

THE VETERINARIAN.

INTESTINAL DISEASE IN A MARE.

MODERN SURGERY has made people familiar with many things which were not dreamt of half a century ago; and it is no longer a mere joke to suggest that a clever surgeon can take a man to pieces, more or less, and put him together again without inflicting upon him any very serious inconvenience. Readers of the *Lancet* and the *British Medical Times*, of *hoc genus omne*, are alternately appalled at the thought of the terrible derangements to which the animal organism is liable from accident and disease, and overwhelmed with astonishment and admiration at the resources of surgery in rectifying them. Allowing full credit to the surgeon's art, it must, at the same time, be claimed for the *ars medicatrix natura* that it can do something in the direction of repairs, in cases which seem at first to be beyond the doctor's power. Everyone who has dipped into the older records of veterinary science—or practice rather—will remember wonderful accounts of the results of rough-and-ready surgery, in the performance of which important organs and parts were sacrificed to exigencies of the moment with a cheerful disregard of the laws of physiology, and with a success which atoned for the utter contempt of consequences exhibited by the operators. For the sake of illustration, it is only necessary to allude to the frequent operation for "gut tie," a derangement which is never heard of now, but in former times was the triumph of the cow-doctor's art. An ox or, for reasons known only to the persons concerned, said to have "gut tie," a derangement which is never heard of now, but in former times was the triumph of the cow-doctor's art. An ox or, for reasons known only to the persons concerned, said to have "gut tie," a derangement which is never heard of now, but in former times was the triumph of the cow-doctor's art. An ox or, for reasons known only to the persons concerned, said to have "gut tie," a derangement which is never heard of now, but in former times was the triumph of the cow-doctor's art.

We have referred to the above cases for the purpose of introducing to our readers an instance of natural surgery, which is calcu-

rotted off. The expulsion of the portions so separated would follow in the ordinary course. Continuity of the intestinal tube would be secured by the adhesion of the parts which remained in contact; and if no serious contraction of the joined tube should occur, the animal might remain in health. There is, however, a certain amount of risk of this result following the aloughing of the dead portion of the gut; and in such cases the part in front of the constriction will become enlarged from accumulation of food, and at some time or other fatal obstruction may be caused. To avoid this complication, care should be taken to give the animal food which is easily digested; and it is also important to give the rations frequently and in small quantities at each meal. A little bran should be given every feed, and water should be kept in the animal's reach at all times. If by any chance the mare is inclined to eat the litter, the habit must be checked; or, if no other means of prevention can be found, the muzzle. The case is a very interesting illustration of the reparative power of the system, unaided by the surgical art, which in such circumstances is powerless.

FOOT-ROT IN SHEEP.—The difficulty experienced by Mr W. Sinclair in getting the ingredients of the foot-rot lotion to mix well may be remedied by shaking the bottle vigorously when the contents are applied.—JAMES T. HATCH.

VETERINARY VASELINE.—I have a horse that set to kicking a week ago, and he cut himself badly inside the hind leg. I have used veterinary vaseline, made by the Chesebrough Company, New York; but I find it partly blisters the parts affected. Could you or any of your correspondents tell me if they have tried it, and with what result?—MELTON. (Vaseline should not cause any irritation.—ED.)

LITTLE'S SOLUBLE PHENYLE.—I should be much obliged if you or any of your readers will kindly inform me whether Little's soluble phenyle is procurable and ever used for horses in England. In India I have constantly applied it to cuts, sores, &c., always with the best results; and I should think that in stone-wall countries especially, where a horse seldom escapes without some knocks or cuts after a hard day's hunting, a wash of it would be just the thing. I find, however, that it is apparently unknown in England.—H. H. K.

HORSES TURNING OUT THEIR TOES.—Col. H. asks, how it is possible to prevent a horse from turning out his toes. Let us first inquire how a horse comes to cut, or brush. Nature forms truly made horses, and also truly made cuts; yet she is always consistent. She sometimes makes a horse with the elbow in and the toes out. Yet, had this horse been permitted to live as she formed it—shoesless and running on natural ground—it would never have cut or brushed. Man requires this animal; for his use, to run on artificial ground (made roads); he

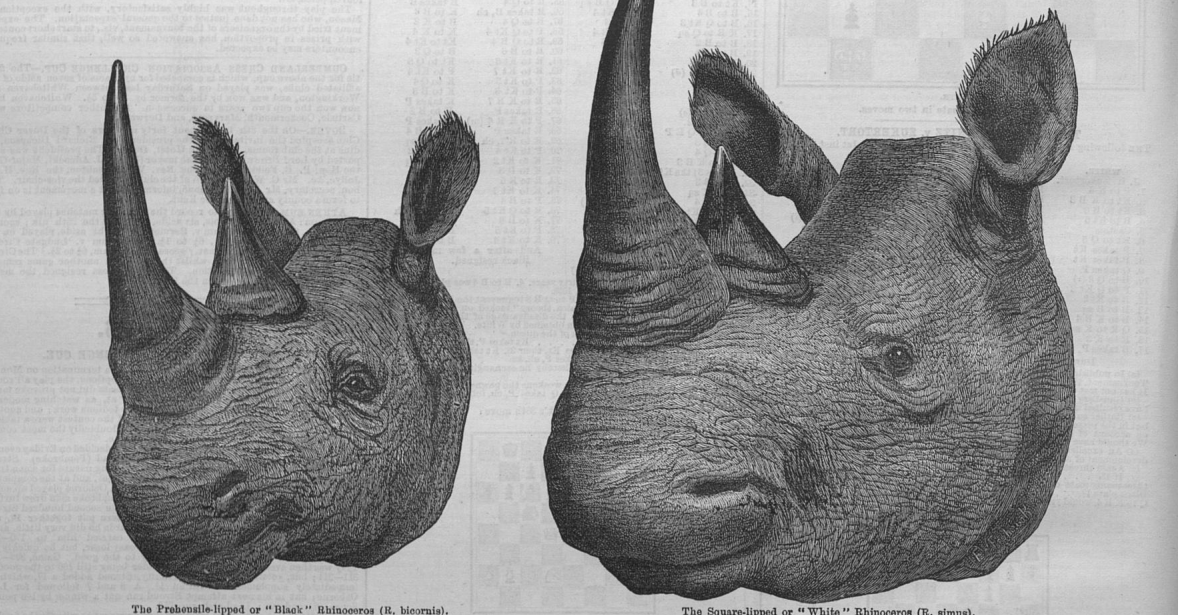
THE NATURALIST.

THE AFRICAN RHINOCEROS.

SINCE the days of the Roman Empire, when the spoils of the world were exhibited to the populace, no specimen of an African rhinoceros was seen alive in Europe until the year 1868, when a young male two-horned African rhinoceros (*R. bicornis*) was purchased by the Zoological Society from Mr. Carl Hagerbeck for £1000. This animal was obtained by the vendor from the Arabs of the Beni-Ammer tribe, by whom it had been captured in the vicinity of Casala, in Upper Nubia. A coloured representation of the animal, as it appeared at the time of its purchase, was published in the *Proceedings of the Society* for 1868, and it was drawn for *The Field* by the late Mr. T. W. Wood, the engraving from his sketch appearing in the number for Sept. 19, 1868. When purchased, the animal was probably under two years of age; it measured about 6 ft. in length, and was 3 ft. 6 in. in height at the shoulders. Seven years afterwards, in 1875, when it had attained the length of 8 ft. 6 in., and a height of about 4 ft. 6 in., it was again figured by Mr. Wolf for Mr. Solander's paper in the *Transactions of the Society*.

There appears no doubt that this species is identical with the ordinary so-called black rhinoceros of South Africa, characterised by a prehensile or pointed upper lip, which distinguishes it in the most marked manner from the larger species, known as the white or square-lipped rhinoceros (*R. sinuatus*). Heads of these two well-marked animals were recently exhibited by Mr. E. Gerrard at the meeting of the Zoological Society, when the distinctions between them were evident on the most cursory inspection. *R. sinuatus* is distinguished by its short upper lip. That of the ordinary *R. bicornis* being developed into a movable point, which can be extended and used as a prehensile organ at the will of the animal. The ears, again, obviously differ, those of the smaller species being rounded at the end, and edged by a fringe of black hairs springing from the margin; whereas in the square-lipped species the ears are pointed. The shape of the nostrils, again, is widely different, being elongated in the larger, and more rounded in the smaller animal; and the eyes are placed much further back in *R. sinuatus* than in *R. bicornis*.

Along with these differences of form there exists, as proved by the observations of Mr. Frederick C. Selous, the most marked divergence in habits and mode of life. The square-lipped rhinoceros Mr. Selous states to have been formerly fairly plentiful in the western half of South Africa, but it is being rapidly exterminated



The Prehensile-lipped or "Black" Rhinoceros (*R. bicornis*).

AFRICAN RHINOCEROS.

The Square-lipped or "White" Rhinoceros (*R. sinuatus*).

ated to dispel any reasonable doubts which we might entertain as to the truth of the cases to which we have just referred. A short time ago we received a specimen from a correspondent, accompanied with a note of explanation to the effect that it was a portion of "a skin" which had been expelled by a mare after an attack of colic. An examination of the specimen proved it to be a piece of intestine, which had evidently been macerated until it was half rotten. The mucous membrane peeled off quite easily, and the muscular structure beneath it was remarkably distinct. In response to our request for a further account of the case, our correspondent wrote as follows:

For some time previous to Jan. 30 the mare appeared sleepy, &c., and on that day she was put to great exertion. The following day (Sunday) she suffered great pain, supposed to be gripes. The farrier gave her a "drench," on Monday, Feb. 1, a drench and one pint linseed oil; 2nd, two drenches; 4th, 12lb. castor oil; 5th, 6oz. ditto. On the night of the 5th it acted, and the mare appeared a little better, but gradually grew worse up to the 12th, when she suffered much, rolling, plunging, &c. During the night she passed the skin sent. Up to this date (March 16) she is going on satisfactorily.

Veterinary surgeons are acquainted with a condition of the intestinal canal which is described as "intussusception," which means the passing of a portion of the tube inside another portion, just as one half of a stocking, the foot-part, is sometimes pushed into the leg part. Only it happens, in the case of the intestines, that several yards of the tube will become inverted in this way during violent spasms; and it is generally understood that when the accident happens it is quite irremediable. Indeed, it cannot be known to have occurred until it is discovered on *post-mortem* inspection, although it may be suspected on account of the obstinate character of the pain, which is not alleviated by any form of treatment, and by the symptoms of mortification which indicate the impending death of the animal.

Whether it is possible for the inverted intestine to recover their proper position in certain cases can never be known, because the fact of the occurrence of intussusception, as we have said, is only to be ascertained after the death of the subject. It occurs to some extent in attacks of colic, and is rectified during the movements of the intestines, nothing would be known of the occurrence. The continuance of the condition is almost certainly fatal.

In the case which is now under consideration, it is reasonable to conclude that the mare, during an attack of intestinal spasm, or gripes, on Jan. 31, which is described as having been severe, became the subject of inversion of the intestine in the way described. A portion of the tube must have been strangulated, and after a time

must employ artificial means for this purpose, that is, have the horse's foot strengthened by means of metal shoes; and here the mischief begins. The horse was running the three years old with its toes turned out, but never brushing. The pressure and wear and tear were on the outside of the hoof (just as a man walking across a room with his toes turned out will tread on the outside of his foot). The horse in this state is brought to the village blacksmith to be shod. He overlooks and ignores the fact that the horse does not stand evenly, though standing naturally; he cuts the sole and crust quite even and flat, and nails on the shoe, just as he would on a well-formed true foot. Instead of assisting nature he tries to alter nature; this is ever a mistake. He throws the legs, so to speak, "out of gear," and, instead of running smoothly, they interfere with one another. It is a nuisance, more especially if he considers it almost a personal insult if you don't accept and act up to that advice; but I will tell Col. H. what I would do if I had a horse that brushed. I would begin by taking off the horse's shoes and seeing how he stood naturally. It might be that the horse could not stand naturally, from the soles having been cut away to fit the blacksmith's shoe; in this case I would let the horse stand for three weeks or a month till the hoofs had grown to their natural shape and size. I would then call in the blacksmith, and say to him, "You see how that horse is standing—I want him shod so that he shall stand in the same manner when shod, and this is the shoe I want put on him—a half shoe, what is called a tip, only coming back to half the foot, leaving the heels and frog quite exposed and free to the ground; and this half shoe would be about 3 in. thick at the toe, and tapering to the heels, where it would not be thicker than the blade of a pocket knife. The brushing or cutting on a horse's leg is caused by one leg passing the other; but this brushing is very often not the fault of the passing leg, it is the fault of the stationary leg resting on an uneven shoe, which throws the leg out of its own natural position and into the track of the passing leg, which hits it.—J. B. DUNBAR BRANDER.

(Advertisement.)—"THE DECAT OF THE TEETH AND GUMS arises from various causes, but principally it may be attributed to one or two neglect, ill-health, and the use of tooth powders, pastes, and washes containing mineral and other deleterious acids, which give a momentary whiteness to the teeth, while they corrode the enamel. It is highly satisfactory to point out Messrs Rowlands' Odonto or Pearl Dentifrice as a preparation free from all injurious elements, and eminently calculated to embellish and preserve the dental structure, to impart a grateful fragrance to the breath, and to embellish and perpetuate the graces of the mouth."—Observer. Avoid spurious odonto, and purchase the genuine Odonto, which has a Government stamp placed on the box to certify to the public the purity, harmlessness, and genuineness of the article. Therefore buy only Rowlands' Odonto, of 25, Hatton-garden, London. Sold everywhere.

It feeds, he says, exclusively upon grass, and is partial to open countries and broad grassy valleys. It is a huge, ungainly animal, with a disproportionately large head. A full-grown male will stand 6 ft. 6 in. at the shoulder, its meat is excellent. The horns vary very much in size in different animals; the anterior, which occasionally reaches 4 ft. in length, usually curves backwards, as shown in the engraving.

The prehensile-lipped rhinoceros is still fairly numerous in some districts of South-eastern Africa, though, like its congener, it is nearly extirpated in the western portions. Its mode of feeding is quite distinct from that of the square-lipped species, as it lives exclusively on twigs and roots, eating the leaves and the twigs, so that its range is more extended, as it thrives in the scrubby bush with which the hillsides are covered. The use of the prehensile lip in gathering the branches on which it feeds is obvious. The different food of these two species is clearly shown in the different character of the droppings, any Bushman or Kafir hunter can tell at once whether these are of the grass-feeding square-lipped, or of the bush-eating prehensile-lipped rhinoceros. Those of the former are black and entirely composed of grass; those of the latter are dark red and filled with chips of wood, which are always absent from the other.

Many writers have endeavoured to prove the existence of other species of African rhinoceroses. These smaller animals, in which the posterior horn has grown so as to be nearly or quite equal the anterior, have been described as distinct, under the name of *R. keiloes*. Mr. Selous has distinctly shown that this is a mere individual variation, and does not justify any distinction of species, in which opinion he is borne out by Prof. Flower, who states that on comparing the skulls and teeth of perfectly adult individuals presenting both varieties of horns, he has been unable to detect any differences of size or form of the various bones that would lead him to regard them as distinct species.

Slight variations in the shape and direction of the horns have also led to the separation of a fictitious species from the square-lipped animal, under the name of *R. owelli*; but there is no ground for such opinion, and, as Mr. Selous says, *R. owelli* is a false species, and should, like the *keiloes*, be omitted from all lists of African rhinoceroses.

In acknowledging my obligations to Mr. Selous, it may be as well to add that the most life-like description of the habits of these animals, and of their pursuit, is to be found in his work on South Africa.

LONDON: BENTLEY AND SON.

"A Hunter's Wanderings in Africa." W. B. THOMES.

1881.