

any fat. The result is, since January 12 we have had forty-eight cows calve, bringing two females to one male. A neighbour of mine has had only six female calves from twenty-three cows by a four-year-old fat bull. But I know there are exceptions to this rule. A relative of mine last year fed a four-year-old bull very high for exhibition, serving cows at the same time, and is having a majority of female calves. My experience is with Devon cattle only.

#### FOUNDER IN HORSES.

A disease that is far too common in horses is caused most frequently by driving or working them till overheated and more or less exhausted, and then allowing them to cool off suddenly without rubbing dry. A horse is driven hard for several miles, and then hitched to a post in the open air in cold winter weather, and perhaps forgotten by the driver, who may be telling stories or smoking a cigar by a warm fire; the next morning, if not sooner, it is noticed that the animal has not eaten well, and can scarcely move from the stall. The lameness may be chiefly in one limb, or in more than one. Dr. Cressy, in his recent lecture before the Connecticut Board of Agriculture, said that any case of founder can be cured if taken within thirty hours of the attack. The first thing to do is to place the horse's feet in tubs of warm water, then blanket heavily, and get the animal thoroughly warm all over. The lameness is caused by a stagnation of the blood in the feet, the result of being cooled too rapidly after exhausting labour. The warm water thins the blood vessels, and favours increased circulation. In very bad cases bleeding in the foot may be necessary, though ordinarily it may be dispensed with. Knowing the cause of founder, it will be seen that it is much easier to prevent than to cure this disease after it becomes established. In the first place, avoid very severe driving and over-exhaustion; but if abuse of this kind is unavoidable, see to it that the horse is not neglected at the end of his journey. Drive into a warm shed or barn free from cold draughts, and rub vigorously till the animal is dried off. Give warm water to drink, and cover with warm blankets. In short, treat the horse just as you would treat yourself under like circumstances.—*Farm, Field and Stockman.*

#### BREAKING HORSES.

Thousands of horses, says the *Breeders' Journal*, are only half broke. They are handled enough so that they can be herded along the road, but this cannot be called driving them. The horses should be taught to obey the voice as well as the rein, but how many do not half obey the rein, much less the voice?

Too little attention is paid in breaking a horse to stand still when he is hitched to a post. They are continually backing and moving forward, and rubbing and being restless. One way to prevent this is to block the waggon wheels, so that it is hard work for them to move the waggon. This can be done by having a short piece of heavy rope with an iron hook on each end. This rope should be just the length so that the hooks can be hooked under the felloe of the front and back wheels. This holds the wheels stiff, and if the horse moves the waggon he must slide the wheels, as they will not turn. A piece of hard wood can be used instead of the rope. It is stiffer and a little better.

Too many, in breaking their horses, put them immediately at work. This, while effective, destroys somewhat the action and temper of the horse. A free-actioned colt, when he is broken to drive, should be harnessed with a horse of the

same disposition as near as possible. This will teach him to imitate desirable qualities of his mate. A well-broken horse is much preferable to use in breaking a young horse, and long drives on a waggon will organize a colt quicker and better than anything else.

For our own use, we much prefer to break colts at first with a biting rig. This gives them a better mouth and a more wholesome respect for the bit than any other method. Two weeks of the biting bridle, three hours a day, with the colt turned out by himself in a safe lot with a good fence, is worth many dollars to a horse in after life.

Never tie a colt or an old horse with an old or insecure halter; for if the colt never knows that he can break his halter, he will very soon give up trying.

#### PRACTICAL STOCK BREEDING.

A scrub heifer bred to a thoroughbred bull for her first calf, and then repeatedly bred to the same bull will improve in her breeding so that each succeeding calf will be better than the preceding one, and this to a greater extent than if she had been bred to different bulls, though all equally good and of the same blood. This rule holds good with horses and sheep as well as cattle. Stick a pin right here. If you are breeding cattle get a good bull and keep him. If you calculate to breed Durhams, do so; if Holsteins or any other breed, do so; but don't breed to a Durham bull one year, and a Holstein the next. You must stick to the one thing if you expect to breed good grades of either; and more than this a cow that has once been bred to a scrub bull, if bred promiscuously to different bulls, even of the same breed, will never produce as good calves as she would if bred several times in succession to the same individual bull. The man who has good heifers, high grades of thoroughbred, and does not want to raise their first calves, and who uses a scrub bull because it is cheaper, is saving pennies to-day at the expense of dollars in the near future. Use nothing but thoroughbred males on all kinds of stock, and, all things being equal, the longer you can use the same animal the better. I do not mean by this that it is advisable to use him on his own progeny, but on the original animals it may be continued indefinitely.

#### SHOEING HORSES.

In response to an inquiry from a subscriber as to the propriety of shoeing horses, the editor of the *Massachusetts Ploughman* says: As the sole object of shoeing the horse is to prevent too great a wear of the ground surface of the outer crust of the hoof, it is very obvious that in certain districts where the roads are sandy and loamy the shoe may be dispensed with, much to the relief of the animal and to the pecuniary benefit of his owner. On pavements and macadamized roads the wear is too great and the foot must be protected. There are very many young animals that are shod merely because it is a custom to do so, and not because necessity calls for it. Where the shoe has never been applied, the hoof takes on a natural hardness, which fits it for an astonishing amount of work without injury. When it is desirable to remove the shoes entirely, the foot should be gradually inured to this new order of things by slow work, otherwise lameness will follow, especially in those cases where the owner has allowed the sole and frog to be mutilated by the knife of the blacksmith. These parts ought never to be touched with instruments. On icy roads, with heavy draught, it is probable that calkins cannot be given up, but these projections to the shoe are applied to the sole of the hoof.

much to the injury of the limbs of the animal, especially where they are not of equal height. In fine, there is no reason why every farmer should not try the experiment of using his horses without shoes, especially on the farm work.

#### SALTING STOCK.

It pays to salt stock regularly, but it is not always convenient to do so. A simple and cheap device to keep an ample supply always within the reach of stock consists of a box, which may be four feet long, one foot wide and six inches deep. This should be nailed at each end to upright planks a foot wide, set firmly into the ground. These uprights support a roof that serves to keep out the rain. After the stock has been salted often and freely enough to satisfy their appetites, the box may be filled and all the animals given free access to it. They will help themselves whenever they wish, and the most timid, as well as the strongest will get all they want.

Horses may be taught to canter slowly and gracefully by riding them under the saddle for long distances up hill. The canter is a gait not so much desired since horseback riding has gone into disuse, but there are many indications that the healthful exercise given by riding on horseback is to become more popular, as it certainly should.

If horses or cattle are troubled with constipation, give such animals half a peck of potatoes, each day, for a week or two. Two quarts of wheat bran mixed with a horse's oats night and morning have a tendency to prevent and relieve costiveness. Bran fed moderately and regularly to cows, ewes, and brood sows will keep the bowels in proper condition.

THE *Western Agriculturist* says: "Horse breeding is a prominent source of profit upon every farm, and the proportion of profit depends largely upon the kind of horses, as well as the energy and skill with which the business is done. The best stallions available are bred to the mares which are being graded up, then their colts are sure to bring a good price at any time. Scrub horses are more unprofitable now than ever before, while the draught horses have increased in profit and in numbers all over the West."

THE Highland Society, remarks the *Breeders' Gazette*, has adopted as a rule for its next show that cattle should be judged by three judges, two to act and one to be selected by lot to vote only in case of the disagreement of the other two; also that the names of the judge, shall be announced before the show. There has been considerable difficulty encountered in satisfying losing exhibitors on that side of the water, as on this, with the result of the award, but it remains to be seen whether there will be any more general acquiescence under the new rule than under the old. But it seems as if the object aimed at should be correct judging, rather than such as will satisfy everybody.

SUCCESSFUL farmers, whether dairymen, fruit growers or stock raisers, are those who consult the requirements of the markets rather than their own inclinations in the matter. Consumers who pay their money will always demand a voice in the style and variety of the goods they purchase. Thus it is the breeders of grade draught horses meet a ready demand and good prices for all the good heavy horses as soon as they are old enough for market. The markets of this country and all Europe are eagerly calling for more good draught horses and of a heavier type. They are equally ready to pay the increased price for the extra heavy teams when they can find them, and so of the best stock of beef and dairy cattle and of hogs. The high grades and full bloods pay best in the