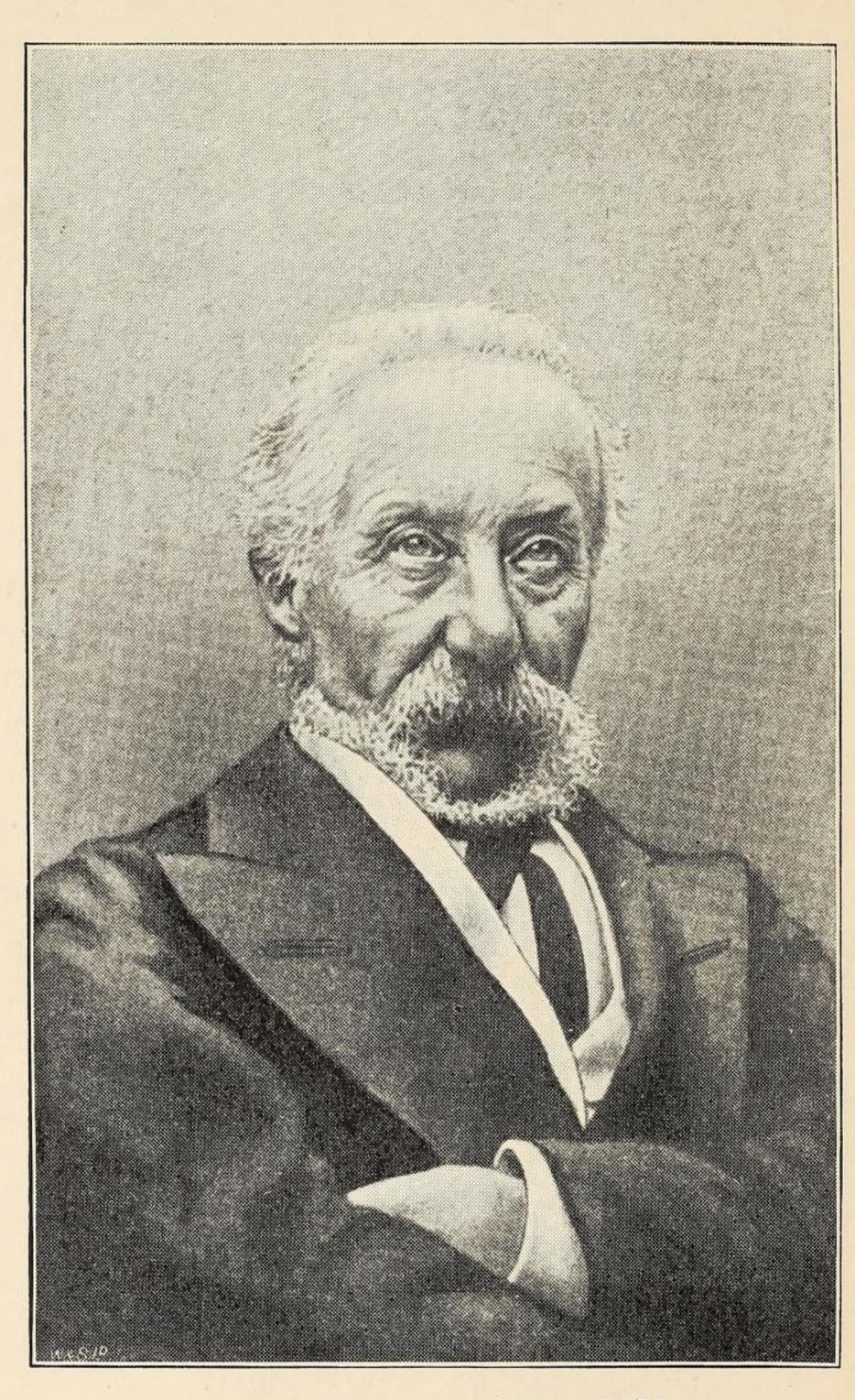


WILD ANIMALS IN CAPTIVITY

A·D·BARTLETT'S·EXPERIENCES AT·THE "ZOO"



A. D. BARTLETT. ABOUT 1871.

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WILD ANIMALS IN CAPTIVITY

BEING AN ACCOUNT OF THE

HABITS, FOOD, MANAGEMENT AND TREATMENT OF THE BEASTS AND BIRDS AT THE 'ZOO'

WITH

Reminiscences and Anecdotes

BY

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WITH ILLUSTRATIONS

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RHINOCEROS.

THE CHARACTER GENERALLY OF RHINOCEROSES.

When very young and small the rhinoceros is not usually bad tempered, in fact many are playful, and if a large ball or small cask were allowed it in its paddock the animal would roll and tumble it about for hours, pushing it with that part of the head where the horn would eventually be formed. Long before the beast becomes adult it is dangerous to enter the den or paddock when the animal is at liberty. It may be simply an act of playfulness on its part, but it would rush suddenly upon you and on account of its great weight and strength there would be much danger of being crushed.

Some of the species, such as R. lasiotis and R. sumatrensis, being of smaller size and less irritable, are by no means so dangerous as the one-horned R. unicornis of India, and the two-horned R. bicornis of Africa. The two latter are never to be depended upon.

The savage manner in which the Indian species will attack the bars of its den or walls of its prison, beating itself furiously against any structure and, in more than one instance, tearing off the horn and leaving the skull bare, is well known.

A large Indian rhinoceros living in the Gardens, while attempting some few years ago to tear down the iron fence, tore the horn bodily from its position on the head.

PLAYING WITH RHINOCEROS.

To face p. 65

The horn of the rhinoceros is of a very remarkable structure, being composed of agglutinated hair, having no bony core but growing from the skin, which is immensely thick over the nose, and when the horn was torn off it left the smooth bony portion of the nasal bones bare and fully exposed. The animal bled very much at the time, but the bone becoming thickly covered with the dried exuded blood, the place soon healed, and in the course of a few months a new horn commenced to be developed.

I may mention another instance: a female rhinoceros in her constant endeavour to tear down the iron fence caused the horn to grow forward, so as to project beyond the nose, consequently the animal had great difficulty in feeding off the ground by reason of the horn coming in contact with it first. Consequently I determined to saw it off. The animal became comparatively sociable and friendly, allowing me to rub her eyes with my hand, and at the same time I practised with a walking-stick the process of sawing the horn. This performance I continued to go through on several mornings. Finding she submitted gently to this treatment I went one morning prepared with a sharp saw, and, with the aid of one of the keepers, who smoothed her eye in order to keep it closed, I commenced to saw off the horn, which I very effectually accomplished in about ten minutes, during which time she remained perfectly quiet. I have kept this horn, and, although it has got very dry, it weighs 11 lbs., and measures 15 in. in length.

Upon another occasion the hairy-eared, two-horned rhinoceros (*R. lasiotis*), in consequence of constantly driving one of her horns against the bars of her cage, she caused it, in growing, to curve backwards until the point was in the act of forcing its way through the skin, causing it to become ulcerated. In this case I had much

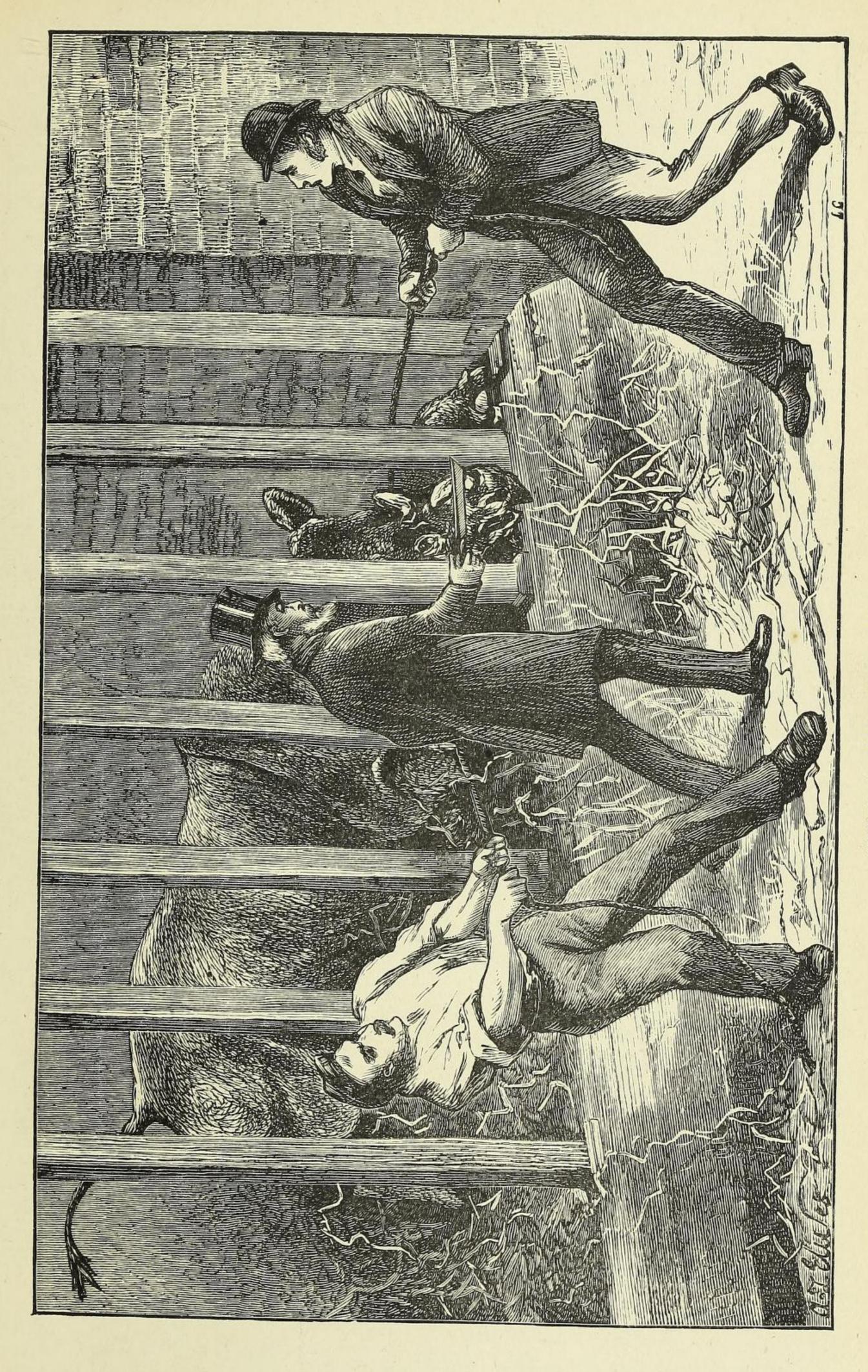
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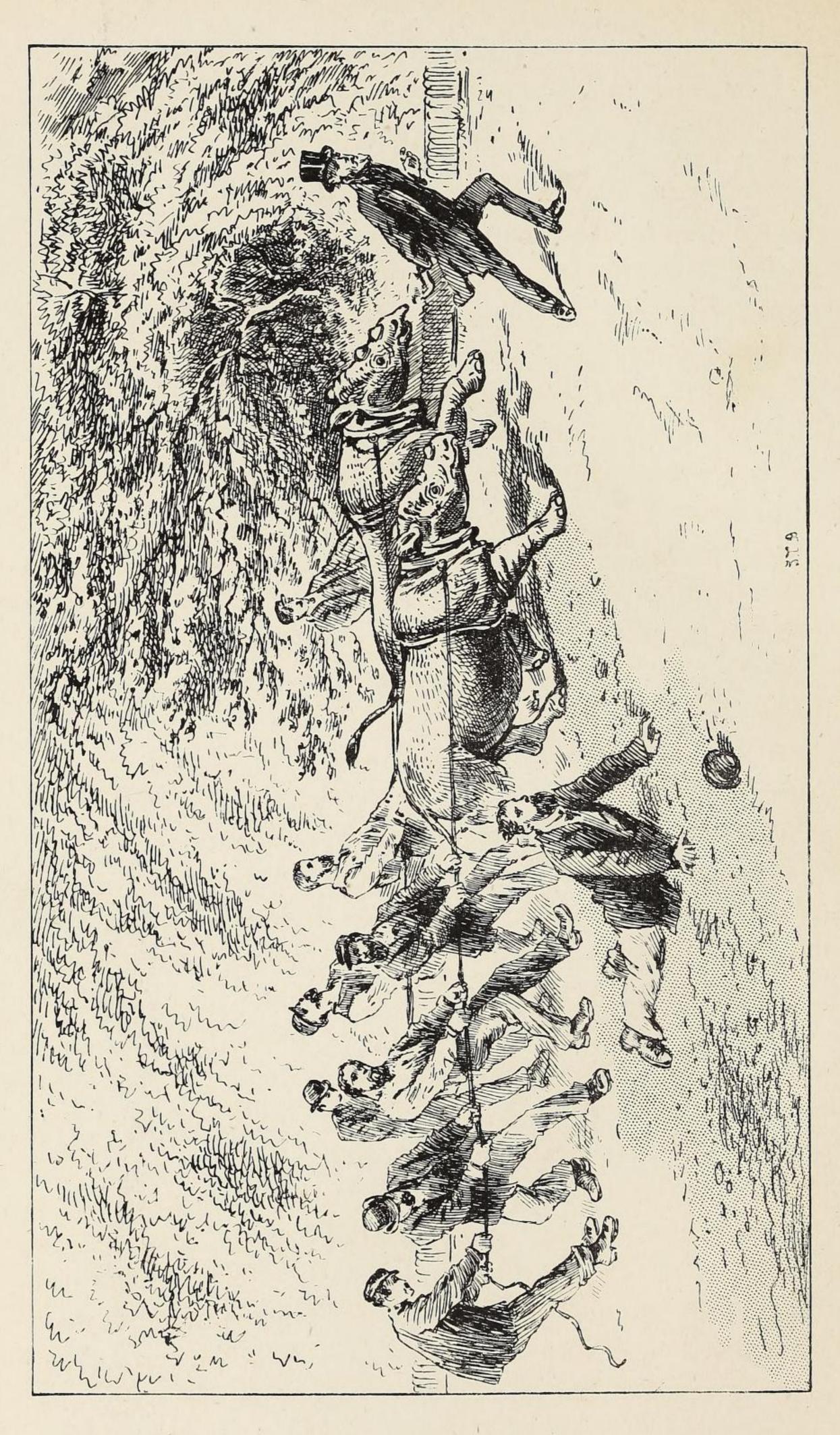
greater difficulty, the brute was not to be coaxed into any kind of submission, but exhibited the most determined resistance to be touched.

I therefore arranged to make both of her front legs fast by ropes attached to the bars of the den. It was a difficult matter to commence using the saw because of her obstinate determination to resist, jerking from side to side her head which we found almost impossible to hold still. After a little while she became less violent and I commenced with the saw to cut off a portion of the horn that curved backwards. Before I had cut half way through she by a sudden jerk snapped the saw in two. Having two more saws at hand the second attempt, I thought, would be successful, but another sudden jerk broke the second saw. She now made such desperate struggles to get free, and becoming thoroughly exhausted remained quiet for a few seconds, thereby allowing me to complete the operation.

My pupil, the late Charles J. Andersson of Ngami fame, on his return from one of his hunting expeditions, told me of the danger of shooting a wild African rhinoceros. He said this ferocious beast would without any apparent provocation make furious charges at trees, rocks, or anything movable, and he, himself, narrowly escaped upon more than one occasion being killed by this powerful beast.

This ungovernable temper is exhibited also by the Indian species, which I have had the opportunity on several occasions of witnessing, tearing its horn and skin in a frightful manner. During these outbursts of temper it would be extremely dangerous for any one to dare to approach it. This furious and inexplicable behaviour has been recorded by many sportsmen who have ventured to hunt this unwieldy and powerful monster.





REMOVING RHINOCEROS

Having resolved on a certain day in October 1865 to remove for the winter months the two young rhinoceroses to the house next to the Elands, I arranged the night before with the keepers to muster at six o'clock the following morning.

Dr. Corrigan, the Director and President of the Dublin Gardens, was in London at the time, and as he had also received a male rhinoceros, which was brought to England at the same time as our pair, he was, I knew, interested in and would like to witness any operations connected with them, in order that he might get a hint for his own future guidance. I therefore informed him that if he wished to be present at the removal I should be glad to see him.

At the appointed time all was ready. One of the animals had a strong leather collar on, the other a collar made of strong, thick, soft rope, round the neck; to these collars were tied two strong ropes, one on each side of the animal. The men were divided so as to take charge of the ropes attached to the collars, there being about twelve men to each beast, and one or two others to assist in leading, or attending to other matters, such as opening or closing gates, keeping the way clear, etc. One keeper was to lead off with a bundle of new hay on his back, in the expectation that as the brutes were hungry they would, perhaps, follow him at once. The ropes fast, the men arranged and the gates opened, the animals came out at a nice easy trot; seeing the crowd of men they suddenly turned round and plunged about. This caused a great commotion, at the same time some of the ropes getting slack became entangled with the

legs of the beasts. Knowing the danger of their being irritated and annoyed by their limbs being encumbered, I ordered the ropes to be let fall on the ground in order that they should be disengaged from their legs, then, to keep them quiet, I took a quartern loaf which had been kept in readiness, and, going between them, broke off pieces of bread and put in their mouths.

Having attracted their attention by these means, they got steady and turned round to follow me for the bread; this enabled the men to again get fairly hold of the ropes.

What had become of my friend Dr. Corrigan and the keeper with the bundle of hay during this little scramble I never heard, but certainly they were completely out of sight before we started the second time. No sooner had we started again (towards the house they were intended to pass the winter in) than I found their pace increase rapidly from a walk to a trot, from a trot to a gallop, myself taking the lead; there was no time for talking, but away we went full pelt. I was closely followed by my rough friends dragging behind them all my brave army, whose weight, strength, and determined efforts did not appear to make the least difference to the speed of these brutes, but on we went. Fortunately I had directed the gates of the yard leading to the house to be set wide open, and which had been attended to, as there was no time to knock at the door. The animals bolted in and across the yard into the house; I threw the remaining portions of the loaf on the floor and scrambled over the rails out of the way of danger; they followed close at my heels, then came to a sudden stop inside the house, and all was soon satisfactorily settled.

After the experience of the first removal of the two rhinoceroses, I thought it would be quite unsafe to again risk a run for it in taking them back to their summer quarters; moreover the animals had much increased in size and strength during the winter months.

I therefore arranged to get them into a large den (one at a time), and draw this on a low-wheeled truck, used for this purpose, but the enormous weight of this den and the animals combined prevented this plan from being carried out. After we had succeeded in getting the beast (the male) into the den, the weight of which was over two tons (without the rhinoceros), I considered that the only way we could move it was by rollers on planks laid on the pathway, and so slide or roll it on. Owing to the slow progress we made, the day was so far advanced that, before the transfer to the summer quarters was completed, I felt convinced we should not have time to repeat the process with the other animal before dark. I was, however, in fear that the female would turn illtempered on account of her being left by herself, and I also had vague fears that she was able to break out of the house were she to attempt to do so.

After safely depositing the male, and having the whole staff of keepers (thirty in number) at hand, I ordered the strong leather collar and an additional rope collar to be put on the neck of the female, and with two double ropes behind and one double rope in front we started. Although we went on tolerably steady, and got safely to the end of the journey, we all felt perfectly sure, from the few pranks played by her ladyship—she had given every one his work to do—that the male would be more than all concerned would have cared to tackle in this fashion.

The large female Indian rhinoceros died on December 13, 1873. She was the same animal which met with the accident by falling through the ice on the pond in her paddock, and of which Mr. Buckland gave a graphic account in Land and Water, December 29, 1870.

He afterwards wrote:—"This animal arrived in the Gardens in 1850. It was then supposed she was about one year old, so that would make her about twenty-four years old when she died, and the fact that an Indian animal accustomed to a hot climate should live in the Regent's Park such a length of time does infinite credit to the management. Her gigantic carcass was placed on boards on rollers, and it took twenty-five men to roll it to the dissecting-house in the Gardens. The measurements of the great beast were:—Total length from tip of nose to tip of tail, 12 ft. 4 in.; circumference at widest part, 12 ft.; the weight was probably between two and three tons. By means of pulleys the huge and ponderous skin was hauled up while Mr. Gerrard separated it from the flesh. The skin was of great thickness, in some places from 2 in. to 3 in.

"This is the same rhinoceros whose horn was amputated by the Superintendent some time since, the weight of the piece weighing 11 lbs."

Mr. Buckland wrote in Land and Water, vol. x. p. 484, from information I gave him, an account of the strange ice accident to the rhinoceros:

"The animal had been turned out that morning as usual into the paddock behind the elephant-house while the dens were being cleaned. The snow had fallen thickly during the night, so that the pond was not to be distinguished from the ground. The rhinoceros not seeing the pond put her fore-feet on the ice, which immediately gave way, and in she went head over heels with a crash. The keepers ran for Mr. Bartlett, the resident superintendent; when he came (in a few minutes) he found the poor rhinoceros was floundering about among great sheets of ice, under which she had probably been kept down till her great strength enabled her to break up the whole

RHINOCEROS IN THE ICE.

Here then was a most awkward accident under unexpected and novel circumstances, putting Mr. Bartlett's readiness of action to the test. My friend, however, with his usual courage, quickness, and readiness of resource, was quite equal to the occasion. He immediately let the water off the pond by knocking away a large plug which he has thoughtfully fixed instead of a tap, which is liable to get out of order. In the meantime the poor rhinoceros was in great danger of drowning, as the pond is 9 ft. deep, so while the pond was running off, Mr. Bartlett, losing no time, sent for all the available keepers and a long and strong rope; barrow-loads of gravel were at the same time strewed on the sloping sides of the pond, to give the exhausted animal a foothold. The rope was then tossed round the haunches of the rhinoceros, like the kickingstrap of a horse in harness, and twenty-six men, one-half at one end of the rope and the other half at the other, pulled hard on the rhinoceros, so that in her struggles to get up the bank she would not only be supported but pulled forcibly forwards. After much hauling on the part of the men and much plunging on the slippery bank of the pond, the rhinoceros was at last landed on terra firma. The salvors of this valuable living property had then to look out for themselves. Mr. Bartlett had anticipated this, for he had left the sliding gate of the enclosure open just wide enough to let out one man at a time, but not a rhinoceros. An absurd scene then took place, everybody rushed to the gate, but the first of the fugitives from the rhinoceros, naturally stout, and possibly stouter at Christmas time than usual, jammed fast in the open gate, so that the other twenty-five men were in the paddock with the rhinoceros. The poor frightened and half-frozen beast luckily behaved very well; she did not rush after the men, but stood still, pricked her ears and snorted, giving the

keepers time to get out as fast as they could and how they could, through the ingenious 'man-hole' or guard in the railing, made in case of emergencies. Neither the rhinoceros nor the men received the slightest injury. Shortly after the accident I saw the rhinoceros munching her breakfast as if nothing had happened. The rhinoceros was the big female; she is about 10 ft. 6 in. long and about 5 ft. high at the shoulder, and she weighs at a guess between three and four tons. The ice I found was 4 in. thick.

"I think the Society are much indebted to Mr. Bartlett for the admirable way in which he prevented what might have been a bad accident."

HORNED ANIMALS.

It may be nearer the mark to say horned mammals, because there are many animals called horned that I have no intention to include in this notice beyond saying there are birds called horned tragopans, horned screamers, and among reptiles, horned vipers, horned frogs, etc. My intention is to confine these observations principally to the class of ruminants comprising the bovine and cervine families. It has often struck me when reading the statements of very intelligent and trustworthy explorers and travellers, what a lamentable want of knowledge of Natural History is so often displayed; for instance, a traveller in the interior of Africa describes seeing a large herd of deer, the unfortunate writer not being aware that no deer exist in the interior or the South or West of Africa, and to see them is an utter impossibility, the fact being that only one species of deer exists, and that in North Africa only. This one kind has a very limited range, is, in truth, only a local variety of the European red deer, but it has received a specific name, Barbary deer (Cervus Barbarus), having been obtained from that locality.

The truth is, that all these so-called deer met with throughout Africa are antelopes, and belong to very distinct genera, and I will endeavour shortly to point out the most ready means of distinguishing between these genera. All antelopes (and the species are very numerous) belong to the bovine or ox group, to which also the goats and sheep claim a near relationship; on the other hand, the true deer all belong to the *Cervidæ*.

Now, these two families are most easily distinguished one from the other, by the simple character of their horns. In the *Bovidæ* the horns are never shed, and the true horn is supported by a bony core that fills up the hollow interior of the lower part of the horns.

In the deer family, *Cervidæ*, on the contrary, the horns are solid and most frequently branched or bearing numerous points or antlers. Moreover, these horns are cast off annually, and renewed in a most extraordinarily short time.

The mode of reproduction of deer, or rather stags' horns has been so frequently and fully described, that it appears to me unnecessary to dwell upon this subject, more than to say the blood-vessels that supply this rapid growth are on the outside of the bony horn and covered over with a thick tough skin, externally coated with a velvet-like fur, which peels off as soon as the new horn is sufficiently hard to bear the rubbing against the trees or branches of trees, indulged in by these animals at the season in which the renewal of their horns takes place.

There is one very remarkable animal, differing from all the other ruminants, viz. the American prong-horned antelope (Antilocapra Americana). This singular animal does not fit comfortably into any classification, but stands at present alone and unique, being the only known hollow-horned ruminant that sheds its horns. Many years since the North-American Indian hunters tried in vain to persuade those eminent naturalists, Messrs. Audubon and Backman, that this animal shed its horns. In their second vol. of The Quadrupeds of North America, p. 198, will be found the following words:—

"It was supposed by the hunters at Fort Union that the prong-horned antelope dropped its horns, but as no person had ever shot or killed one without these ornamental and useful appendages, we managed to prove the contrary to the men at the Fort by knocking off the bony part of the horn and showing the hard spony membrane beneath, well attached to the skull, and perfectly immovable."

It therefore continued to be unknown or disbelieved until Nov. 7, 1865. On the morning of that day I witnessed the shedding of the horns of this very singular animal, and at a meeting of the Zoological Society, Nov. 28, 1865, I read a paper that was published in the *Proceedings* of the Society, calling attention to the fact.

Three months afterwards a letter, stated to have been written seven or eight years ago by Dr. Canfield (but which had been laid aside and unnoticed), was forwarded to the Society and published in the *Proceedings*, 1866. In this letter it was made to appear, and most thoroughly established the fact, that the prong-horn shed its horns annually; yet, notwithstanding, some American writers doubt the accuracy of the conclusion at which the best authorities have arrived. During the last autumn the prong-horned antelope now living in the Society's Gardens shed and renewed his horns exactly in the same manner as stated and described in the paper alluded to, as read at the Zoological Society's meeting in 1865.

There remains yet another group of animals that deserve a passing notice, because they are horned mammals, but not belonging to the bovine or cervine classes, and they are not ruminants. The group alluded to are the rhinoceroses. They are horned, but the nature and structure of the horns differ so entirely from the horned animals before described that it appears necessary to give a few words of explanation with reference to their structure. In the different species of rhinoceros the horns are attached, and grow with the skin of the animal; they are not hollow, nor are they supported by a bony core, as in the bovine group. They (the horns) are not of a bony substance, as in the cervine group, but are composed of a substance of agglutinated hair, resembling the structure of the hoofs. The horns of the rhinoceros grow during the animal's life, but by the constant wearing down they are kept in working order, and are, when the animal lives in a wild state, tolerably sharp-pointed.

THE PRONG BUCK, OR PRONG-HORNED ANTELOPE OF AMERICA.

Previously to my paper, which was published in the *Proceedings of the Zoological Society* November 28, 1865, nothing was known, positively, to the scientific naturalist of the true nature of the horns of this very remarkable beast.

I proved, incontestably, the peculiar and unique condition of the shedding and the reproduction of the horns of this singular animal.

It may appear strange and almost incredulous that, soon after my paper was read in America, the Smithsonian Institution, with its great reputation, should forward a letter to the Zoological Society with the extraordinary statement that they had had this letter in their possession for eight years, unnoticed and unpublished, detailing and describing all that I had stated without making the slightest allusion to what I had already settled.

If there were any truth (which is much doubted) in the statement that Dr. Canfield had made the same discovery

in 1858, and that his long and very interesting communication had nevertheless been neglected and put aside for nearly eight years, the officials of the Smithsonian Institution would appear to have treated Dr. Canfield with very scant courtesy; unless they disbelieved his statements, and that it was only after my paper was published that they thought it worth while to notice them.

PORCUPINE (HYSTRIX).

The Hystricidæ are by no means difficult to keep in condition. They will eat a very great variety of different kinds of food, roots, bark of trees, leaves, nuts, berries, green food, bones; the large or small bones of horses or oxen, with a small quantity of flesh on them, are in cold weather freely taken; they will cut through the legbones to get the marrow. They like a warm dry place to sleep in and retire to during the daytime. Hard dry biscuit, Indian corn, oats, etc., form great part of their food in confinement. They do not unfrequently breed in captivity.

HARES AND RABBITS (LEPORIDÆ).

Every one is supposed to know how to keep hares and rabbits, but it is not always easy to keep them in condition, and to get them to thrive well in confinement. As a rule, they have too much moist food given to them, and this always proves fatal; the drier the food the better they thrive; and, above all, they require to be kept clean, and to be given plenty of clean fresh straw. Their food should be hay, clover, oats and bran; a little green food, such as grass, cabbage, celery, parsley; and roots, such as carrots, mangold, or parsnips. For very young animals fresh tea-leaves mixed with pollard or fine bran is better than green food. Scraped carrot added to this mixture, to which a little oatmeal may also be added, has often saved a brood when the mother has been lost or killed.

RHINOCEROS.

The food in captivity is clover or meadow hay, straw, boiled rice mixed with bran, roots, such as mangold and carrots, grass, leaves, branches of trees and shrubs, bread,

biscuit, grain consisting of oats, barley, Indian corn, etc. In using such grain as barley, it is better to boil it. Indian corn should never be used unless it has been broken or boiled, otherwise there is great danger of its germinating in the animal's stomach; an instance of this kind occurred, to my knowledge: the animal having swallowed the Indian corn without crushing it, the seed germinating in the stomach of the rhinoceros killed him.

TAPIRS.

By no means easily kept in good health. These animals are subject to several disorders, and quickly go wrong; if by chance their bowels become much relaxed, they have protrusion of the gut, and exactly the same misfortune occurs if they are constipated. It is therefore of the utmost importance that the food must be varied, and a careful watch kept as to the condition of the bowels.

The tapir doubtless feeds upon fresh growing plants, and is always found near fresh-water rivers and streams, rarely about lakes. Now as it is quite impossible to obtain these plants at certain times of the year, recourse must be had to a variety of other kinds of food at all times attainable. Of these we take boiled rice, boiled potatoes, mangold, carrots, bread, bran, biscuits, boiled Indian corn, hay, clover, straw, chaff, bruised oats, beans, treacle, sugar; green food, such as grass, cabbage-leaves, and small branches of trees.

From this stock a quantity can be selected and mixed so as to suit the taste and inclination of the animal. Sometimes one will not touch the same kind of food on which another will feed freely and do well; therefore it is difficult to say what is the exact kind of food for a tapir.

Some fresh-caught tapirs do very well on yams or sweet

potatoes, and refuse all other food. They probably die when taken on board ship if there is not a supply of this kind of food.

As soon as the stock is consumed they require to be gradually weaned, and a little mixed food changed at intervals to entice them to eat. During the change much depends upon the skill and judgment of the person in charge; care and watchfulness as to the altered condition must be strictly attended to, or the animal will be lost.

GIRAFFE.

The food of the giraffe in captivity must be as dry as possible, such as good old English clover-hay, crushed oats, beans, bran, crushed Indian corn, chaff with straw; roots, such as mangold, carrots, and particularly onions, are good for them, and in summer a little green tares.

SHEEP AND GOATS.

Wild sheep require much care in this climate, especially in this locality; those sheep from the mountains of Asia on the dry and hot or dry and cold countries must be carefully fed at all times. They are very liable to get out of order soon after arrival here. Green or moist food must be used very sparingly; they are in the habit of becoming relaxed, and this condition in many of the animals proves fatal; therefore the drier the food the better, such as good clover or meadow hay, oat-straw, crushed oats, beans, carrots, mangold, tares; a little grass now and then would be of service.

A fine young male (Ovis vignie?) that arrived from the Punjaub was nearly lost as it took to purging, and eat but little for several days. Finding this, I gave it a quart of the best millet seed each day, viz. a pint in the morning