

THE VETERINARIAN.

LAMENESS IN THE HIND EXTREMITY.

ANY DERANGEMENT of the structures forming the stifle joint is necessarily a serious matter—first, because the joint is the most complicated in the body, taking into account the bones, separate cartilages, and the ligaments which contribute to its formation; next, because, on account of the extensive movements which it is required to perform, it is impossible to secure complete immobility even for a short time, and therefore disease which might be cured by very simple treatment, if the affected parts were in a state of perfect rest, become incurable under the existing conditions.

Some of our readers are aware that the stifle joint (patella) is the representative of the knee of the human subject, and it is well known that an injury to the knee is always viewed with some apprehension, although the sufferer in this case, unless he be very young, can aid himself by the surgical appliances which are used to keep the part at rest by the exercise of his own judgment.

As in man, the knee cap (patella), the floating bone in front of the joint, is liable to dislocation; and in some foals, from an imperfect development of the outer condyle of the thigh bone (femur), or relaxation of ligaments, the patella slips out when the animal lies down, and gets back into its place when in the act of rising. This congenital defect is likely to become permanent, unless some means are adopted to prevent the constant luxation, so as to permit the further growth of the defective condyle and the acquirement of the necessary rigidity of the ligaments.

Dislocation of the patella is, however, an accident which may occur to any horse; however well knit the joint may be. In the hunting field it happens in going through a gate which closes too quickly and catches the hind leg just inside the stifle joint against the gate post, causing the patella to be forced outwards, with the immediate result of rendering the horse incapable of moving forward, although it is possible, with care, to back him to a shed or shelter of some kind, where he may stand until his injuries are attended to.

To a skilful veterinarian the reduction of the dislocation of the patella presents no difficulties. With the aid of a side line, the hind limb is drawn forward by an assistant while the operator applies pressure against the displaced bone to push it upwards and inwards until it slips into its place. The side line is then relaxed, but sufficient tension is maintained to keep the leg in a forward position for some time, in order that the strained ligaments may to some extent recover their tone. If possible, the horse should be kept quite quiet in the place where reduction of the dislocation has been effected for twenty-four hours, or be moved to a more convenient place in a proper stall, if one can be obtained.

Strain of the ligaments of the stifle joint is an accident of many degrees, depending on the amount and direction of the force employed. There are ligaments which hold the lower condyles of the thigh bone on to the inter-articular cartilages, which rest on the bone below (tibia); also ligaments which keep the cartilages in place, and several ligamentous bands attaching the knee cap (patella) to the articular surface between the lower condyles of the femur. In an ordinary case, any or all of these may suffer, and, as a rule, the symptoms do not enable the examiner to define the exact position of the

VETERINARIAN NOTES AND QUERIES.

BOTS IN HORSES.—"Derg" would do well to consult the books on Veterinary Homoeopathy, by J. Moore, V.S., "Horses Well and Ill," 3s. 6d., and by R. P. G. Lord, M.R.C.V.S.L., "The Va's Mecum," 15s. The Homoeopathic Trituration of Arsenicum Alb. can be used as directed without the possible risks attending the employment of the crude white arsenic. Either work can be obtained from the Homoeopathic Publishing Company, 12, Warwick-lane, Paternoster-row, E.C.—*НОМКО*.

DESTRUCTION OF LARVE OF THE BOT FLY.—With reference to the discussion which your correspondent "Derg" invites on the subject of "Bots in Horses," it may be very interesting to speculate on the nature of the parasites and the means of expelling them from the intestines of young horses. I should like, however, to hear the opinion of your correspondents as to the means of destroying the larvae on the pastures, and what the effect of a strong dressing of gas lime would be towards the attainment of this object. I have a very high opinion of gas lime as a fertiliser of immense capabilities, and I think it is a destroyer of insect life, and would possibly be found fatal to the fly deposits mentioned by "Derg." I would suggest two tons to the acre on his pastures in November, and a dressing of waste salt in March or April. The products of coal, too, have wonderful properties, as, for instance, the Thorncliffe sheep dip, which is said to destroy microbes, and to be harmless to the animal internally. I may say that I have no interest in the sale of any of these commodities.—*PREVENTION*.

THE NATURALIST.

BURCHELL'S RHINOCEROS.

IN THE LAST NUMBER of the *Field* I had the satisfaction of giving an account of Mr Coryndon's capture of two specimens of the Rhinoceros simus. The engraving now presented is from a photograph of one of the specimens—that belonging to the Hon. Walter Rothschild—which has been set up by Mr Rowland Ward. As I mentioned last week, this example is regarded by Mr Coryndon as being most naturally mounted. Mr Coryndon's own account of the capture of these two animals was published in the last number of the *Field*, but a fuller description of the habits of the species was given by Mr Selous in a paper communicated to the Zoological Society in 1881. Mr Selous was hunting in South Africa early in the seventies, when rhinoceroses were plentiful, and he had many opportunities of observing the habits and peculiarities of these animals. He maintains, in opposition to many later writers, that there are but two distinct species of rhinoceroses in that district, namely, the *R. simus*, and the smaller prehensile lipped *R. bicornis*. The first feeds on grass, and the second on bush. The square-

such as the northern sea cow (*Rhytina*), have been exterminated, so that there can be but little hope for terrestrial species unless it is the direct interest of each individual hunter to stay his hand.

W. B. TEGETMEIER.

PROTECTION OF BIG GAME.

SIR,—As one who is much interested in the question of "preservation of big game," I have felt some surprise that, although numerous complaints are constantly appearing in print about the needless and cruel destruction of wild animals, few practical propositions are put forward for protecting the miserable remnant that still survives.

I have seen the following suggested as regards South Africa: "That a number of sportsmen join together and acquire from Government a suitable tract of land for the preservation and breeding of wild animals in or near their native haunts. This would necessitate some capital, and the organisation of a number of keepers, both native and British. This was thought likely to become a good paying concern, that it would afford good shooting to the members, and that young animals could be yearly caught for sale to the European menageries." The objection to this seems to be the distance from England, the time on the journey, and that most men, except a favoured few, would not care to risk their money in a concern so far off, and which they could only hope to visit at few and distant opportunities.

I have often thought, especially when I see the money and time devoted to such comparatively insignificant and useless animals as some of the fancy dogs, for whose sake shows, clubs, weekly papers, &c., are being devoted, that were anyone to start a practical scheme in connection with big game, there would be many sportsmen and naturalists who would come forward and assist.

We have horse, cattle, and canine societies, bird, rabbit, and even cat clubs, why not a big game protection society? There is not the slightest doubt—indeed, it has often been proved—that many species of big game are quite capable of domestication, and of bringing in good returns in cash; further, they can be made to do so in this country, which is a great point.

I believe I am right in stating that two species of big game stand out ahead of all others in this respect—viz., the bison and the eland. The tameness of these brasts equals that of domestic cattle; they thrive and breed well in England, and their young are in good demand, and command very handsome and remunerative prices. Why not form the club, and start the enterprise with the above two species? afterward more could be added.

The wapiti would be a most suitable beast. I have some doubts whether the moose could be successfully bred and reared on small farms. It would, however, be well worth trying to save this, the finest species of the deer tribe, and one which, if it cannot be kept domesticated, is sure of a speedy yet silent destruction.

I should propose taking a farm of some 500 acres, or less, to start with, in one of our distressed agricultural districts where land is cheap and with the necessary buildings upon it. Most of the land could be put into grass and all real farming eschewed, except the buying of a couple of breeding mares to do odd jobs and plough up a few acres for roots and corn, which is all that would be necessary. Enough rabbits should be trapped to nearly pay the rent, or they could be kept for shooting purposes; and, if the locality were well chosen and the ground game and birds looked after, some good sport should be forthcoming.

I have myself travelled in Africa, and understand well where to go for, and all costs connected with importing, a small herd of elands. As to bison, they are, I



swelling, and pain in the injured part will also be some guide to the extent of the injury, and with this evidence the observer must be content in forming an opinion.

Treatment of inflammation of the stifle, whether it is due to a strain, contusion, or wound, will be directed to the reduction of the inflammatory state as quickly as possible, for the reason that the articular surfaces are extremely liable to the ulcerative state. Pomentation with warm water, laxative medicine, and low diet are the chief means to be adopted, and the cessation of the acute symptoms is an indication that they have been to some extent effectual. But it is often observed that the lameness remains even when the joint has resumed its natural contour, and the heat and pain have apparently ceased. This continuance of lameness indicates beyond

question the presence of disease in some of the joint structures, and it is quite impossible to determine on what charges of structure the defective action depends. There may be abrasion of the synovial membrane when it is reflected over the edges of bones or cartilage, or actual removal of cartilage, or death of a portion of bone probably underneath the articular surface. And the most experienced veterinarian will not be able to satisfy himself as to which of these conditions exists; and from first to last the diagnosis must necessarily be more or less doubtful, until a post mortem examination proves the opinion to be correct, or, it may be, quite wide of the mark.

The experienced man will be assisted in his judgment by his observations of the degree of lameness, its increase or otherwise during exercise, and the character of the animal's gait in walking and trotting, and he will generally be in a position to advise as to the probability of a cure being effected by treatment. In any case the horseman and his servants may rest assured that lameness of any kind affecting the stifle joint is not a case for amateur doctoring, and if the horse is not worth the cost of treatment by a competent man, it would be a wise course to consign the animal at once to the knacker.

Veterinary authorities do not write hopefully of the treatment of the stifle lameness, and it is not to be expected that any special remedies should be advocated differing in any important details from those in ordinary use, i.e., stimulating liniments, blisters, setons, and, as a final resource, firing. In reference to the two last modes of treatment—blistering and the use of the actual canter—it has been suggested that they both tend to keep the joint at rest by the swelling and pain which they cause, rendering movement unpleasant to the animal, and difficult at the same time. Counter-irritation in any form may be temporarily useful, or may remove a chronic irritability of the joint structures, but there is no form of treatment which can repair the breaches caused by caries or ulceration. In most of the cases of stifle joint lameness which have come under our notice the course of events has been tolerably uniform.

In ordinary sprain or contusion of the joint, followed, as usually happens, by swelling, pain, and consequent lameness, treatment by pomentations, rest, and careful dieting has been successful, as it generally is in such cases in other joints. But when lameness has remained after the subsidence of the symptoms of inflammation, the final result has seldom been favourable. The horse has been worked in the hope that the stiffness would pass away. Then various remedies—liniments, &c.—have been tried on the recommendation of friends, who have seen them do wonders; blisters, setons, and the firing iron have all been used without permanent benefit, and at last the unfortunate animal has been relegated to the list of incurables. When an opportunity for dissection has been afforded in cases such as those above described, it has been found that such alterations of structure existed as rendered cure impossible; and, had their presence been known, no one would have advised the adoption of treatment which must inevitably fail.

FIFTH SHEET.



BURCHELL'S RHINOCEROS (B. SEMIS).

mouthed rhinoceros was very abundant in the western part of South Africa forty years ago, and as Andersson and Chapman relate, they shot as many as eight of these animals at a water hole in a night. In 1878 and 1880, Mr Selous found them still numerous in a small tract of country in North-Eastern Mashonaland; but he prognosticated their speedy extermination, which is rapidly approaching, and therefore his description of their habits will be read with interest as unlikely to be superseded by that of any future traveller. Mr Selous writes as follows:

The square-mouthed rhinoceros is a huge, ungainly looking beast, with a disproportionately large head, a large male standing 6ft. 6in. at the shoulder. Like elephants and buffaloes, they lie asleep during the heat of the day, and feed during the night and in the cool hours of early morning and evening. Their sight is very bad, but they are quick of hearing, and their scent is very keen; they are, too, often accompanied by rhinoceros birds, which, by running about their heads, flapping their wings, and screeching at the same time, frequently give them notice of the approach of danger. When a man on foot far behind; but if chased by a horseman they break into a gallop, which they can keep up for some distance. However, although they are run very swiftly when their size and heavy build is considered, they are no match for an average good horse. They are, as a rule, very easy to shoot on horseback, as if one gallops a little in front of and on one side of them, they will hold their course, and come sailing past, offering a magnificent broadside shot, while under similar circumstances a prehensile rhinoceros will usually swerve away in such a manner as only to tipped rhinoceros for a shot. When either walking or running, the present his hind quarters for a shot. When either walking or running, the square-mouthed rhinoceros holds its head very low, its nose nearly touching the ground. When a small calf accompanies its mother it always runs in front, and she appears to guide it by holding the point of her horn upon the little animal's hump; and it is perfectly wonderful to note how in all the sudden changes of pace, from a trot to a gallop, or vice versa, the same position is always exactly maintained. During the autumn and winter months (i.e., from March to August) the square-mouthed rhinoceros is usually very fat; and its meat is then most excellent, being something like beef, but yet having a peculiar flavour of its own. The part in greatest favour amongst hunters is the hump, which, if cut off whole and roasted just as it is in the skin, in a hole dug in the ground, would, I think, be difficult to match either for juiciness or flavour.

In this species the horns vary very much in different individuals, so that they cannot be taken as indicative of species. In a full-grown square-mouthed rhinoceros the anterior horn varies from 18 inches to over 4 feet in length, usually slightly curved, but sometimes it is quite straight, and the anterior part of it rubs the ground as the animal walks along feeding, and is in some specimens rubbed flat by the friction. Mr Selous says he never remembers having seen an anterior horn in a square-mouthed rhinoceros that was not partially flattened in this manner. The square-mouthed rhinoceros rarely attacks man unless wounded, it is usually a most inoffensive animal.

It is not satisfactory to know that the advance of civilisation in Africa will inevitably tend to the total extinction of both species of rhinoceros, which will pass out of existence as surely as the quagga and bison certainly would. The perfection of arms of precision has sealed the fate of many of the larger animals. Man, utterly ignorant to create, is powerful to destroy. Even gigantic animals inhabiting the waters,

beasts and other animals pease in England, but elands and bison certainly would. All cow calves should be kept, a herd book formed, two or more (if possible) distinct strains kept to prevent inter-breeding, and in a few years a fine and paying herd would be the result. Other animals could be taken up as opportunity occurred.

What a sight for lovers of nature if animals collected from different continents could be seen, naturalised and acclimatised, roaming at will on the waste land adjoining some of our outlying country farms. Some of the tropical animals would require housing and careful treatment in winter; but I do not think they would be more delicate than Jersey cattle. As regards wildebeeste and other antelope, it would be a question of some difficulty to know how to bring a herd of these

swift-footed and capricious animals under cover were severe weather coming on; however, it could be managed with a little trouble.

The British nation has had the credit of sending out most of the best hunters; let it also have the credit of trying to save from extinction, at least, those species of wild game which can be turned to good account and added to the list of valuable domestic animals. I fear that in Africa we can expect no legislation to stay the speedy extermination of game that is going on.

Suitable land in England is to be had, the animals are still to be had, where are the men?

H. D. F.

It seems to us that the domestication of foreign big game in England is, for many reasons, quite impracticable. It was attempted with a limited number of species (amongst others the eland) many years ago by an Acclimatisation Society, and signally failed. A more feasible plan would be to try and secure some adequate protection for these animals abroad. We understand that a committee, including several well known sportsmen, has already been formed for the purpose of considering a scheme by Capt. A. St. H. Gibbons for the better protection of big game in S.E. Africa. The details of this scheme will be submitted for the consideration of Mr Cecil Rhodes, and on receipt of his reply we shall doubtless hear more about it.—Ed.]

ARRIVAL OF SUMMER BIRDS.

REPORTS continue to reach us from all parts of the country respecting the arrival of migratory birds. As many of these are merely repetitions of previous announcements, we do not reproduce them here, nor do we propose to notice species whose arrival has been already chronicled, unless the reports are confirmatory of unusually early arrivals, or actually antedate them.

- CHIFF CHAFF.—March 10, Hendon, Middlesex (L. Buttress).
WHEATEAR.—March 20, Herne Bay (John Young).
WYNECK.—March 31, Herne Bay (John Young).
BLACKCAP.—April 1, Bourton Bridge (H. C. Rose); April 1, Heathfield, Sussex (W. D. Haviland).
YELLOW WAGTAIL.—April 5, Bourton Bridge (H. C. Rose).
SANDMARTIN.—April 12 (large flock), Loch Tay (A. O. Worthington).
WHITETHROAT.—April 11, Haasocks, Sussex (John Young).
WHINCHAT.—April 13, Northampton (J. Cordeaux).
SERGE WARDLER.—April 13, Shalford, Surrey (S. A. Davies); 14, Hendon, Middlesex (L. Buttress).
GRASSHOPPER WARDLER.—April 15, Hastings (H. G. Jeffereys); 15, Wellington, Somerset (W. A. Fox).
COMMON SANDPIPER.—April 11, Clyde at Dalbeth (J. Patterson); 16, Pentland Hills (R. Godfrey).
LESSER FRANK.—April 14, Yorkshiro (H. B. Hewelson).
RING OZEL.—April 7, Mearns, N.B. (H. B. Watt).
REDSTART.—April 13, Uppulme, Devon (W. A. Fox); 15th, Middlebrough (T. A. Lofthouse).
CORNCRAKE.—April 16, Bishop Auckland (J. T. Proud).

It will be observed that the early appearance of the wryneck, or cuckoo's mate, noticed last week, is now confirmed.

Tegetmeier. W.B., 1894. Burchell's Rhinoceros. *The Field*, 21 April 1894, no. 2156, p. 549, 1 fig.

Burchell's Rhinoceros

In the last number of the *Field* I had the satisfaction of giving an account of Mr Coryndon's capture of two specimens of the *Rhinoceros simus*. The engraving now presented is from a photograph of one of the specimens - that belonging to the Hon. Walter Rothschild - which has been set up by Mr Rowland Ward. As I mentioned last week, this example is regarded by Mr Coryndon as being most naturally mounted. Mr Coryndon's own account of the capture of these two animals was published in the last number of the *Field*, but a fuller description of the habits of the species was given by Mr Selous in a paper communicated to the Zoological Society in 1881. Mr Selous was hunting in South Africa early in the seventies, when rhinoceroses were plentiful, and he had many opportunities of observing the habits and peculiarities of these animals. He maintains, in opposition to many later writers, that there are but two distinct species of rhinoceroses in that district, namely, the *R. simus*, and the smaller prehensile lipped *R. bicornis*. The first feeds on grass, and the second on bush. The square-mouthed rhinoceros was very abundant in the western part of South Africa forty years ago, and as Andersson and Chapman relate they shot as many as eight of these animals at a water hole in a night. In 1878 and 1880, Mr Selous found them still numerous in a small tract of country in North-Eastern Mashonaland; but he prognosticated their speedy extermination, which is rapidly approaching, and therefore his description of their habits will read with interest as unlikely to be superseded by that of any future traveller. Mr Selous writes as follows:

The square-mouthed rhinoceros is a huge, ungainly looking beast, with a disproportionately large head, a large male standing 6 ft 6 in at the shoulder. Like elephants and buffaloes, they lie asleep during the heat of the day, and feed during the night and in the cool hours of early morning and evening. Their sight is very bad, but they are quick at hearing, and their scent is very keen; they are, too, often accompanied by rhinoceros birds, which, by running about their heads, flapping their wings, and screeching at the same time, frequently give them notice of the approach of danger. When disturbed they go off at a swift trot, which soon leaves all pursuit from a man on foot far behind; but if chased by a horseman they break into a gallop, which they can keep up for some distance. However, although they run very swiftly when their size and heavy build is considered, they are no match for an average good horse. They are, as a rule, very easy to shoot on horseback, as, if one gallops a little in front of and on one side of them, they will hold their course, and come sailing past, offering a magnificent broadside shot, while under similar circumstances a prehensile-lipped rhinoceros will usually swerve away in such a manner as only to present his hind quarters for a shot. When either walking or running, the square-mouthed rhinoceros holds its head very low, its nose nearly touching the ground. When a small calf accompanies its mother it always runs in front, and she appears to guide it by holding the point of her horn upon the little animal's rump; and it is perfectly wonderful to note how in all sudden changes of pace, from a trot to a gallop, or viva versa, the same position is always exactly maintained. During the autumn and winter months (i.e. from March to August) the square-mouthed rhinoceros is usually very fat; and its meat is then most excellent, being something like beef, but yet having a peculiar flavour of its own. The part in greatest favour amongst hunters is the hump, which, if cut off whole and roasted just as it is in the skin, in a hole dug in the ground, would, I think, be difficult to match either for juiciness or flavour.

In this species the horns vary very much in different individuals, so that they cannot be taken as indicative of species. In a full-grown square-mouthed rhinoceros the anterior horn varies from 16 inches to over 4 feet in length, usually slightly curved, but sometimes it is quite straight, and the anterior part of it rubs the ground as the animal walks along feeding, and is in some specimens rubbed flat by the friction. Mr Selous says he never remembers having seen an anterior horn in a square-mouthed rhinoceros that was not partially flattened in this manner. The square-mouthed rhinoceros rarely attacks a man unless wounded, it is usually a most inoffensive animal.

It is not satisfactory to know that the advance of civilisation in Africa will inevitably tend to the total extinction of both species of rhinoceros, which will pass out of existence as surely as the quagga has done. The perfection of arms of precision has sealed the fate of many of the larger animals. Man, utterly impotent to create, is powerful to destroy. Even gigantic animals inhabiting the waters, such as the northern sea cow (*Rhytina*), have been exterminated, so that there can be but little hope for terrestrial species unless it is the direct interest of each individual hunter to stay his hand.

W.B. Tegetmeier.

Figure with caption:

Burchell's rhinoceros (*R. simus*)