THE HORSE.

Wounds and Their Results

While it is usually wise for the average horse-owner to secure professional attention in cases of serious wounds, it is well that all owners of horses, or those in charge of them, should have an intelligent idea of the proper treatment for accidents of this nature. In many cases, where important blood-vessels are severed fatal hemorrhage would result before aid could be got, unless effective means were taken to check the bleeding, while in other cases it may not be possible to secure the services of a veterinarian, and treatment must, of necessity, depend upon the skill procurable, hence we believe it wise to consider rather minutely the different kinds of wounds, and the necessity or advisable manner of treatment. Wounds are classified under the following heads: Incised, punctured, contused, lacerated, gunshot and poisoned.

Incised Wounds.—An incised wound is one made by a sharp-cutting instrument. The textures are divided evenly and smoothly. There is practically no tearing or bruising of the parts, hence, on account of the blood-vessels being cut instead of torn, the bleeding is usually greater than in wounds of a different nature. If the wound be made parallel to the course of the muscular fibres of the parts there will be little gaping of the edges so long as the parts are kept in apposition; but if the incision be traverse, or across the direction of the muscular fibres, or to the axis of a limb, the lips of the wound will be drawn apart in proportion to the tension of the muscles, the deep seated tissues often dividing further than the superficial owing to the retraction of the muscular tissue, and a cavity is sometimes formed in which blood and pus will collect and retard healing.

Treatment.—The treatment of incised wounds may be said to be somewhat simple, but some important points must be observed, viz., first, to arrest bleeding; second to remove all foreign bodies and cleanse the wound thoroughly; third, to effect and maintain co-adaption, to guard against excessive inflammation, and prevent infection. Bleeding, whether from an artery or vein, unless slight, must be arrested promptly. If from an artery the blood will be of a bright red or scarlet color and escaping in jets; if from a vein the color will be a dark red and the stream constant. Arterial hemorrhage is the most serious. If the vessel be small and only partially severed, the blood will escape more or less freely in jets, as stated, and in many cases if the artery be completely severed with a knife or shears the ends will contract and check bleeding. The coats of an artery are composed largely of elastic tissue, the fibres of which curl up when severed, hence when a vessel is torn, lacerated or cut with a dull instrument which makes a more or less fimbriated edge, the fibres curl inwards and thereby close the opening and check the flow of blood. This is the reason why bleeding is more profuse from incised wounds than from others. When the vessel is small, even though cut with a sharp instrument, the contractile power of its coats is sufficient to close the orifice, but if the artery be one of considerable size this cannot take place as the force of the steam of blood is sufficient to overcome the contractile efforts of the coats of the vessel. Hence bleeding will continue and may become serious, even though the vessel be completely severed. In such cases the end of the severed artery from which the blood is escaping, should be searched for, drawn out with a pair of forceps and tied by a ligature. Carbolized silk or catgut makes the best ligature, but when these cannot be secured, a clean string or thread may be used. In many cases it is necessary to enlarge the external wound in order to be able to secure the end of the artery, and occasionally a wound is in such a position that it is dangerous or inexpedient, hence the hemorrhage must be checked by other means. If the wound be in a limb or where the vessels run close to a bone, and there is little muscular tissue external to it, bleeding can be checked by pressure applied to it between the wound and the heart if it be an artery, and between the wound and the extremity, if it be a vein. Pressure can be applied by buckling a strap or applying a strong bandage or cord tightly around the limb. This will, of course, check the circulation in all the vessels enclosed in the part, hence the pressure must be left on only such time as is necessary to have the wound properly dressed, or until skilled assistance arrives. When such assistance cannot be secured the isolated part will check the bleeding until the wound is cleansed and stitched, after which a pad can be placed over the stitches and a bandage applied moderately tight, to exert considerable pressure upon the pad without materially interfering with other vessels. And in a few hours a clot will have formed in the end of the severed vessel and there will seldom be danger of a recurrence of the hemorrhage. When the severed vessel is deep seated in muscular tissue, and cannot be taken up and ligatured, the wound must be plugged firmly with batting or other clean material, which is first rendered antiseptic by being saturated in a 4 or 5 per cent. solution of carbolic acid or one of the coal tar antiseptics, then firmly packed into the wound and maintained there by bandages or sutures. It should be kept thus for 8 to 10 hours and the patient kept as quiet as possible in the meantime, when, in most cases, a clot will have formed, and the packing can be removed and the wound dressed. Venous bleeding is usually more easily controlled than arterial. If the vessel be small, bleeding will usually stop spontaneously if the wound be exposed to the air, but if the vessels be large it is necessary to proceed as in arterial bleeding. Veins being more superficially situated than arteries are usually more easily taken up and ligatured.

We expect to discuss the further treatment of incised wounds, in a future issue. WHIP.

LIVE STOCK.

With oat prices lowering the market for young pigs should strengthen.

Hog prices hold at a fairly even level, with receipts rather below par on most markets.

Windfall apples, defective vegetables, etc., are relished by swine and if gathered and fed will aid in reducing the grain ration.

We have heard of from ten to twelve cents per pound being paid for stockers. These men are optimistic regarding the future of the cattle market.

Exercise is important with the herd sire. The well-fenced paddock leading from a box-stall furnishes possibly the ideal housing condition for the bull.

Have you tried feeding silage to hogs? Let a bunch of shoats loose in a pile of silage and see if they like it or not. What an animal likes is very often good for it.

If the ewes are rather thin it will pay to feed them a few oats and if possible, turn them on fresh pasture. Having a ewe in gaining condition at breeding time is advisable.

Mack and Knight.

First and Second in class for Fillies or Geldings at the Western Fair, and first as a pair for John McIntosh, Embro.

For all classes of stock there is no one grain that excells the oat as feed. The bumper oat crop should materially assist stock men in carrying their stuff through the coming winter.

Give the boys an interest in the herd and flock even if it is only a ewe lamb or a young sow that they can call their own. The product of these will in a short time enable them to purchase a promising heifer.

Don't forget the herdsmen's competition. Liberal prizes are offered for essays on the Fitting and Showing of Beef Cattle. Particulars of the competition were published in September 2 issue of "The Farmer's Advocate."

If you haven't got a good farrowing pen, make an enclosure in the barnyard with fence rails or posts and build the straw stack over it. The sow and her litter will ask no finer quarters and if they can root in a near-by paddock and secure green feed so much the better.

When $3.75 per hundred is charged for present day quality bran one thinks of the days when millers were glad to get rid of this by-product of their industry at ten or twelve dollars per ton. But, then few of us would care to move the calendar back to those balmy days.

Few breeders own a cow that has produced four prize winners, two of them champions at one fair in keen competition, yet that is what Morning Blossom 2nd did for Jas. Douglas. The sire no doubt, had something to do with the quality shown by this quartett.

The producer complains about the low price of hogs while the consumer is aghast at the price of bacon and hams. Were our system of getting the products of the farm into the hands of the city folk less wasteful and extravagant both the producer and consumer would benefit.

Some stockmen apparently do not try to improve their herds by use of better sires even after it has been proven to them that it pays well to do so. Too often such men are loud in their condemnation of farming as a profitable occupation. The fault too often lies in themselves.

Buyers are busy in the grazing districts purchasing bullocks that are about ready for the shambles. From shipping points in the northern part of Middlesex county fat cattle by the hundreds will soon be loaded on cars in route for the leading live stock markets. From Ailsa Craig cattle are shipped by the train loads.

In looking over the reports of the larger fairs one notices quite a few new names among the list of prize winners; and many of these names are young men. This is a very good sign. So long as young breeders are coming out with their herds there is no danger of retrogression in the breed or in the live stock exhibits at the fairs.

One cannot tell what a herd sire is really worth. Browndale at one time was offered at a very moderate price, but to-day it would no doubt take a long price to buy him from his present owner. He has stamped his good qualities upon his offspring and each year is further demonstrating his ability to produce outstanding calves which are able to top strong classes. Off course the owner knows how to feed, fit and show stock.

A bull is not past his usefulness at three or four years of age; in fact he is only beginning to prove his value or worthlessness as a breeder. The good ones should be kept in service for the benefit of the industry. We realize that at three years his progeny are of breeding age and to avoid inbreeding a new bull must be secured, but why slaughter the good one? Is there not a breeder in the adjacent locality that will exchange? There are far too few outstanding herd sires in service compared with the multiplicity of poor ones.

The Effect of Breeding Ewe Lambs.

BY PROF. A. A. DOWELL, UNIVERSITY OF ALBERTA.

It is the general opinion of sheep growers that ewe lambs should not be bred but allowed to run open until the fall or early winter of their second year, so that they will lamb at approximately two years of age. It is felt that the demands of early motherhood result not only in a greater percentage of weak lambs, but if practiced continually, would gradually reduce the size of the breeding flock. Then, too, some breeders report rather discouraging losses among these young ewes at the time of lambing. It is evident that if early breeding does result in weak lambs, loss of young ewes at time of lambing, or decreased growth of body or fleece, it is a practice of doubtful value. On the other hand, if early breeding can be followed successfully, it means quicker returns and greater profit from a given number of sheep. To get some definite information on this important question, the Department of Animal Husbandry of the University of Alberta bred a few 1919 ewe lambs in the fall of that year, and allowed others to remain open according to the usual practice.

The 1919 ewe lambs used in this experiment were out of common white-faced range ewes, showing a predominance of Merino blood, and sired by pure-bred Oxford, Shropshire and Suffolk rams. They were dropped in May, 1919, allowed to run with their mothers on pasture during the summer, and then fed some grain in the fall after weaning. Of the twenty-five ewe lambs used in this test, eleven were bred and thirteen left open. Those bred were mated to a pure-bred Hampshire ram lamb the latter part of December, so that they would lamb the following May, when just twelve months old. These ewes were weighed on the day bred and re-weighed eight hours after lambing to get the exact gain in body weight during pregnancy. The open ewes were weighed on December 24th, which was the average breeding date of those bred, and again weighed on May 22nd, which was the average lambing date of their mates.

Both the open and bred ewes were wintered in the same yard and fed exactly alike—receiving one-half pound whole oats, one pound prairie hay, and one pound oat green feed hay per head per day. From these statements it will be evident that all ewes were fed and housed alike throughout the summer, fall and winter. The only difference was that part of them were bred to lamb when one year old.

To secure information on the effect of early breeding on the growth of wool, each fleece was carefully weighed at the time of shearing—the first week in June, 1920. The results are interesting.

On December 24th, 1919, the open ewes averaged 103.53 pounds. They averaged 109.92 pounds on May 22nd, 1920, showing an average gain of 6.39 pounds. At the time of breeding the other ewes averaged 105.09 pounds and eight hours after lambing weighed 109.00 pounds, a gain of 3.91 pounds per head. In other words, the open ewes gained 2.48 pounds per head more than those bred.

The average weight of fleece for the open ewes was 8.27 pounds, as compared to 8.76 pounds for the bred ewes—showing an advantage of .49 pound in favor of the latter.

Each of the bred ewes gave birth to good, strong single lambs, weighing an average of 8.43 pounds at birth, and raised one hundred per cent. They proved good mothers, though apparently the milk flow was not as abundant as with more mature ewes.

From our experience we cannot agree with the state-