity in the base of the horns; particularly that of the foremost, which, like a glenoid cavity, by means of certain articulations, is adapted to, and incloses a round protuberance of the scull. It was with great difficulty that we cut the horns away from the cranium through the finews and cartilages, by means of which they were attached to it, and of which the remains are still to be seen on the horns I have brought home with me. Had I previously had the least hint of the horns being moveable, I should certainly not have omitted to investigate the degree of force with which the muscles and tendons, intended for the strengthening of the joint, and keeping the horn steady and erect, were capable of acting. Of the elder of the rhinoceroses which we had just shot, and whose horns I have preserved in the cabinet of the Royal Academy, the hindmost horn is very evidently much worn away. I have likewise found the same appearance on another rhinoceros-horn, which was put up for fale at the Cape. But in the younger animal, which I difsected, and which I particularly allude to in the present description, no marks of this kind were observable. The shape of the rhinoceroses-horns are universally conical, with the tips inclined somewhat backwards, as is shewn in the annexed plate; and may be seen still more distinctly in a

figure given by Mr. Klein, which represents a pair of rhinoceros-horns of the natural fize.

With respect to their substance and texture, these horns seem to consist of parallel horny sibres, the extreme points of which on the lower half, especially on the posterior part of the foremost horn, and on the greater part of the hindmost, project in many places; so that the surface in those parts is full of inequalities, and in some places seels as rough as a brush. The upper part of the horns is smooth and plain, like those of oxen.

The anterior horn belonging to the leffer of the rhinoceroses that we had shot, was a foot in length, and five inches over at the base. On the larger of these animals this horn was half as long again, and feven inches in diameter measured at the same part. This rhinoceros, however, did not exceed the other in bulk, in proportion to the fize of its horns. Indeed, in the cabinet of the Royal Academy of Sciences, there is preserved a pair of horns belonging to the rhinoceros bicornis, the foremost of which is twenty-two inches in length, and the hindmost sixteen. The distance between these horns is scarcely two inches. They differ likewise from the horns I saw in Africa, and from those I brought with me, in being of a lighter colour and straight, and at the same time flat on the sides; so that the hindmost horn in particular, has pretty sharp edges on the upper part, both before and behind. These horns most probably came from the northern parts of Africa, as they were purchased at Naples by Baron Emanuel De Geer during his travels, and were by him fent to his father,

ther, the late Marshal de Geer, as an additional ornament December. to his noble museum, together with which they were presented by the Marshal's illustrious widow to the Royal Academy of Sciences.



This animal may be faid to be totally destitute of hair, though there are a few scattered dark bristly hairs about any inch long on the edges of the ears, with a very few between and round about the horns. This is likewise the case at the tip of the tail. This part of the animal is about an inch thick, diminishing by degrees from the root to the tip, which is somewhat enlarged in the fore part, and particularly in the back part, and at the same time rounded off, but is flattened at the sides. It is directly on the edges produced by this conformation, that there are to be seen some strong stiff hairs an inch, or an inch and a half in length. Such of them as stand towards this creature's hard and rough body, are visibly worn down and stunted.

The feet, as may be feen in the figure, are not much wider than the legs. In the fore parts they are furnished each with three hoofs, which do not project much, and of which the middlemost is the largest and most circular. The foles of the feet, like those of the elephant, are covered with a thicker and more callous skin than the other parts; and are, if we except the edges, (which are composed of the hoofs) together with a fiffure in the heel, somewhat of a circular form.

I chose the lesser of the rhinoceroses for the purpose of making the diffection, as well as a description and drawing of this animal. I and my people, making five in all, were not able to stir the carcase, when, with a view to get at it

with.

December. with the greater convenience, I endeavoured to lay it no its back. This, however, proceeded in a great measure from the laziness of my Hottentots, and their backwardness to affist me. In the position, therefore, in which this unwieldy creature lay, we cut up its left side, and took a large flip from off its thick hide. This could not be effected without much trouble, and repeatedly whetting our knives afresh.

> Though the animal had lain above twenty-four hours, and an ecchymosis was formed about the wound, yet the flesh had hitherto been preserved from putrefaction by the thickness of the hide. A piece of this flesh we broiled immediately, which tasted in a great measure like pork, but in my opinion was much coarfer. In the mean time, we cut through the ribs with an axe, and what with hacking and tearing together, we at last contrived to empty the cavity of the abdomen. I made drawings and descriptions of these parts, and took the dimensions of them as speedily as possible; after which we took out the diaphragm, and a naked Hottentot crept into the carcase, in order to pluck out the lungs and heart.

As the animal had received its death-wound by a flot in the large blood-vessels of the lungs, these parts were already affected with some degree of putridity. The lungs, liver and milt therefore, had not been long exposed to the open air, before they began to swell and effervesce. And indeed, the violent heat of the fun at noon, together with the thirst we suffered, and the stench of the carcase, rendered this operation in a short time extremely dangerous as well as difgusting. In the mean time, I made the following observations. The

The viscera of the *rhinoceros bicornis*, in my opinion, December. most resemble those of a horse. So that this animal, notwithstanding its being furnished with horns, by no means belongs to the ruminating tribe, but rather to the class of those whose fat is of a soft nature like lard, and not hard like tallow.

The stomach does not bear the least resemblance to that of a horse, but rather to that of a man or a hog. It was four feet in length, (as I have lately found in my notes, fince I gave the description of this animal in the Swedish Transactions) and two feet in diameter; and to this viscus was annexed an intestinal tube of twenty-eight feet long, and fix inches in diameter. This intestinal canal was terminated three feet and a half from the bottom by a large cœcum, if I may so call a viscus, which at its upper end was of the same width as the stomach, viz. two feet, and of above twice the length, that is, eight feet and a half, and lay on the spine of the back, being attached to it at both ends, after which it was contracted into a rectum six inches in width, and eighteen in length.

The kidnies were a foot and a half in diameter, and the milt fearcely a foot broad, but full four feet long. The heart was a foot and a half in length, and the breadth not much less. The right lobe of the lungs had an incision in it, but was in other respects undivided and entire, being two feet in length. The left was subdivided into two lobes, the smaller of which was next the base of the heart. The liver, when measured from right to left, was found to be three feet and a half in breadth; but in depth, or measuring from above downwards, as it hangs in the animal when

December. this latter is in a standing position, two feet and a half. It confisted of three larger and perfectly distinct globes, almost equal in fize, and of a small lobe besides, which projected to about a foot from the concave side of the liver, at the middle of its upper edge. No gall-bladder, or any traces of it, was to be observed. In this the rhinoceros resembles the horse.—Just before I finished the dissection of this animal, I opened its stomach, which was very much distended, in order to examine what it usually fed upon. The contents of the stomach were entirely without smell, and perfectly fresh and sweet, consisting of roots and small branches of trees masticated, some of which were found as big as the end of a man's finger. This creature, as it appeared, had likewise eaten a great quantity of succulent plants, among which I thought I recognized two or three that were harsh and prickly. The whole of this mass diffused around a very strong and not disagreeable aromatic odour, which in a great measure took off the stench arising from the putrid viscera. Might it not be some peculiar herb, or, perhaps, the root only of an herb, with which I was entirely unacquainted, that produced the greatest part of the aromatic flavour? In the excrements of this animal, which were four inches in diameter, and in other respects resemble those of a horse, though they are of a much drier nature, there is usually seen a quantity of bark and fibres of trees, a circumstance that the hunters pay attention to; and by that means are able to distinguish it from the dung of the hippopotamus, an animal that feeds only on grafs. I thrust my hand into this creature's mouth, which was half open, and found the tongue perfectly foft, which

which is in direct contradiction to the common notion, viz. 1775. Quod lambendo trucidat, (that he kills by licking with his tongue.) I was likewise not a little assonished to find no fore-teeth in any of the three carcasses of the rhinoceros, although one of these beasts seemed to be old; and, in fact, this animal has little room for fore-teeth, as the mouth goes off so sharp at the fore part, that in that place it is only an inch and a half broad. Besides, it has no occasion for any teeth there, as the lips, like the skin, are of that extreme hardness, that it is able to clip off the tops of plants and shrubs with them; and that with so much the greater ease, as the under jaw goes within the upper; fo that this species of rhinoceros is probably capable of laying hold of its food with its lips, and conveying it into its mouth, with the same ease and dexterity as Dr. Parsons observed in the common rhinoceros on a similar occasion.

At that time I could not possibly separate the slesh from the other bones, for the purpose of examining them. I was in hopes, however, that, by the time I returned, the eagles and wolves would have saved me that trouble. And, indeed, this was so far the case, that I had it in my power to carry home with me the cranium of the least rhinoceros, which I dissected, very nearly in a compleat state. It is from this skull that I had the annexed drawing made; and this part of the animal is of too much importance, for the description of it to be omitted here.

Both jaws being clapped together in their joint, give nineteen inches for the aggregate height in the back part; and, measured at the fore part from the tip of the nose, Vol. II.

fifteen; the length, measured from the tip of the nose to the hindmost part of the cranium, is in a direct line twenty-three inches, or something less than two feet.

> With a view to avoid being prolix in my description, I refer my readers to the figure annexed in Plate III. of this volume, whence they will be able readily to conceive the proportion, &c. of the other parts. It is on the fore part of the os frontis that the lesser horn is fixed; it will, therefore, probably, be easily perceived from the annexed drawing, that the *sagittal suture* is obliterated, and that the os occipitis is terminated by a flat furface, along which it goes strait down in a perpendicular line to the condyloid processes, one of which is seen in the figure.

> The cavity in which the brain is contained, does not extend much farther forward than the offa bregmatis. The other bones by which it is encompassed are tolerably thick, so that this huge animal has but a small brain in proportion to its fize; the cavity for containing this organ being barely fix inches long, and four high, and of an oval shape. In order to know the capacity of it with the greater certainty, we filled it with peas, which we afterwards measured, and found to amount barely to a quart. With a view to discover the proportion between the brain of the rhinoceros and that of a man, I likewise filled a middle-fized human scull with peas, and found that nearly three pints were requisite for this purpose. On the other hand, the cavity of the nose in the rhinoceros is of a considerable size, which probably does not a little contribute to the quickness of this animal's scent. At least, physiologists use to explain the superiority of hounds in this parti

cular, from the circumstance of the tunica schneideriana, or the nervous membrane appropriated to this sense, being so extensive, (when expanded and extricated from all the folds which it makes in the cavity of the nose, with the greatest art contrived for this purpose,) as to cover the whole body of the animal; while on the other hand, this membrane, in the human species, is but just capable of covering the head.

Six dentes molares only, or grinders, were observed on either side of each jaw, belonging to the two oldest of the rhinoceroses shot by us, and sive only in the least or youngest, as the annexed drawing of its cranium shews; yet quite back in the mouth we discerned the marks of two more on each side, the foremost of which had begun to make its appearance, but the hindmost was almost entirely included in its socket. Hence it follows, that an aged and full-grown rhinoceros has fourteen teeth in each jaw, in all twenty-eight.

In the anterior part of the os palati, this animal appears to have a tooth-like process, which in the scull that I brought home with me is lost. Considering the distance of it from the lower jaw, it should seem that it can hardly serve any purposes of a tooth. I have to thank M. Pallas for this piece of intelligence; who, when I had transmitted to him this engraving, was so good as to send me the beautiful sigures of the cranium of a rhinoceros, transmitted to him by M. Camper for the Asta Petropolitana.

The dotted lines drawn about the cranium, show pretty nearly the situation of the horns and lips.

As

1775. December.

As I have mentioned above that the rhinoceros may be killed by a fingle shot, it follows that the hide of this animal is not so impenetrable as has been supposed. Bon-TIUS has long ago remarked, that this beaft is usually killed with powder and ball. M. DE BUFFON probably did not pay attention to this passage, when he afterted, on the authority of Gervaise, that its hide cannot be penetrated by any ball, excepting only about the ears. To these, however, M. DE BUFFON seems, of his own free will and bounty, to have added the eyes and the belly. It is true, indeed, that leaden balls will sooner be flattened against the skin than pierce it; but that balls or cylinders made of iron (des lingots de fer) should not be able to make the least impression on it, seems to be another addition of M. DE BUF-FON's, equally abfurd with the former. It frequently becomes necessary for me to correct in this manner, the voluminous works of this illustrious author; which, indeed, merit this correction so much the more, as the errors in them, being in other respects not unfrequently dressed up in an elegant style, have, in fact, imposed on many with charms which ought to be the attendants on pure genuine truth only, and unadulterated nature. It is therefore probable, that the sportive genius of M. DE BUFFON, must at times have operated in imposing likewise on its owner; but I am willing to hope, that this gentleman being b_V profession the interpreter of nature and truth, will on this account see with the greater pleasure, any strictures and remarks which are necessary to free natural knowledge from falsehood and error.

For this reason I shall proceed, without any farther ceremony, to inform the reader, that the hide of the rhinoceros, as well as that of the elephant, is capable of being penetrated by javelins and darts. I ordered one of my Hottentots to make a trial of this with his hassagai, on one of the dead rhinoceroses. Though his weapon was far from being in good order, and had no other sharpness than that it had received from the forge, yet, by means of a certain manœuvre the fellow made use of, it received such an impulsive force, as at the distance of sive or six paces, to pierce through the thick hide of the animal half a foot deep into its body.

The Hottentot or Caffre hunters are accustomed to steal both upon the elephant and the rhinoceros while they are asseep, and wound them in different places at one and the same time. After this they follow the traces of the animal for one or more days, till it drops down with weakness or dies of its wounds. Generally, however, according to their own account, they poison one or two of their darts, immediately before they attack an animal of this size; in which case, they have no occasion to wait so many days, as they otherwise would, before their prey falls into their hands. A farmer told me, he had seen an elephant in this manner wounded and dead within twenty-four hours.

As to what regards the one-horned rhinoceros, M. DE BUK-FON, in Tom. XI. changes his opinion three times in the space of a few pages. In page 177, without quoting his authority for it, M. DE BUFFON considers the hide as being so tough, as not to be penetrable either by the fire-arms or side-arms of the hunter, (ni du fer ni du feu du chasseur.) In page 181 again in the notes, he quotes, approves, and highly com-

mends

mends the account given by M. Mours relative to this point, which yet is in contradiction with the former. This, however, he seems again to have forgot, when, in page 195, (without producing any authority for it) he affures us, that javelins (les javelots & les lances) are not able to pierce this animal's side.

> M. DE BUFFON, not content with afferting that the hide of the rhinoceros is impenetrable, in page 176, will not even allow it the least portion whatever of sensibility, (privé de toute sensibilité) and this merely without quoting any authority, or having any other foundation for the affertion, than what his own imagination has furnished him with. And yet, had M. DE BUFFON but paid a moderate degree of attention to the clear and distinct account drawn up by Dr. Parsons in the Phil. Trans. which he himself has quoted, it would seem that he must have been of a different opinion. In that paper it is mentioned, that the rhinoceros emitted his penis, when he was tickled under the belly with a wisp of straw. M. DE BUFFON too remarks himself, that the rhinoceros is fond of wallowing in the mire like the hog: but I will leave it to others to judge, how this accords with the absolute insensibility he attributes to the hide. And, indeed, when even the thick hide of the elephant is affected by the stinging of flies, how can we suppose that of the rhinoceros to be absolutely insensible? In fact, the skin at the bottom of a man's foot, though thicker than it is in other parts of the body, is nevertheless by no means void of sensibility. Moreover, the skin of the rhinoceros, however tough and close in its texture, has, (at least about the groin,) vessels, blood, and juices, adapted for the nourishment of insects, and which, indeed,

indeed, actually do nourish them; this beast being infested December. with a kind of acari, which I have discovered on its pubis and groin, and have drawn up an account of them, inserted in the VIIth Tome of Memoires sur les Insectes. Neither does the thickness of this animal's hide prevent it from perspiring.

This creature, which at all other times appears to be of a grey colour, foon becomes black when it is hard hunted. This proceeds from the dust and dried mud sticking to the animal's skin, and moistened by sweat. Of this fact, besides that I have been affured it by others, I think I once myself saw a manifest instance, in the case of a rhinoceros, which was pursued by some other sportsmen, and very unexpectedly passed within the distance of forty or sifty paces of my waggon, and, fortunately for me, without perceiving it, or doing it any damage. This beast was much darker coloured than any I ever saw, the number of which, however, in all, did not exceed eight

From the figure of the rhinoceros referred to above, and from the description I have already given, it follows, that M. DE BUFFON, in his notes to page 186, accuses Kolbe, without any foundation, of having described the lesser horn as being placed in a strait line behind the other, and upon the animal's forehead. It is impossible, says he, that the two horns should be placed so far from each other; for in the horns which are preserved in Sirhans Sloane's museum, there is only the distance of three inches between the larger horn and the smaller. In fact, this eminent naturalist seems rather too hasty in the foregoing remark, and forgets that every animal's nose is placed near its forehead; so that while one horn is fixed on the rhinoceros's nose, the other may be very well fixed, and actually

December. actually is so, on the forehead. A figure so plain and simple as Kolbe's (vide the French edition) might have sufficed to prevent mistakes on this subject.

> In fine, it is necessary to inform my readers, that what M. DE BUFFON advances concerning the copulation of the onehorned rhinoceros, viz. that it is performed croupe à croupe, is not in the least applicable to the rhinoceros bicornis; but in all probability, this opinion is not true with regard to either species, as in the two-horned rhinoceroses which I examined, the penis was placed as forward under the belly as it is in a horse; though, considered with relation to the different bulk of the two animals, it is much shorter. the animal which I diffected it was no more than feven or eight inches in length, as may be seen in the specimen I brought home with me. In a rhinoceros, which had the appearance of being old, it was not much larger. M. DE Buffon, after Dr. Parsons, describes the penis in the onehorned species as being still shorter. Besides, he does not -say a word concerning the situation of this member, but founds his conjecture on the subject of this animal's copulation, merely on the circumstance of its having been obferved to bend its penis backwards when it staled, in which direction consequently the urine was emitted. But this, perhaps, was owing to an accidental and vicious conformation; or it might be done out of cleanliness, especially as we know that the rhinoceros bicornis at least has a very acute smell, and seems to love cleanliness, from the circumstance of its chusing certain places near the bushes to stale upon. It is possible, indeed, that the animal may have a kind of musculus erector, for the purpose of occasionally altering

altering the direction of this member. But I am afraid of December. tiring my reader's patience, by dwelling so long on the fubject of this quadruped; I shall therefore at present only make mention of it, just as it may happen to occur in the course of my journal.

Mr. Immelman likewife was at length weary of standing by and seeing me dissect this beast, and therefore set out before us on his road home, with a view to repose at intervals, and cool himself under some shady tree. In order to go, as it appeared to him, by a nearer way, he rode over a hill overgrown with bushes. From this spot a rhinoceros rushed out upon him, and he would certainly have been trampled to death by this huge creature, or else have been taken up by it on its horns, and, together with his horse, thrown up into the air, had not this latter in his fright made a sudden start, and by several side leaps carried his rider through the bushes, out of the sight and scent of the animal.

Here it must be observed, that the rhinoceros's eyes are sunk into its head, and are but small when compared to the bulk of its body; in consequence of which it sees, as it is said, but indistinctly, and that only strait forwards. But to make amends for this desiciency in sight, its organs of smelling and hearing are so much the more acute; at the least noise, therefore, more than usual, this creature takes the alarm, and pricking up its ears, stands clapping with them and listening. Above all things one must take care, even when one is at great distance, not to get to the windward of it; for in that case, it seldem fails directly to follow the scent, and attack the object, as it was very near doing by Mr. IMMELMAN: This gentleman, having with

1775. great difficulty made his escape, struck into a by-path, in order, after passing through a little dale, to get into the strait and plain road. In this road he overtook me, on a spot whither I had retired to screen myself and my horse from the burning rays of the sun, and was overlooking my drawings and memorandums. He was still somewhat out of breath in consequence of his adventure, at the time he gave me an account of it; while I, for my part, could not help in some measure envying his good fortune, in having at so cheap a rate seen this huge unwieldy animal alive, together with the motions it made in the cumbersome hide in which it was incased: but, indeed, he himself had seen so little of it, that we soon came to an agreement to ride up together on the other side of the very hill, in which he had just been put to flight by the rhinoceros. From hence we thought we should be able to descry this creature on the plain; but that we might not be betrayed by the effluvia of our bodies, in case he should return again to the thicket, we threw some dust into the air, in order to determine more accurately which way the wind was, and thus be able to direct our course precisely in opposition to it. And indeed, we had not been long arrived at the fpot before my horse began to be a little shy, and at length was quite restive, behaving just as he had done before when I first rode him up to the carcases of the two rhinoceroses. This circumstance I took notice of to my companion, confidering it as a fign that, in all probability, there was a rhinoceros near the spot; but he went on, saying, it was impossible, as it did not strike him just then, that there might be more than

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one in that vicinity. We therefore advanced still nearer, December. till being but fifteen paces off, I heard a rustling noise like that of an animal raising itself up leisurely on its legs. Immediately upon this appeared a rhinoceros, with its horn projecting over one of the bushes. I now thought it high time for us to turn back immediately, and made figns to my companion, that it might be done as filently as possible. He too had perceived the snout of this animal, and we rode away as softly as possible; our horses' feet, nevertheless, made a crackling noise among the dry branches which had fallen from the trees, and with which the narrow paths between the bushes were every where covered. On this account, we did not neglect during our retreat to look behind us, in order that we might make off as fast as possible, in case the rhinoceros should have been alarmed by the noise, and have been induced to pursue us. What I call paths were merely tracks made by the buffaloes and rhinoceroses forcing their way through the thickets; but among these likewise we found many blind paths, i. e. such as terminated on a sudden in some high and impenetrable bush. Into a place of this fort we might in our flight easily have strayed, and there have been caught by the rhinoceros, as it were, in a trap. This adventure made us afterwards suspect, that every bush harboured a rhinoceros; and induced us for some time to give up all thoughts of reconnoitring among the bushes with so much assurance, an animal that did not appear as if it was to be trifled with.

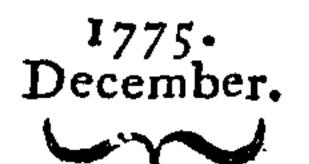
From the preceding relation, I think we may infer, that this rhinoceros was different from that which put Mr. IMMEL-

MAN to flight; as likewise, that this latter did not pursue us, by reason that, in consequence of our having rode up to it full in the face of the wind, it could not get scent of us; besides, this animal did not hear our talking nor the crackling of the branches, with a sufficient degree of certainty to engage it to make an attack upon us: and in fine, it appears, that it had with great forecast chosen a thick and high bush, by way of entrenchment, on that side of the bush, from whence the wind prevented it from getting scent of any thing. If I may form any conclusion from my horse's stopping, it would seem, that he had got scent of this beast as far off as the distance of forty or fifty paces, though the wind was very moderate from that quarter.

> On the way to our home, (for fo we always called our waggon, or baiting-place in the defert) we came within pistol-shot of a herd of elk-antilopes, probably the same with those we had given chase to in the morning without success; but what was very fingular, they at this time hardly shewed the least fear. The males, which were of the fize of an ordinary galloway, appeared much more bulky and corpulent than their females, and seemed to run rather heavily.

> In the evening we received an unexpected visit. This was from eight colonists, who were come hither from Camdebo with four waggons, and had brought with them two of their wives, and a couple of children. They were going to the falt-pit before-mentioned near Zwartkops-river, in order to fetch falt from thence; but having been told by us of the violent drought they would meet with in their way thither, part of them only went with two waggons, that being fewer of them, they might be less liable to suf-

fer for want of water. These people informed us, that December. that very day they had chanced to awake a rhinoceros University just by the road side; but that the beast, probably scared by the noise and bustle it heard from different quarters at once, ran by them without doing them any hurt. They related to me, however, an instance, in which a rhinoceros had run up to a waggon, and carried it to a confiderable distance on his snout and horns. They likewise informed us, that the distemper among the horses had already begun to commit ravages in the district of Camdebo, where, however, it otherwise seldom used to make its appearance till the month of April. The reason of this, probably; was the universal drought that prevailed this year.



CHAP.

Journey from Quammedacka to Agter Bruntjes-

December. ON the 21st at nine in the morning we left the pool at 2uammedacka, which we had by this time drank dry, and arrived at noon at Little Visch-rivier, where we again pitched our tents. We here found a herd of spring-boks, a couple of which we shot. At five o'clock this morning the thermometer was at 52 degrees, at twelve at 82, and at half past three at 95 degrees. The evening was very much overcast. In this tract of country there was a great drought on both sides of the river, but still greater farther on towards the north, where the foil was more gravelly, and produced a greater quantity of fucculent plants. In the spaces between these, besides shrubs and bushes, there was sometimes to be found a little dry grass; every where else, the ground was as dry and bare as a high road with a clayey bottom. Between ten and eieven o'clock at night, we heard the roaring of a lion; and though it only roared twice, the animals we had with us were very restless the whole night throughout.

On the 22d early in the morning, we croffed Little Vifchrivier, it being supposed, that where we then were, it would
not be so well worth our while to go in search of the hippopotamus, or sea-cow, an animal that is bigger than a rhinoceros, and lives both in the water and on dry ground, (vid.
Plate IV. of this volume.) This, in fact, as I had seen the
rhinoceros, was what I now chiefly laid out for.

Between nine and ten o'clock, being on our march, we saw two large lions. They were about three hundred paces from us, in a little vale. The instant they perceived us, they betook themselves to flight. Being very desirous to have a nearer view of these animals, we rode in pursuit of them, all the while shouting and calling out after them. Upon this they mended their pace till they got down to the side of the river, which we had just crossed, and there hid themselves in the thickets. Urged by their curiosity, two of our Hottentots sollowed us, one armed with a couple of haffagais, and the other with a gun. We ourselves were without any arms whatever; but I imagine we ran no risk in this chase, as we could easily have turned back and fetched our arms, in case the lions had thought proper to purfue us. In running they had a kind of fideling pace, like that of a dog, accompanied now and then with a flight bound. Their necks were all the while somewhat raised, and they seemed to look askance at us over their shoulders. One of them had a mane, and consequently was a male; but both of them were nearly of an: equal fize, and feemed to be confiderably higher and longer than our faddle-horses, which were of the fize of common. galloways. Neither our horses, nor several gazels which