

equently the quarters will have a better chance to grow. Of course, if a foot is naturally well shaped and properly set, it doesn't take much of an effort to keep it that way. Always allow the frog to grow as long as it will. A great many people think that a horse isn't neatly shod unless the frog, bar and sole are pared away closely. No worse mistake was ever made, and any horse-shoer who will do that to please his customer is doing nothing short of cruelty to animals. Never under any circumstances cut away the bar or sole unless it is diseased. Then it is necessary in order to treat the affected tissue with medicine and cure it. Nature has provided the frog, bar and sole to protect the inner and very tender parts of the foot.

The Colt's Feet.

The colt should have his feet carefully watched, always keeping them trimmed level. There is very little that can be done to readjust the set of feet and pasterns on a mature horse, but the young colt is easily susceptible to such changes. The set of feet and pasterns can be thrown one way or the other if it is done while the bones and joints are still young and flexible. If the colt stands too close behind or in front, keep the inside toe of the hoof a bit shorter than the outside, and have the inside quarter a trifle higher. To throw the feet closer together, lengthen the inside of the toe and keep the outside quarter slightly higher than the inside. The mature horse that toes out badly in front, nigger-heel fashion, is hard to help with shoes, for his legs do not set straight under him. The growing colt can be helped considerably by proper shoeing because his joints are still capable of being twisted slightly. Beware of the stallion with this fault, for there is no characteristic which draft horses transmit to their offspring with as much certainty as nigger heels.

How to Shoe Show Horses.

Horse-shoers and showmen disagree many times on the kind of shoes to use to show a big horse to the best advantage. My 30 years' experience as a fitter and shoer of all breeds of draft horses, besides several years spent in Scotland in the same work, have thoroughly convinced me that more horses have their action ruined by heavy shoes than are ever helped by them. One should vary the weight of the shoe with the size of the horse. A two-pound shoe is heavy enough for a yearling stallion, whereas I sometimes use as much as three pounds in a shoe for an aged horse. If a horse is a bad goer, a heavy shoe will frequently make him worse. More can be done to perfect a horse's action by correcting as nearly as possible the shape and set of his feet than by loading him with heavy shoes. I always use medium weight shoes, particularly on young horses. One is much surer of getting true action with light shoes on a well-formed foot than he is to try to balance up an ill-shaped foot by weight in the shoe. In most cases the well-shaped foot can be grown in time, and ordinarily a horse will go pretty nearly right if his feet have been properly taken care of since a foal. It is useless to expect that a horse-shoer can put weight into a shoe so that it will serve the place of the properly turned foot. If the hoof isn't there on which to nail the shoe, it is impossible to balance the foot perfectly, because the weight will not come in the right place. That is why one sees so little uniformity in action as he looks at a string of draft horses at a show. Each horse has been equipped with a pair of shoes which it was thought would perfect his action. Nobody ever saw a good-going horse barefooted that didn't have the right kind of action when shod unless it wasn't done properly. Shoes in front should be perfectly round whereas those behind should be slightly oval shaped. There should be no toes either on the front shoes or the hind ones. The heels should be blunt and hammered down so that they are very low. A heel on a shoe has no particular value to a show horse except it may save him from slipping. The outer edge of the shoe should be made to fit the foot neatly, with the heel extending only a very little beyond the back edge on the front foot. The hind feet will stand more of a heel to the shoe than the front ones. In fact, I usually make the outside heel on the shoe for the hind feet quite a little longer than on the inside. That shaped shoe in the heel will help to throw a horse's hocks together. A similar shoe at the heel in front will, of course, help a horse to toe out. It is particularly advantageous to shoe a horse so that his hocks will stay together a bit. It gives him better stifle movement and makes him stouter to keep his heels together military fashion. Try yourself and see whether you can lift a heavier load with your feet standing apart or when your heels are close together and your toes out a bit. The same rule applies to the pulling power of a draft horse. The shoes should always be creased in the line of the nail holes, as that helps a horse to grip the ground. The toe clip should not be over an inch wide and an inch and a quarter high. It should be hammered out very thin, so that if a horse pulls a shoe and steps on it the clip will bend and not run into the foot. I have seen some very bad cases develop from a horse stepping on a shoe with a big stiff clip on it. Furthermore, a wide clip doesn't look well, as it gives the appearance of too much metal on the feet. If I want to do a fancy job, I weld this clip on, but more frequently I turn it up from the shoe. A very important feature about a shoe which many blacksmiths forget is to have the inside edge next to the foot lower than the outside. Most shoes on sees are made higher on the inside than on the outside. The reason for having the outside on the shoe higher is that the weight of the animal should come on the wall and not on the sole of the foot. If the sole must bear the jars, the horse will soon go lame, and particularly when he has to stand on a hard floor or be trotted on hard pavements. Frequently, if there isn't any toe to spare, I take a paring

knife and remove just enough of the sole before putting the shoe on so that I am sure the shoe will not touch the sole. If a horse goes sore in front after he has been on the fair circuit for a while, it is likely due to his feet drying out, or else to a slight touch of founder from a draft. To pack clay in the bottom of the feet will help, but the best remedy I ever found was to stand the horse in a tub of hot water. Heat will take down inflammation and there is no other way of keeping the water so uniformly hot. To stand a horse in a tub of hot water several hours per day will usually remove the soreness in a short time. If the foot is contracting and causing inflammation inside the hoof walls, the hot water will soak up the hoofs faster than anything else. There should only be four nails on a side and they should be driven high up. The last nail toward the rear side of the foot should not be driven farther back than the quarter which is about the middle of the side from front to back. Both the holes and the crease in the shoe should be set at an angle so that the nail can be driven parallel with the slope of the hoof wall. Then, by punching the holes slightly to the inside of the centre of the shoe, the nails can be driven high up on the hoof with no danger of pricking. They hold better if nailed on this way. If set near the outer edge and at right angles to the shoe, it is impossible to drive nails high enough to hold well. If a shoe is nailed tightly in the heel, it will likely cause lameness. The reason is evident, for anyone knows that if a shoe is nailed on when the foot is dry and a horse goes out into the mud and soaks up his feet, the shoes are bound to draw very tightly because the foot has expanded with the moisture. Pressure for any length of time will cause inflammation of the sensitive tissues inside the foot wall.

How to Correct Faults in Gait by Shoeing.

To shoe a draft horse to improve his gait requires a good deal of skill. One can shift the weight in a light horse and in that way alter his method of going considerably. No one cares whether a race horse goes square or not, if he has the speed. On the other hand, we require that a draft horse move true. The front foot should be picked up and set down straight ahead without any side motion one way or the other. Besides, the hind feet must be brought forward and set down in the same track made by the front ones. The appearance of the set of a foot can be changed wonderfully by shifting the clip a little to one side or the other. That does not, however, improve the action at the trot. A paddler can only be helped by shortening the toe on the outside and growing it slightly longer on the inside. The shoe should not be nailed on exactly with the set of the foot, but should be shifted slightly with the toe a bit toward the inside. An attempt should be made to grow the foot so that it stand directly in line with the body, so that when the horse picks up his foot he will carry it forward in as nearly a straight line as possible.

Percheron breeders, there is nothing that will pay you better than to take the right care of your horses' feet beginning with them as foals.

Note.—This excellent article was prepared by George MacLeod of Geneseo, Ill., after 30 years' experience as a fitter and shoer of all breeds of draft horses, and was recently published in the Percheron Review, under the heading, "A Percheron Foot and How to Shoe it." The information is valuable to all horse breeders.—EDITOR.

LIVE STOCK.

Our Scottish Letter.

The fortnight closing has been an eventful one in stock-breeding circles. We have had great sales of Shorthorns at Birmingham and Penrith, and great shows of horses at Newmarket and at Glasgow. The Shire Horse Show and the kindred events which were usually held in the Royal Agricultural Hall at Islington, London, in spring had, this year, to be transferred to Newmarket. The Hall in London has been requisitioned for War purposes, and for the first time in their history Shire horsemen have, like Clydesdale men, had to hold their Spring Show in the open. The shows of all breeds have, this year, been restricted to stallions—no mares or fillies being shown. The champion of the Shire show was Messrs. Forshaw's Rickford Coming King, a great draft horse which more than once in the past had stood reserve for champion honors, and now has justified his name. A Scotsman who knows draft horses as well as most has been giving his candid opinion of the Shire horses at the show. He is a N. C. O. in the Lovat Scouts, at present in camp in East Anglia, and he got a day off to attend the show. He was much impressed with the uniformly good hard colors of the exhibits. This is one of the first things which will strike the visitor to a show of Shire horses now—especially if he was a visitor to like events during the two closing decades of the nineteenth century. We have been in the way of attending the Shire Horse Show, not every year—but pretty frequently, since about the year 1886 or thereby, and two things are unmistakable. One, the remarkable improvement in the breed in respect of soundness and, what our soldier friend remarked, the extraordinary advance in securing uniformity of colors and markings. In those earlier days chestnuts, sorrels, roans, greys and blacks were as common as bays and browns, now scarcely any color can be seen but bays and browns, and there are no unsightly white markings. The improvement in soundness has been due to the rigid veterinary examination carried out in connection with the show. In the early days many a breeder felt sore at the result of the veterinary examination. We have known cases in which very high prices had been paid for horses which, in respect of merit,

seemed sure to win, but the veterinary bench said, "not so," and there was nothing for it but to accept their fiat with as good a grace as possible. The veterinary bench was so constituted that no horse could be condemned without the signed declaration of at least three thoroughly qualified men. We now have alike in England, Scotland and Ireland, Government Registers of sound horses, but good as these are, so far as they go, they are based on the verdict of one veterinary surgeon as to the soundness of a horse. The verdict of three is better than the verdict of one, and we prefer the Shire Horse Society's method.

Another point noted by our soldier friend was the fact that the action of the Food Controller seemed to have a good effect in preventing overfeeding, and the Shire stallions seemed to be all the better of their restricted rations. No doubt a Shire lends himself to overfeeding more than a Clydesdale, and his activity would be improved when not overloaded with flesh. We cannot say that we noticed much difference in this respect at the Glasgow Show of Clydesdale stallions, which was held this week. As a matter of fact, a great change came over the methods of feeding Clydesdale stallions perhaps during the past twenty years. When we first knew the Glasgow Show, now almost 40 years ago, it was quite a common thing for horses to be so overfed that many of them became affected with laminitis, or as it was popularly expressed, "they became foundered." Such a thing as a "foundered" Clydesdale stallion is nowadays rarely seen, in fact we do not remember when we last saw one that, as it is expressed, "put down his heels." A horse affected with laminitis puts down his heels first. The results of the rationing of stock were not much in evidence, we are told, at the Bull Sales. Still, although these spring gatherings of horses and cattle have shown the stock to be in healthy, thriving condition, there has been a reduced use of highly concentrated feeding stuffs. This could not but be as the food cannot be obtained.

The Glasgow show of Clydesdale stallions was held on Wednesday and Thursday, and on Tuesday William Montgomery's 25 Clydesdale stallions were sold at auction at Lanark by Messrs. Lawrie and Symington (Ltd.). The sale attracted an enormous crowd, and the result was an average of £557 19s. 5d. for the 25 entire horses. Seven of the horses were purchased by A. M. Montgomery, of Netherhall, Castle Douglas, who is to carry on the great tradition of the Montgomery family, in connection with Clydesdales. As a compliment to William Montgomery on his retirement from the stallion and export trade, he has been elected President of the Clydesdale Horse Society for 1918-19. For a third time James Kilpatrick, Craigie Mains, Kilmarnock, who paid 5,000 gs. for Bonnie Buchlyvie 14032, at the Seaham Harbour dispersion, has been appointed Vice-President. No doubt this presages the time when he will go a step higher. To return to the Montgomery sale—the highest price was 1,550 gs. or £1,627 10s., paid by William Kerr, Old Graitney, Greta, for the eight-year-old Dresel 16548—a thick, good stamp of horse with beautiful feet and pasterns which won third prize at the H. & A.'s show at Howick in 1914. He was got by the Cawdor Cup champion Revelanta 11876, a son of Baron's Pride, and his dam was by Labori 10791, a son of Hiawatha, and the first horse to win the Brydon Challenge Shield. To see how an investment of this kind may work out, it may be worth figuring a little. Dresel is hired for 1918 and 1919. His terms for 1918 are £3 10s. at service, and £5 10s. additional if the mare proves in foal. If he serves 80 mares his owner receives money in hand amounting to £280. Assuming that of the 80 mares 60 prove to be in foal this will bring in an additional revenue of £330. The first season, therefore, may be estimated to yield £610. Of course, the horse may serve 100 mares, and as he is a sure stock-getter 80 of these may prove to be in foal. In that case the revenue yielded in the first year would be £790. For 1919 the terms on which Dresel is hired are £4 at service, and £5 additional when the mare proves in foal. Again, assume the 80 mares as the season's service and the result is £620, or assume 100 mares and the result is £800. Take it either way and it appears that the price of Dresel has been two years purchase. We believe Mr. Kilpatrick's big investment of 5,000 gs. in Bonnie Buchlyvie was all recouped in less than two seasons. There can be no doubt that one of the safest investments in stock is a successful stock-getting Clydesdale stallion. Granted that the horse is a sure foal getter and lives for say ten years, there is no surer way of making money. Of course, an indifferent stock-getter or a horse which leaves no stock is one of the worst investments a man can face. The second highest price of the Montgomery sale was 1,400 gs., paid by A. M. Montgomery for the young horse Imperial. This works out at £1,470, and the horse is hired for 1918 and 1919. His terms for this year are £3 at service and £5 additional for each mare proving in foal. This again yields, with 60 mares served and say 50 of them proving in foal—a revenue in the first season of £430. For next year the terms for Imperial are £4 and £5. As a four-year-old horse he will then be able for at least 80 mares, and the revenue for the season should be not less than £620. In two seasons, therefore, the horse should bring in over £1,000, and having all his career before him he should prove quite a sound investment. Other good prices at the sale were 1,020 gs. for the black horse Coronation 15780, a grand draft horse type, and 1,350 gs. for Merlin 10716. Both of these horses are hired for 1918 and 1919. The former was bought by A. M. Montgomery, and the latter by Geo. A. Ferguson, Surradale, Elgin, who now owns one of the greatest Clydesdale studs in Scotland.

At the show on Wednesday and Thursday there was a really splendid show of Clydesdale sires. There

were four class olds and horses great trophies, Brydon Challenge Shield, with Litigant 19071. gay horse was Bervie, Kincard Buchlyvie 11263, Favorite 10630. fine proportions, legs, and every trophies was Ge colt built on a the three-year-old great weight and many. He was Galston, and was Bute Lily 27479 hired for 1918, the grandest colt third-prize three 19026 by Baron owner. He, too, 1919 and 1920, Morayshire, resp was Mr. Kilpatrick last year was first for both great Buchlyvie, and h was by the exce which this season Craigie Excelsior for which A. M. uncle's sale. The Hiawatha Again bred by his own Society for 1918, for 1919. This is He is a surestock well both for his Ferguson was thin horse in Victor D shire and got by P Sir Hugo 10924 who owns an exce land, was fourth 18626. The first-last year was first Doura Elect, but Obligation 19426. Doura, Kilwinning 15203, while his d of Blacon. This i with a beautiful f His owner is Mr. Larbert. The first Ferguson's Passche black colt by his out of Celia by Du by Mr. Robert J. Lothian.

With his sweep patrick has now w right. It was first won by A. B. Ma since been won thr and three times b It had, however, horses, and Mr. K triumph. His five Oyama 13118 in 1 St. Clair 14347 in 1916, and Craigie Time hastens r horn bull sales at sulted in great sur Perth a month ago pected that the rec lowing day at Aber the Saphock bull P to be a safe record, were eclipsed. A father, Matthew M export trade, gave 3 of Cruickshank br and was bred by Aberdeen, who we Cruickshank. His bull bred by Mr. Queen VI. The Pe bulls, cows and heif auctioneers are Mes and the town is a gr horns.

Great Sheep

EDITOR "THE FARMER'S ADVOCATE." Not many years ago Scotland had a few sh farmers have any. week in February an in Cumberland Cou officials took part in county for sheep rais be a large increase farmers wish to bu there are very few for The principle rea dog nuisance. Ther successful there mus the sheep industry dog caught worrying