

of bone. It may be a constitutional disturbance and want of a depleted state of the system. It is either of these that will be followed by heat and cold in; standing in water; friction, and the air has been used) or less violent circulation. we should not fever appears. after off with warm or cold. mmed, unless eg at a time. ter washing a visps of straw y, then apply ther leg, etc. especially if amsters have or such a job work. The on and make me time the by standing not as the on the hair wet. Unless til dry and ash. Allow by the heat ill drop off. influences, pposing the he following horse than on general our horses'

quality of bone, with a view, probably of selling again, clips his legs, that in the course of a couple of weeks he has cracked heels and often mud fever in all his legs. In cases of this kind the reaction is too great; the cold has such an effect upon the clipped legs that have previously been protected by hair that the circulation is partially arrested; then when he is in the warm stable it regains its normal condition, only to be again checked when the horse is taken out, etc., etc., and this usually results as stated. The way to prevent skin diseases of this kind in the legs is to keep the horse in a dry, comfortable place, feed in proportion to the amount of work, and as far as possible avoid the direct operation of heat and cold, wet and dry, directly upon the skin.

## SYMPTOMS.

The first symptom is a redness of the skin (noticeable only in horses with white heels), swelling, heat, and tenderness. The swelling is probably the most noticeable, and exercise usually dissipates this. After a while cracks extending across the limb will be noticed, the horse will go lame for a few steps, and if the weather be cold it is probable the cracks will bleed a little. As the disease advances the symptoms become worse; the affected leg or legs swell more when he stands; the cracks exude pus, often of a fetid odor, and the lameness increases. In chronic cases the swelling will not disappear on exercise, the horse goes lame mostly all the time, the parts assume a dirty, greasy appearance, and the odor is offensive.

## TREATMENT

If rational treatment be adopted in the early stages, it is usually successful in a reasonable time. The first thing to do is to remove the cause if possible. Let the patient have a few days' rest. Give a purgative of 6 to 10 drams aloes and 2 drams ginger, according to size. Feed bran only until purgation ceases, and even then feed very little grain until he is put to work again. Follow up with 3 drams nitrate of potash twice daily for a week or ten days. Local treatment consists in keeping the parts as clean as possible without washing. I might here state that many cases of scratches are aggravated by washing with soap and water. This is another case in which we say "Do not wash." The local applications depend to considerable extent upon the weather, and this applies especially when the horse is worked or driven when suffering from the disease. Lotions, oils or ointments are usually used. In warm, dusty weather lotions are best, as they have an astringent antiseptic action, and do not gather dust or dirt as oils or ointments do. In cold weather lotions often have such an astringent effect that they dry up and harden the skin, and then the cold weather still further contracts and a case that has apparently done well will crack open again, while oils or ointments have a more softening, and at the same time, antiseptic effect, and tend to prevent cracking. Whatever is used (sometimes they are used alternately, or the lotion applied when the patient is in the stable and the ointment just before he is taken out in the cold weather) should be freely used three or four times daily. A favorite lotion is made of 1 oz. each, sulphate of zinc and acetate of lead, half ounce of carbolic acid and a pint of water. Probably the best ointment is the oxide of zinc ointment, to which is added 20 drops carbolic acid to the ounce.

When a case has become chronic, and what is generally called proud flesh is present, it must be removed by applying a caustic, as butter of antimony, applied with a feather once daily for two or three days before the above treatment is adopted. When the parts smell foul they should be poulticed with linseed meal and a little powdered charcoal for about two days and nights; a fresh poultice applied warm about every eight hours before the general treatment is adopted. In cases that are largely constitutional, in addition to the constitutional treatment mentioned, it is well to give alteratives, as one and a half ounces Fowler's solution of arsenic twice daily for a week.

WHIP.

## Requests Advice on Breeding.

A St. Elmo, Alta., reader writes as follows: "I have a small bunch of mares, average weight about 1,000 pounds, mostly good, straight bays and brown in color. Now what kind of a sire in your opinion would be the best for me to get to mate with them, so as to raise the most marketable horses, on an Alberta ranch? Some advise me to use a Hackney sire, claiming that I

shall get the class of horse mostly in demand. Others advise me to use a draft horse, claiming that I can raise the quality of my bunch quicker than to follow any other line of breeding. I feel sure that a little information along this line, given through your valuable paper, will be of interest to many others who are in a similar position as myself. I should also like to hear the opinions of any of your readers who have had actual experience along these lines."

[We have always advised breeding to type as nearly as possible, irrespective of arbitrary standards such as weight or height; therefore, if the bunch under discussion be light boned and active, we should favor a carriage, trotting or Thoroughbred sire, but if they be somewhat heavy boned we should grade up with a Clydesdale, Percheron, or Shire. Of course certain conditions might affect the judgment in the case, as for instance the demand for different types of horses, but if market conditions were equal we should stick to the type to which the mares mostly inclined.]

We are not unmindful, however, of the rapid transformation that a rather small, fine boned and well bred either Percheron or Clydesdale stallion would work in such a bunch. There are plenty of instances where such horses, bred to small ranch mares, and the resulting fillies bred to heavier horses, have produced geldings weighing from fourteen to sixteen hundredweight and a class of breeding mares that are a credit to any ranch. That is one of the beauties of these mongrel-bred range mares, that their type is quickly modified by the use of pure blood.

Our suggestion to follow type in this case might lead our correspondent to use a Hackney or Thoroughbred stallion, and it is our impression that he would not be disappointed in the class of horse he would eventually raise, but there is the question as to whether such horses are as readily sold or bring as high a price as the draft grades that might be produced from the other system. Personal taste will also enter into the question. As for the writer, he would pick out a few of the most stylish and active and breed them to a light horse and use a Clydesdale or Percheron on the others.

## STOCK

(Contributions invited, discussions welcomed.)

## Wants Advice on Cows.

This is the question put to us by a correspondent at Boscurvis, Sask.: "Which is the most profitable type of cattle for a farmer to keep? Does it pay better to raise beef cattle than cattle to make butter? and how much milk can beef cattle be expected to give? Also what is the average weight of beef cattle? About how much milk do Ayrshire cattle give and what is their weight? Should a farmer keep special purpose cattle of either class or just mongrels as they will answer for both purposes?"

It is very evident that there is no one class of cattle that is most profitable for farmers to keep, else there would only be one class, for all would want the most profitable. Each man is helped to a conclusion as to the class of cattle he will keep by several conditions; such as, the nature of the market, the suitability of his farm for a certain kind of stock, his own personal tastes, the amount of help he can readily command, and the class of cattle most commonly kept in the neighborhood.

We have been in the Boscurvis district; it is between Oxbow and the Dakota line, and is an excellent farming community, as far as one could tell by a casual visit. Near the post office there is not much rough land, but if our correspondent happens to be provided with land that is not easily cultivated or that he does not wish to work, this should influence him in his choice of cattle. Wherever a person has considerable rough land we do not hesitate to advise him to put high grade cattle of the beef type upon it. If land of this kind be close enough to the house it is also a useful adjunct to dairy farming, but is more particularly adapted to beef cattle, as high classed dairy cows require a greater variety of food than is generally found on rough land, if they are to maintain their milk flow.

So much for the man with rough land. When we come to consider the situation where the land is all good arable soil, capable of producing a

good crop of grain or grass four years out of five, we have quite a different proposition. Such land is worth from thirty to fifty dollars an acre and is rather too expensive to use for pasturing steers and cows that yield little more than milk enough to raise their calves, unless one has a lot of it and is short of help or buildings, or has a decided preference for cattle of that class which require very little attention. But if one has no particular choice and can get help, then, provided he can get a market, he will make more out of good dairy cattle on the average farm of good land than he will out of the average beef cattle. Beef cattle are essentially the stock of an extensive land owner, and dairy cattle of the smaller farmer who has as large a family to support as his neighbor who has more land.

As to markets there is generally a difficulty when one lives more than five miles from a station or is outside a shipping distance to a creamery. The situation is relieved, however, if several neighbors are selling cream or butter; for then the expense of hauling cream to the town is lessened, and this often makes a difference between profit and loss. Communities should always try to produce as far as possible a bulk of a single product. As our correspondent is situated he can find a market for his cream at Brandon if he can manage to get it delivered at Oxbow. Or if he choose to make butter there is always a good market for such goods.

The beef type of cow will vary as much in milk production as Thoroughbred horses vary in speed. There is more in the inherent tendency of animals to perform certain functions than their outward form indicates. We have, however, alluded to the performance of the average beef type of cow, and to repeat, that is about all that is expected of her; namely, to raise a calf and give a little milk besides. Steers or heifers from such cows should weigh from twelve to fourteen hundred pounds at two and a half years. Nor does it necessarily follow that if all the cows in a herd be Ayrshires they will give a uniform quantity of milk. Good dairy men claim that a cow that will not give six thousand pounds of milk and make over three hundred pounds of butter in a year should not be kept. Ayrshires, however, are good average milkers as compared with other dairy breeds, and are exceptionally hardy and robust cattle.

In answer to the question as to whether or not farmers should keep special purpose cattle we refer our readers to the article on the dual-purpose cow which appeared in our January 23rd issue. The dual-purpose cow advocated there might be called a mongrel, inasmuch as she is not a purebred, but the term mongrel is rather too harsh to apply to a good cow simply because her ancestors have not been recorded in some book. In the present state of our average farms we believe that a two-functioned cow is the one to keep, but as land becomes higher in price and farming more intensive, farmers will have to specialize, and that according as the conditions enumerated above affect each they will engage in either dairying or beef production.

Our correspondent probably has a few cows that would ordinarily be called mongrels, and his questions have probably been suggested through wondering to what type of bull he should breed them. Our reply should throw some light on the question. If he can find a Shorthorn bull that comes of a strain of cows that are known to be good milkers, then we should advise using him; if he still wants to keep to dual-purpose cows and cannot get a milking bred Shorthorn bull breed to another, if he wishes to go into dairying, he should grade up with a Holstein, Ayrshire or Jersey, but he should not try to maintain a dual-purpose cow by mixing all the breeds, for it is part of the inward cussedness of things that the good features disappear and the objectionable ones persist.

## Record of Performance for Shorthorns.

At the approaching meeting of the Dominion Shorthorn Breeders' Association there is one subject overshadowing all others in importance that should be earnestly discussed, and energetic action taken accordingly. That is, provision for the establishment of a record of performance for milking Shorthorns. Such a record would not take the place of ordinary herdbook registration, nor would it result in the development of a distinct breed. It would merely be a means of indicating those individuals or strains of the breed which have proven under official yearly test their superior capabilities in dairy production. It would be the means of developing the milking