

THE HORSE

Make the Harness Fit

ONE of the most important points in obtaining the maximum amount of work from the horse, is in having his harness properly fitted. The most frequent cause of sore necks is an ill-fitting collar. Sore necks may be caused by collars that are too short, or a collar that is too long; by one that is too narrow at the neck, or one so wide that it works back and forth, or even a collar that is properly fitting, but has hames that are too long. Some horses get sore shoulders from a faulty conformation of the shoulder itself. A very straight shoulder, will usually be troubled with collar boils on the point of the shoulder because the pull is not properly extended along its whole length. With implements equipped with tongues which require considerable backing, sore shoulders are often caused through the lack of breeching.

Not only should collars be fitted to the horse, but each horse should be properly fitted with a bridle of simple pattern, and with a bit suitable to the mouth of the horse. Care should be taken with two-mouth horses to see that the eveners are in reality eveners. And in making up a team for working, the driver should as much as possible, place horses of equal temperaments in opposition to each other. There is nothing that will so wear down the flesh on a quick, nervous horse as to be hitched up with a mate of slow, easy going habits.

The Horse in Winter

WITH the high price of feeds, the farmer is confronted with a problem in the carrying over of his horses during the winter. Whether the horses work or not, our climate demands that considerable be spent in maintaining the horses, both workers and growing stock, during the winter. An Englishman, who has travelled over Canada, Australia and South America looking for a country to locate in with his boys, summed up our climate in these words: "It seems to me that you spend six months of the year growing enough feed to carry your stock over the other six months." While this may not be exactly true, yet the feed problem on the average farm requires careful attention.

Idle Work Horses.

Much has been said on the wintering of idle workers. Some farmers seeing their neighbors' horses, which depend on the straw stack for their winter-feed, turning out in poor condition in the spring, go to the other extreme and stall feed their animals to the detriment of both the health of the animal and plumpness of their own pocket books. A happy medium should be sought.

At the Experimental Farm, Ottawa, it has been found that idle horses will winter successfully on one pound of mixed rough hay, one pound of oat straw and one pound of roots per day for every hundred pounds live weight. Other horsemen winter their idle horses largely on such cheap rough feed as oat straw or corn fodder with a hay. If low grade roughages are used in winter, it will often be found necessary to use four or five pounds of grain per day in order to maintain them in good flesh. The horses should be turned out for exercise every day.

Colts.

One of the great secrets of success with colts is to keep them growing straight ahead until they have reached maturity. The valuable imported horses that command such high prices in this country are fed grain from the time they are old enough to eat it until they are mature. A sufficient

amount of good grain and hay should, therefore, be fed young colts all through the winter of their first year. The breeder who is raising pure bred colts will afford to feed a little grain and a good quality of hay through the second and third years as well. Grade colts, however, must necessarily be carried through their second and third summers on pasture alone for economical profits. In winter, however, they should have the best roughage available, and enough grain to keep them in moderate condition and growing. They should be watered regularly twice a day, and if possible the chills should be taken from the water by means of a tank heater. A comfortable dry place in which to sleep is of great importance in raising good colts.

The Brood Mare.

Successful horse breeders are pretty well agreed in the opinion that brood mares are better off if worked steadily during the winter, rather than standing idle in the stable. To insure steady work, however, they should be driven by the owner or by a good capable teamster whom one can trust. They should never be allowed to strain, nor should brood mares be put over a road where they are liable to crowd.

Mares that are in foal should receive more grain than barren mares or geldings, even if idle in winter. A feed of 5 or 10 lbs. of oats per day or a mixture of three parts oats and one part bran, makes the best winter grain ration for brood mares. Good clean timothy hay free from mould should be used. One of the most important things in keeping the brood mare in shape is regular exercise.

The Stallion.

What has just been said with regard to the mares' need of exercise is also true with regard to the stallion. More stallions are ruined by being maintained in too fat a condition than from any other cause. The stallion from which the best colts will be obtained next year, other things being equal, is the stallion that is worked regularly throughout the winter this year. He should not be allowed to go hungry nor should he be fed on too rich a ration. It is a fallacy for breeders to choose the services of a stallion that looks the nicest. This tempts the owners to endeavor to "trade" by maintaining their stallions in excessively fat condition, and this in turn detracts from the value of the stallion as a colt getter.

Well Done, Manitoba

EDITOR, Farm and Dairy.—I have just returned from a six weeks' visit to the International Soil Products Exposition in the south where Manitoba was making a name for herself. At that Exposition we captured, in competition with the world, sweepstakes, first, second and third for wheat; sweepstakes, first and second for oats; sweepstakes, first and first for rye; first and second for flax, no sweepstakes prize being given; first for barley and numerous other first and second prizes. In addition to this the exhibition of the Immigration and Colonization department proved to be the leading attraction of the International Soil Products Exposition.—Louis Koln, Superintendent of Immigration and Colonization for Manitoba.

The least expensive method of building up a wornout soil is to use just enough fertilizer to get clover started, and get clover in the land at every possible opportunity.

The liberal feeder is the only man who should invest in pure bred stock. Good strains have been built up by men who took advantage of the careful use of breeding stuffs as well as hereditary forces.

Will We Finish Lambs for Block?

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exceeded this amount during the past two years, and promises a still further rise during the next two years, one is safe in anticipating a reasonable profit in lamb finishing, in spite of the very high price of lamb at the present time. If this applies to the purchasing of stock lambs for winter feeding, it would apply doubly to the farmer or shepherd having lambs in an unfinished condition. It is always profitable to finish lambs before putting them on the market.

Feeds For Winter Lamb Finishing.

The selection of feeds for winter use should be to replace good pasture grass in every way possible. Grass is the ideal ration for sheep, not only in cheapness but also in nutrition, palatability, and succulence. A large number of feeds have been tried in this work, and these may be briefly treated under the four headings: dry roughages, succulent roughages, grains, and mill feeds.

Of the dry roughages, alfalfa hay is an easy leader, closely followed, however, by fine clover hays and fine mixed hays. At the Experimental Station, Lethbridge, Alta., it has been found that alfalfa hay, when properly fed with succulent roughages and grain, is worth \$21 per ton for the finishing of lambs. It has also been found that alfalfa hay alone or with meal is less profitable than when succulent roughages, such as roots (turnips and mangels) or green oat sheaves, are also fed. What applies to the rich alfalfa hay also holds true with clover hay. Good quality clover hay is worth from 10 to 50 per cent, more in lamb feeding than timothy or similar grass hays. Proving the value of succulent roughages, it was found also that good quality timothy hay plus mangels gave from 15 to 20 per cent, more profitable gains than clover hay alone. A hay made from peas and oats, well cured,

will produce satisfactory gains, but at least 10 per cent, less profitable than alfalfa or clover or a mixture of these with oat sheaves.

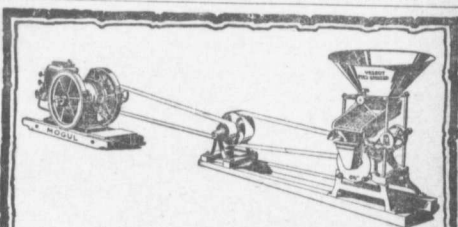
Fine corn stover will also make profitable gains, but there is a large percentage of waste. However, a small amount may be fed satisfactorily as a supplement to good quality leguminous or grass hay. Coarse hays commonly found in marsh lands are approximately 50 per cent, less valuable in lamb finishing than good quality timothy hay, and approximately 80 to 75 per cent, less efficient than clover or alfalfa hay.

A limited amount of straw may be fed satisfactorily in finishing lambs, but this should only be as a supplement to clover hay and roots. Generally speaking, the richer the hay and the better it is cured, the more profit will be made in feeding it to lambs. Coarse, dry roughages of any sort are not palatable, more wasteful, and less profitable than are the finer feeds of the same varieties.

Succulent Roughages.

Succulent roughages play a very large part in profits from lamb finishing. Generally speaking, good succulent roughages, such as turnips, mangels, sugar beets, corn ensilage, pea and oat ensilage, or the like, make the dry roughages and grain more palatable and more digestible. Again, these succulent roughages are cheaply grown and are rich, nutritious foods for themselves. Where corn ensilage may be raised for \$2 per ton, it is the cheapest and best succulent roughage for lamb finishing. When fed with clover hay and grain it will produce five per cent, greater profits than a mixture of turnips, clover hay, and grain. However, a mixture of turnips and ensilage with hay and grain will usually give greater profits. The turnip is the easiest root to feed in finishing lambs, particularly where wetters or even ran lambs may be

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EAST—Hamilton, Ont., London, Ont., Montreal, Que., Ottawa, Ont., Quebec, Que., St. John, N. B.