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Disease in Horses.

SIR,—Are some horses predisposed to diseases of the limbs, such as spavins, splints, ringbones, &c. If so, how can such horses be distinguished from those which are naturally sound? ENQUIRER.

["The horse with unduly small joints is weak and especially subject to sprains and bone disease. A knee that is wanting in breadth from side to side, or from before backward, and to the lower part of which the back tendons seem to cling ('tied in below the knee'), is one which will predispose to disease of the small bones of this joint, to sprains of the back sinews, to splints, and to ringbones. Similarly a hock that is wanting in prominence and breadth at the point, or that is narrow from without inward or before backward at its lower part, will certainly give way under severe work and throw out curbs, spavins, or other defects. A pastern that is unduly long and oblique will predispose to disease of the bony pulley behind the fetlock, or to ringbone on the lateral aspects of the pastern bone, because of the great strain thrown on the ligaments. A pastern, on the contrary, which is unduly short and upright, whether in trotter or in cart-horse, will predispose to splints, disease of the fetlock, ringbones, etc., because of the concussion in severe work.

"Faulty and imperfect nutrition of the bone is certainly a frequent cause of bony growths. As allied to this is the fact that such growths are especially common in young and immature horses put to hard work. Here the bones contain an excess of soft elements, and under severe strain and concussion take on inflammation, with the result of an excessive deposit which becomes calcified and bony. A similar condition often results from poor health or imperfect digestion. As the health falls off the nutrition is impaired, and the bones are not the last to participate. Changes of various kinds may occur, but, as a rule, the soft elements of the bone increase at the expense of the hard or earthy portion; and as the subject is thus placed in the condition of the young animal, but without its vitality and power of recuperation, it suffers readily under disturbing causes, and is especially susceptible to overwork and concussion. Thus it follows that a period of indigestion, that debility caused by bots or other parasites, that a diseased tooth interfering with chewing, that any chronic affection of the breathing organs or kidneys, that rheumatism and a variety of other disorders may indirectly become causes of bony growths. In the same way, prolonged idleness in stall or box, and irregularities in exercise, will interfere with the perfect nutrition of the bone, and lay it open to injury and disease under work. Finally, horses bred on flat, damp soils are usually less durable in their bony systems than those that have been raised on hilly or undulating ground. The free range of the young Mustang, Broncho, or Shetland pony no doubt contributes to produce their phenomenal hardiness and endurance.]

SIR,—Will you please inform me what will make a horse's mane grow? R. D., Waterford, Ont.

[There are many preparations to stimulate the growth of hair, but the use of them is attended with more or less danger. It is, therefore, better that they only be used by such persons as thoroughly understand their effect on the system. To hinder rubbing, and give the mane and tail a bushy and glossy appearance, the skin must be kept clean. This may be done by washing with castile soap and warm soft water, to which a tablespoonful of washing soda may be added to a gallon of water.]

Important Changes.

CATTLE RUNNING AT LARGE.

SIR,—In the report of the Fruit Growers' Association of Ontario, published in your last issue, there are certainly some very good views expressed with which I quite coincide. I think the time is now past when animals should be allowed to run at large and pasture the entire summer on public roads. In some sections farmers turn out all their stock, even to the horses, to pasture on the roads. Some only allow them to pasture for a month or two in the spring, while others let them stray all summer. They are a constant source of annoyance to the public, and besides this the farmer who thus uses his stock loses the whole summer's manure, which is a more considerable loss than it is generally believed to be. To keep up the fertility of our soil all our manure must be carefully husbanded. Besides this, animals running at large do not get the necessary care and feed, both of these being necessary to produce a perfect animal, these alone being profitable both in the English and American markets. The scrub animals, such as are raised on the roads, are almost profitless. These are only a few of many reasons, but if these were all they are sufficient to prohibit stock from running on the road in the cleared and thickly settled sections of the country.

The clauses in the report regarding fences have also some useful hints. The old fashioned zigzag rail fence has served its time in all the older sections of Ontario. When the country was new it was, perhaps, the best fence settlers could construct, but now that our land has become so high in price we cannot afford to use them longer. Few people have any idea of the amount of land occupied by these unsightly fences on their farms. If the country was divided into 400-acre blocks, as some of it is, and we divide the farms into 16-acre fields, which is a fair average, on each 400 acres there will be 3360 rods of fence, or 840 rods on each 100 acre farm. The fence bottoms will cover a strip at least half a rod wide, therefore 28 acres is wasted on each 100 acres in Ontario. There are about 77,606,400 acres in Ontario, one-third of which we will allow for waste land, rocks, water, &c., which we think a very large proportion; then there would be 51,737,600 acres fit for tillage. Any one can calculate the vast amount of good land which is covered with fence bottoms, besides the amount of land which is indirectly injured by them. Insects harbor in and about them to a great extent. We have had turnips where the plants have been almost destroyed for a rod wide all around the outside of the fields, which, in a 10-acre field would amount to almost an acre, or a clear loss of quite \$20, including labor and profit. There are also other destructive insects and vermin which harbor in the fence corners, whose damages we cannot so easily estimate, and beside the insects the foul weeds and briars find a friendly protection, from which the Canada thistles, &c., send forth their seed in abundance. Yet we cannot do away altogether with our fences, as the Fruit Growers' Association would advise. We must have line fences of some kind. What are they to be? is the question. Timber is getting scarce; the crooked fence is a large yearly loss to both farmers and the Province. But we think the ingenuity of our manufacturers has supplied our wants just at the right time with barbed wire. The Americans have been using it to some extent for some time, and in your last issue we see the "Dominion Barb Wire Fence Co.," of Montreal, are manufacturing it for Canadians. A wire fence has many merits—the snow will not drift, insects can find no hiding-place, and the ground that it occupies need not be wider than four feet, which will amount to a large saving of land over the old system, beside doing away with the insects and the weeds. If this system of fencing cost twice as much as timber, it would, in the long run be far the cheaper. Considering the above advantages, and also its durability, I think a wire fence would be much improved by placing one good stout pole or rail from post to post, above the wire, so that stock could see it more readily and not be so apt to get hurt by running against it. It would be found especially beneficial as a road fence when the snow drifts and fills the roads in winter, thus doing away with the expense of shovelling out the roads so often, the cost of which is very considerable, and if spent on the roads for their permanent improvement would make a decided change for the better. If our roads were so fenced they would not need to be so wide by a rod as they are now. This would effect an enormous saving of land to the Province, and would also increase the revenue.

PROGRESS.

Milk Fever.

SIR,—I have had several cows sicken and die soon after calving. I feed well; my cows are all in high condition. It has been invariably my best milking cows which have died; they all had an abundance of milk after calving, but which in part disappeared when taken sick. What is the cause? A. H., Bowmanville.

[From your description we believe your cows have died from milk fever. We will give the causes, symptoms, &c., as given by Professor Law in "The Farmers' Veterinary Adviser." The symptoms are dullness, languor, uneasy movements of the hind limbs, a full bounding pulse, red eyes, hot head and horns; soon the cow becomes weak on its limbs, unable to rise, lays its head back on the flank, or dashes it to the ground, breaking the horns if the surface is hard, and struggles convulsively with the limbs. The surface of the body may now be bedewed with perspiration. The eyes red, fixed or rolling convulsively, the pupils dilated, the heat of the head still greater, and the pulse quicker and weaker. Sensation is completely lost, and the skin may be pricked at any point without the slightest response, and the eyeballs may be touched without causing winking; neither dung nor urine are passed, the intestines and bladder being also the seat of paralysis and torpor. In one form of the disease the heat of the head, delirium and violence may be entirely wanting; the prominent symptoms being the fever, accelerated pulse and breathing, elevated temperature, loss of power over the limbs, paralysis of sensation, inappetence torpor of the bowels and bladder; both forms are exceedingly false. Almost all attacked within two days after calving perish, and a large proportion of those taken ill during the first week. Prevention—Spare diet for a week before and after calving, an active purgative (epsom salts) to act as soon after calving as possible. Plenty of fresh cool air, milking if necessary before calving, and thence daily after. When the grass is luxuriant it is necessary to keep such animals as may be predisposed to the disease in-doors upon dry hay with plenty of salt and water, or in a very bare pasture. Treatment—If the animal is seen to be sick before it becomes unable to stand, bleed from the jugular vein, but never after the pulse has lost its fullness and hardness; apply ice cold water, bags of ice, or a solution of an ounce each of nitre of sal ammoniac, in a quart of water, to the head around the base of the horns; give powerful purgative, (2 lbs. of epsom salts, ½ oz. carbonate of ammonia, ½ dr. nux vomica); apply friction to the limbs, draw the milk off at frequent intervals, and repeat the ammonia and nux vomica every four hours. The nux vomica may be replaced by strychnia, 1 grain to two or three drops of vinegar, in a teaspoonful of water, and injected under the skin twice, with an interval of four hours between the injections. The fever may often be materially reduced by enveloping the whole body in a sheet, wrung out in cold water, and covering over this with dry ones. In the second or torpor form of the disorder there is often no call for cold applications to the head, while purgatives and nux vomica are especially demanded.]

Gypsum.

SIR,—I wish for some reliable information regarding gypsum. It is spoken of very highly as a fertilizer by some, while others deny that it is of any value. How is it that there is such a difference of opinion on a subject that is so easily tested? If it is of real benefit in farming it should be more generally known, that we might make more use of it than we do. Yankee farmers are importing it from Canada. Q., Elora, Ont.

[Gypsum (more generally called plaster) has been proved to be very beneficial to some crops and on some farms. In other cases there has been no perceptible advantage from its use. This has led to the difference of opinion that you speak of. There can be no reasonable doubt that many who have used it have been paid by the increase of yield. It is especially serviceable to clover and corn, though it has been proved to be of service to other crops as well. Plaster attracts moisture and its accompanying ammonia from the atmosphere. This can be proved by plastering part of a crop and leaving part unplastered, and examining them when the dew lies on the ground. A similar trial will show the profits from using plaster; the yield of each will prove the value of it.]