

THE HORSE.

Good News for Horsemen.

For the past few weeks papers all over Canada have been commenting on the horse situation. From an article which appeared in "The Toronto World" last week it would appear that there is some chance of the Allied nations being able to purchase horses in this country in the very near future. No further hint has been given as to why they have not already been buying in Canada on a scale somewhat commensurate with that upon which they have been operating in the United States. According to the "World's" information the Allies bought extensively in the States in preference to Canada because it was feared that horses might be declared contraband of war and this would shut off the supply from that country. They were anxious to get as many as they could before such a declaration could be made. Up to the present time no such orders have been issued and Canadian farmers have, notwithstanding explanations made on the floor at Ottawa, been wondering why the purchase of horses was continued in the United States while no buyers for countries outside of Canada were operating in the Dominion. United States is the only large horse producing country open to the Allies, Russia having to conserve her own supplies for her own army. Horse breeders and farmers generally would be glad to dispose of large numbers of horses in this country and would welcome the foreign buyers on our markets. We have many times emphasized the fact that our farmers are not so much after high prices as they are desirous of thinning out some horses from over-stocked farms. It is claimed that there are still nearly 3,000,000 horses in Canada and almost a half a million more than last year. Buyers for the Canadian Remount Commission have not been operating on the same scale during the past few weeks. There has been some difficulty, apparently in getting the horses transported and as is well known horses are not required in large numbers at the front at the present time; especially is this true of mounts, the larger number used being transport and artillery animals.

A Patriotic Service.

The Canadian farmer, who is forced by market conditions to hold his horses, may be doing unconsciously a patriotic service in this connection. Canadian horses are not allowed to be shipped to the United States at the present time. The European buyers have not been operating on our markets. The Canadian Remount Commission has bought only in limited numbers, so that from week to week our market reports tell the same tale—nothing doing in the horse market. When we consider that it costs about \$100 a year to keep a horse, probably more under some conditions and less under others, the farmer loaded up with surplus animals is surely going to lose money by holding them, but he would lose still more, perhaps, to sacrifice them on a glutted market. It is hinted that Canada is to be the source of a reserve supply of horses for the British army, and that horses will be bought here in large numbers sooner or later, if the war goes on, as all indications point that it will. This being true, the situation is simply: The Canadian farmer is asked to keep and feed his horses for the use of the Empire later on. This is far more economical, so far as the nation is concerned, than for the horses to be bought before they are needed and fed out of Government funds. Every surplus horse fed and maintained by the farmer, and which is bought later for military purposes, really saves the nation at the rate of \$50 every six months the farmer feeds him. That is, if each horse was bought now and kept by the Government six months before actually going into active service it would cost this amount, whereas, maintained as a reserve on the farm, the owners feeding these horses are simply helping out to that extent, and should be given credit therefor. The embargo placed by the authorities precludes sale, therefore, feeding the horses for future service is patriotic service.

Advantages in Breeding Late.

Some indications now point toward the early opening of the Canadian horse market to European buyers. This may stimulate the breeding of mares for fall colts next season. There are many advantages and some disadvantages in breeding late in the season, or in fact long after the usual breeding season is past. A mare bred late in the fall is usually in far better condition to stand the heavy fall work than one served early in the spring. Then, too, she is better able to do the spring work than one bred early, and consequently due to foal in seeding or shortly after. Spring and fall are the two busy seasons for the horses on the farm and most farmers try to raise colts from their working mares, so that there is something in favor of raising fall

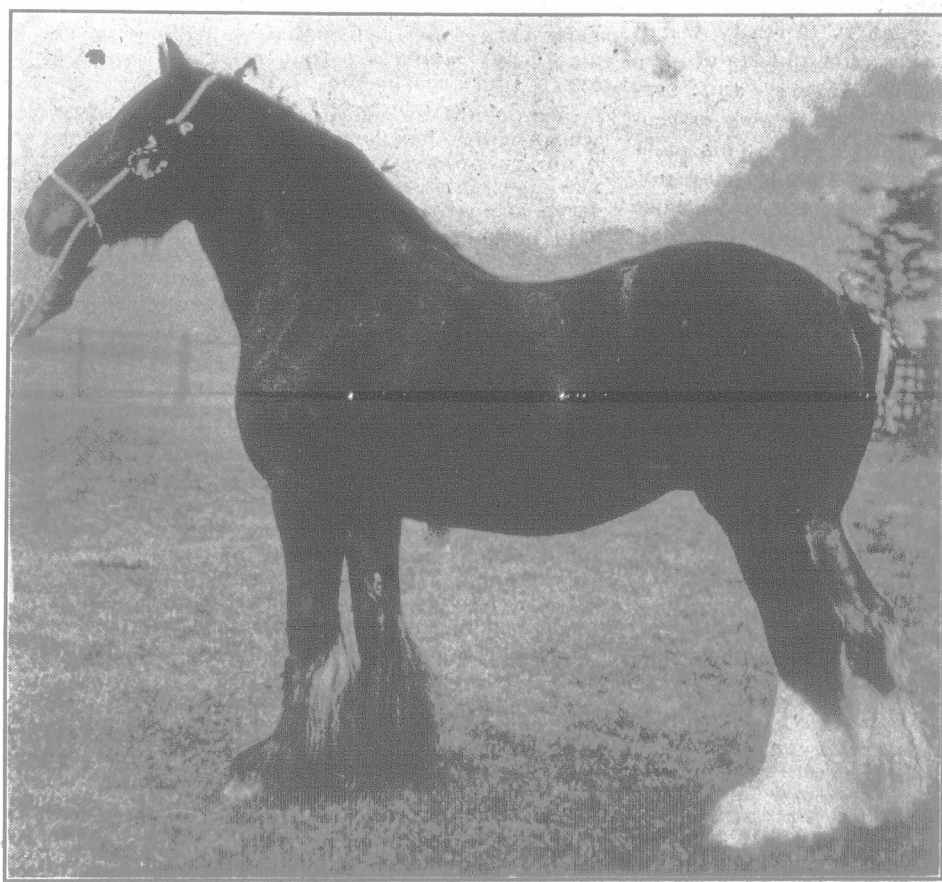
colts, as far as the working of the mare is concerned.

Some hold that the winter gives the fall foaled colt a good opportunity to get a start, as the mare has nothing whatever to do during this season. This may, however, be partially counteracted by the lack of grass for the mare and colt. It is a well-known fact that nothing will take the place of good pasture grass as a place to raise the foal. The mare milks better on grass, and the colt seems to do better on grass milk than milk produced from any other feed. Besides this the colt soon learns to nibble a little grass, which is the most easily digested feed he can get other than his dam's milk. A little more care is necessary in feeding during the winter than in the summer. The mare should get plenty of roots, good clover hay and a fair proportion of bran in her oats.

too rich and the weather is often cold and inclement. Our principal breeds bespeak in their type and characteristics the nature of their environments. Whether it be beast or human there is that in-born character which betokens a native land of wealth and sunshine, or hills and a sterner clime.

Had the volumes, that have been written on heredity, been based on anything but theory, we would now know considerable about the great art of breeding and how likenesses are transmitted from parent to offspring. In poultry it has been shown that the ability of a hen to lay a large number of eggs is passed down, not through her female progeny but through the males. Such information as this is substantial and to the point, but as yet with other lines of live stock we must mate the best with the best and expect desirable results, for we know not yet how the great law

of heredity works in detail. The same mating will give different results on different occasions, but why no one can tell. In spite of the shadow surrounding the law of breeding upon which so much depends, we know its force and feel its power and must work as though we understood it well. Why does the white face in the Hereford predominate, or why does the Angus calf not have horns? or, apparently more simple still, why is the Yorkshire white, the Berkshire black, or the Tamworth red? In some way "opposites" to these conditions have been eliminated or "bred out" by discarding the animal with horns or an undesirable color until the remaining individuals have those characters intensified in their bodies and are sure to transmit them.



Roycroft Forest Queen.
Shire filly; champion at the Royal.

LIVE STOCK.

Influential Factors in Breed Making.

Good judgment and vision on the part of Thomas Bates and Thomas Booth prompted them to breed Shorthorn cattle according to their own ideas. Their ideas were pronounced enough to be termed ideals, and towards the realization of those ideals they directed their efforts. The same may be said of Amos Cruickshank. Had he never seen a vision of the deep, low-set, smooth and beefy Shorthorn, never unto this day perhaps would we have known the Lavenders, the Orange Blossoms, the Broadhocks or the Nonpareils. In the best of them the vision of a man is transformed into a reality, and we profit by the determined and well-directed efforts of a great breeder who died twenty years ago leaving a heritage to all patrons of his favorite breed. Robert Bakewell had a vision of an improved Shire horse and a different type of Leicester. So zealous was he in his work of improvement in all kinds of stock that his name comes down as "the father of improved live-stock husbandry." Hereford breeders have often heard of the Tomkins, Galliers, Price, Hewer and Jefferies, for unto them is due much of the credit for the present type of the white-faced beaver. Men of this century and on this continent are still making history. In dairy cattle particularly records are being broken almost daily and better stock is being bred. We hope the ideals toward which our breeders are striving will stand the test of time as did those fostered by our predecessors over a century ago.

It is remarkable how environment has influenced the character of the different breeds. A breed such as Holsteins, developed on the hills of Ayrshire, Scotland, would be as improbable as breeding up a type of sheep such as the Merino on the fertile meadows of Holland. On the island of Jersey, containing slightly over 28,000 acres, about 40,000 Jersey cattle are maintained, and the balmy atmosphere and pleasant outdoor life are responsible for the breed as we know them. Galloways originate from the South-western part of Scotland, where the soil is none

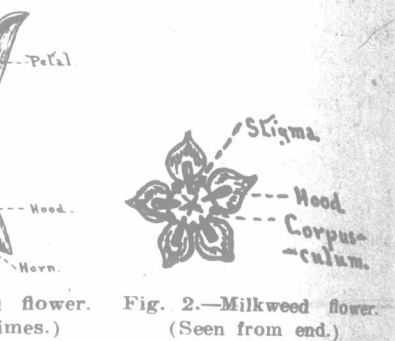
This accumulated character and fixedness of type is what marks our pure-bred animals. Any one who will mix types and indiscriminately mate is undoing the work of centuries. He is decreasing that intensity of blood which insures desirable conformation, milking qualities or pleasing markings, and our live-stock records cannot be guarded with too keen an eye. Using a pure-bred sire on grade stock will improve the latter and in time bring it to a standard worthy of regard, but to mate an animal so improved with a scrub or grade will offset the efforts of the past and make that work of less avail. A knowledge of how breeds have been developed would encourage many a careless breeder to conserve this intensity of blood for good.

A Paddock for the Bull.

The other day we visited several farm stables and took note of the condition of the stock bulls. In one of these stables we saw a bull tied by the neck, getting no exercise whatever. In another, the bull was loose in a box stall. Of course, the latter method is to be preferred every time, but neither gives sufficient exercise to the herd header to ensure a large number of strong, healthy calves. Nearly every farmer realizes, to some extent, the importance of exercise for the sire, but comparatively few take the pains to erect a suitable paddock in which the bull may run and keep up his stamina. We believe that a large number of the complaints of difficulty to get cows with calf, and also regarding weak, poorly-developed calves, are directly due to the poor condition in which the sire was at time of service, as a direct result of lack of sufficient exercise to keep him rugged and fit. Most breeders prefer not to allow the bull to run with the herd, and, as it requires a strong fence to hold him, he is generally left either tied by the neck or in a loose box. It is a crime to keep a bull tied all the time and use him for service. He should at least have a box stall, but it would pay most owners of sires to get to work this fall and erect a high, strong fence around a small paddock adjacent to the buildings, and plan to keep the bull in it for several hours each day. During fly time it is preferable, of course, to keep the bull in a darkened stall during the day and allow him out at night. He should, at least, have five or six hours in the open every day in the year.

of a flower and it can be seen cell from each of the adjacent against the pocket. The pollinia are joined by little stalks to the bottom of slit referred to above. is called the corpusculum and is with a notch in its upper side. the corpusculum, with its notch attached pollinia.

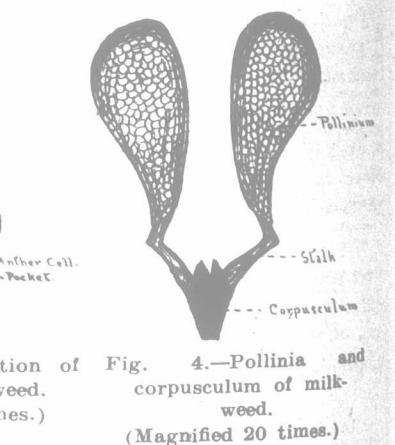
an insect, attracted to the Milk- their odor, visits them in search et slip on the smooth, dome-like hoods, and it only secures a hold ts into one of the pockets. When e the nectar and wishes to proceed it tries to pull its foot out of the e result that the foot slips down- comes in contact with the corpus- hes fast in the notch in its face. w forcibly draws its foot out of e the corpusculum and the two



a. When the pollinia are first stand wide apart, but as their are brought close together, so insect visits the next flower the e introduced into the wide upper like pocket. As the lower part too narrow for the pollinia, as slips downward in the slit the pollinia break and leave them e of the pocket, where the pollen- te and their tubes enter the

aged from the above it takes an strength to be able to pull its his trap-pocket, and such is the uently find insects hanging dead n the slit.

ce which exudes when the Milk- is not the sap, but it is a fluid ecial tubes and is termed latex. s are situated near the surface,



comparatively shallow wound causes out. This fluid is undoubtedly nt, as it is extremely acrid and Milkweed distasteful to herbi- When dry this latex is elastic, soap and water but soluble in having the properties of crude

the Milkweed is one of the most capsules to be found in nature's ds being arranged in a most on the central support, and each t of the finest silk. The seed of wonderfully adapted for dispersal t serves as a balloon to carry t the margin of the seed is of a float if the seed falls into

ard of a case where two boys, farmers having large farms and est, are being encouraged to en- m that it is carrying things too campaign for greater production way the men before the harvest military work. These boys are, k at home, and, while under tem no one can say who should t seem that such farm boys t if they can do better service at