

from the back of knee down the extreme edge of leg to fetlock joint and hanging to the ground. This is the natural state in which the Clydesdale should appear in the ring. But with rough-haired animals much work is done to obtain this clean appearance, the Clydesdale grooms being adepts at plucking out the long hairs bandaging the legs in cotton batting, washing the legs clean, drying with the finest of white sawdust, hand rubbing until the hair lies closely to the bones. The Clydesdale steps into the ring with the most beautiful legs of all the draft breeds, he comes only second to the greatest of all breeds, the Thoroughbred, for density, strength, quality and weight of bone.

Sometimes the pasterns are shaved with a knife and finished off with a piece of glass or even the horse clippers are used in removing the long hair, but this is a most reprehensible practice and the judge will always place an animal down if he can detect any interference with the natural state of hair. Before entering the ring all Clydesdales should be well broken, well shod (with the exception of the yearlings, much better without shoes) bodies and legs clean, the young classes in good thriving, healthy condition, mares with foals in fair condition, mature stallions, yeld mares and geldings must be in good condition, not overloaded with fat but well covered with hard flesh and hair and skin in nice bloom. On no consideration should an animal be brought into the ring that is unsound even if the judge fails to detect the unsoundness in the limited time at his disposal to examine the animal. Although the horse wins a place it is no honor for the exhibitor. Never for a moment from the time that you enter the ring forget that the judge may be looking at the horse. Properly place the animal to the best advantage when the judge is examining the horse closely, when walking let the horse go at a free straight stride and keep step with the animal, move at the trot slowly and steadily, always move away and come back straight to the judge, and always remember to keep on the outside of your horse when turning never let the horse run in a circle, it is very bad ring manners, extremely dangerous and spoils the action by causing the animal to throw out his off legs. Always be courteous to the judge, do not get unduly excited when winning and be a gentleman and a sport when losing. All men honor the breeder, owner and groom for winning the prizes, but greater and more enduring honor and glory are theirs when all men know them as good sports and perfect gentlemen. To those who have never shown an animal I would say bring your animal just in his natural state, have him clean, he needs no ribbons or decorations the judge never sees decorations, but is quick to see an animal of real merit. Fancy harness and well-decorated, mature animals look well, and especially present a fine appearance and are a popular and imposing spectacle at our great winter fairs where great crowds gather to see our famous Canadian breeds of horses, but the prize-winners have to win their laurels on their own merits.—James McKirdy, in "The Farmer's Advocate and Home Journal, Winnipeg, Man.

Breaking Colts.

EDITOR "THE FARMER'S ADVOCATE":

I break my colts by not breaking them. This sounds paradoxical. Let us see. Your paper, Mr. Editor, is "true to name," for it is in reality the advocate of everything that has been and is being found to be of practical worth to the man on the land, from actual trial by men of experience. This brief article is likewise a testimony based on experience.

From the first I get my colts used to being handled, without petting them, from the time when the halter is first put on until they are going as wanted, either singly or in double harness. I aim never to have them in fear of me. This does not mean that there are never occasions when firmness has to be used. In handling young horses it is essential that one should "start only what he can finish." For example, one of my colts when brought in after the summer refused to stand hitched, but as soon as she found herself tied, would surge back and hang on the rope, until, if possible, it would break. I cured her in this way: Passed a strong rope over a pulley, firmly fixed to a beam about seven feet high. To one end of the rope was attached a barrel in which a few rocks were thrown. To the other end the colt was hitched, by the usual noose around the neck, the rope in turn passing through the halter ring. She threw her weight on the rope and hung for but a few seconds, the weight of the barrel causing her to give in. The second time she went at it rather halfheartedly, raising the barrel but a few inches and allowing it to drop immediately. She was completely conquered, and that without breaking her spirit. I tried to get her to set back on the rope again, but could not. I carelessly placed my hat on her head, and she would not move. I took up her feet one after the other, and she made no objection, though she had not been in harness before. I threw the harness on her, and again off, allowing it to come against her heels, and she showed no fear or dislike to it. I then led her into the stable and tied her in the stall with an ordinary halter shank, and have had no trouble with her since. My point is this: It is possible to break colts without breaking their spirits, and colts so broken are much more valuable than those that are brought into subjection by the harsher means often used.

I have one very dependable animal the mother of the colts of which I am writing. I hitch colts with her, and after two or three lessons they work together as though they had always been so. Then it is a natural and easy transition from the double to the single rig. The whole secret, as I apprehend

it, is for a man to exercise his "horse sense," and make sure that he knows his colts' dispositions and to gain their confidence. Then, by always being on guard, without seeming to be so, to start only what he knows he can come through with, and it "follows as the night the day" that he will soon have his colts working out his will in every reasonable way. A discouraged horse is about as much use in the world as a discouraged man. It pays to take time with kindly firmness and break the colt without breaking his spirit.

B. C.

H. G. E.

Lameness in Horses. XII

RINGBONE.

Ringbone is a term applied to a bony deposit situated between the fetlock and coffin joints. The deposit may encircle the whole limb, or may be noticeable only on one or both sides, or in front only, but is called ringbone in all cases. Ringbone is of two kinds, viz., false and true. False ringbone is an exostosis (a bony growth) on the bone between the fetlock and pastern joints, but it does not involve either joint and does not cause lameness, except in very rare cases, when it is very large. Some consider that it does not constitute unsoundness, but as there is a danger of the growth extending, and involving the joint, hence a horse affected should be considered unsound.

True, ringbone is one in which either pastern or coffin joint, or both, are involved. Where the coffin joint is diseased, it is called low ringbone, when the pastern joint is diseased it is called high ringbone. By involving the articulations, these cause more or less acute, obstinate, and, in some cases, incurable lameness. Ringbones, whether high or low, vary greatly in size, but the degree of lameness is not indicated by the size of the deposit. An animal with but a small deposit may go very lame, while another, with a larger growth may show only slight lameness.

Causes.—In most cases there is an hereditary predisposition, and if the breeding of the animal affected can be traced back for several generations, it will generally be found that an ancestor, more or less remote, suffered from the disease. It is usually caused by concussion during progression. By this means inflammation is set up in the inner layer of the bone (called the cancellated tissue). This extends and involves the outer structure (called the compact tissue); an exudate is thrown out; this becomes converted into bone, causing the visible enlargement. When the joint is involved, the cartilage which covers the ends of the bones is destroyed, and this causes acute lameness. While it is doubtless possible for a ringbone to result from an external injury, as a kick, blow, etc., it is very seldom that such occurs.

Symptoms.—In the majority of cases lameness is irregular in the early stages; sometimes lameness will be well marked, at others not so acute, and some times entirely absent. As the disease advances and the joint or joints become more thoroughly involved, lameness becomes constant, and more or less acute. In cases when the coffin, or navicular joint (which is situated within the hoof) is diseased, lameness is often apparent for considerable time before any enlargement can be noticed, as there can be no visible enlargement until it extends up the pastern bone and shows above the hoof. Lameness, in these cases, is often hard to diagnose, as there is no visible cause, but the enlargement soon becomes apparent, when the diagnosis can be confirmed.

The somewhat common idea that ringbone is due to the presence of some abnormal organ or object called "the feeder," and that the removal of this feeder, by cutting into the fetlock pad and dissecting out a quantity of fat or other tissue, is, of course, totally without foundation. Ringbone is purely a disease of bone; it originates in bone, and, while it involves other tissues, and destroys them, it is essentially a bone disease and should be treated as such. The inflammatory action continues, and the exudate thrown out becomes ossified (converted into bone). When the articular cartilage of a joint is involved, it becomes destroyed, and, as the process of ossification continues, the bones of the joint become united; (this process is called ankylosis) and, of course, cease to exist as a joint, the bones being united into one. When ankylosis has become complete, inflammation subsides and lameness ceases. There may be faulty action, owing to the stiff joint, but pain is no longer present, and the animal will go practically sound, notwithstanding the absence of the joint.

Treatment.—In treating a case of ringbone, the practitioner aims at simply curing the lameness; he does not attempt to remove the enlargement. The enlargement is a growth of bone; the bone is diseased to its innermost parts, and a little consideration will convince an intelligent man that it is impossible to effect a removal of the enlargement. Treatment should be directed to the hastening on of the process of ankylosis, for, so long as this is not complete, lameness will be shown. This is done by counter-irritation in the form of blisters or firing, which sets up a superficial irritation, increases the internal inflammation, hastens the process of ankylosis, which is followed by a subsidence of inflammation and lameness. In quite young animals, repeated blisterings may effect a cure, but in the majority of cases it is better to fire and blister at first. This should be done by a veterinarian. It is often noticed that the patient will go lame for considerable time, sometimes for eight or ten months, or even longer, after the operation,

as the process mentioned is sometimes very slow. When a recovery has not taken place in ten or twelve months, it is well to fire again, and if this fails to effect a cure, we may decide that the case is incurable, and the only means of removing the lameness is by the operation of neurotomy, which consists in removing the nerve supply to the foot. The operation can be performed only by a veterinarian. It does not cure the disease, but removes lameness by removing sensation. As the process of repair and decay goes on in the foot after the operation, in just the same manner as before, and the animal will not show symptoms of pain, hence is liable to become totally useless, from various causes, it is not considered wise to operate except in cases where the animal is practically useless from severe lameness.

WHIP.

Horse Memory and Habits.

EDITOR "THE FARMER'S ADVOCATE":

During a season when many of us do a little colt training on the side, it is well to take advantage of the remarkable faculty of memory possessed by horses. This was recalled to my attention the other day. Over five months before I had driven with a single horse by an unusual street route into my market town. At a certain corner I turned off on to a little side street to stop at a friend's place, returning over the same course in the afternoon. During the following months I drove many times to town, but not over the particular streets in question until yesterday. I had no purpose of turning at the little side street, however, but on reaching the corner immediately the horse started to make this turn I gave him five months ago, and it required a good tug on the reins to keep him to the straight course. This recalls another instance during the past year. For the first and only time I drove through the road gate-way into a farm yard and remained about half an hour, and then returned the way I had come. In a month or two afterwards, not having used the road in the interval, I chanced to drive over it again, but in the opposite direction. On coming near the entrance to the farmyard above referred to, my nag at once turned with determination to the gate-way as though it were a daily routine. I could cite similar cases with other horses, but these are sufficient to suggest to what extent advantage might be taken of the vivid and seemingly permanent impression on the horse by a single occurrence. If desirable habits are so easily inculcated it certainly attaches importance to every action in handling horses, young or old. Other readers could no doubt relate experiences bearing on this point.

Middlesex Co., Ont.

JOHN JEHU.

LIVE STOCK.

Making Pork Out of the Spring Litter.

Almost anyone can raise a litter of pigs, from weaning time to six or seven months of age, but one feeder can often bring them along much more profitably than can another. Simply raising them is not all. They should be raised economically, or in a broader sense of the word, successfully. It is a fairly easy matter to produce hogs for 9 cents a pound, and show a profit, but, unfortunately for the farmers, hogs do not always sell around \$9 per cwt., and we can never tell what they will be worth six months in the future. The buyers, taking cognizance of the supply, determine what the price shall be. In the production of swine, and other kinds of live stock, we should endeavor to make the cost of gain as small as possible in all cases, and still obtain the desired quality in the finished animal. This does not imply a meagre bill-of-fare. Judicious feeding and care, however, are necessary.

A stunted, uneven litter of pigs is a difficult proposition to start with. A stunted pig has not many months to overcome the handicap, and it is likely to show it to its last day. To overcome this difficulty, have the sow in proper condition when she farrows; feed her lightly at first on warm slop, containing a little middlings or bran, and do not bring her to full feed for a week or ten days. After a few days, when the sow begins to regain her normal condition, there is nothing better, as a ration, than a mixture (equal parts) of finely ground oats and middlings allowed to soak between feeds. If sweet skim milk can be added, the ration will be an excellent one. Wheat bran and shorts, treated in the same way, and augmented with skim milk is also very suitable. Some feeders recommend a mixture of chopped rye, with half its weight of wheat bran added, and allowed to soak for 24 or 36 hours. The milking sow will require plenty of slop, or water, to maintain an adequate supply of milk.

Many breeders make the mistake of weaning the pigs too young. It is sometimes necessary to have them away from the sow in time to breed for another litter the same year. However, this can usually be managed, even when the young run with the dam for eight weeks. Gradual weaning is less likely to give the youngsters a set-back, from which they do not readily recover. At about three weeks of age, the pigs can be taught to eat. At this stage they should be provided with a trough in a corner of the pen, or run, which is inaccessible to the sow. New milk is best to start them with, but, after they "get the habit," their allowance can be changed to skim milk and porridge, made