

or beef or dairying industries have amounted to much if managed in the same way? Has not this sort of thing had much more to do with the decline of sheep-raising than the lack of an import duty on wool?

Our woollen manufacturers—and, indeed, all our manufacturers—would like increased protection on their products, because it would enable them to charge more for their output. There is no doubt as to this. Our woollen manufacturers now have a protective duty of 30 per cent. in their favor; and this, added to the natural advantage of proximity to their market, should be ample to insure reasonable profits, and I am informed by one who knows intimately the conditions of woollen manufacture that this is the case wherever modern machinery and methods are used. There is little doubt that many of our woollen manufacturers are in the same class as our unsuccessful sheep-raisers, and are looking to a protective tariff to make them a profit which should come from the application of more brains in their business. What is wanted is not more protection, but an educational campaign both on the farm and in the factory.

Then, again, this matter of protection to wool is an endless chain—it is hard to see where the effects cease. To give the farmer a gross return of 3 per cent. more than he now receives, or of about 35 cents per sheep, we would increase the cost of the woollen manufacturer's raw material by about 15 per cent. Consequently, he demands more protection, which again increases the cost of material to the tailor and maker of clothing. There, again, more protection is the remedy, and the whole accumulated burden falls on the shoulders of the helpless consumer, with the effect of increasing the cost of living, which is already higher in Canada than in almost any other country in the world. The farmer will be injured in two ways: First, by having his own living expenses increased; and, second, by having his market injured by the greater economies which must be practiced in city homes to meet the increased clothing bill. Further, and worst of all, the farming community will have lost that jewel, consistency, and will no longer be able to meet the rapacious demands of the protectionist manufacturers with that statement of policy which has become a settled question to the 30,000 organized farmers of Canada, "The entire elimination of the protective principle from our tariff." Let us be clear on this question. The farmers of Canada are already suffering greatly from the effects of our protective tariff; in proof of which statement we have only to point out that the decrease in rural population, which is now rousing such concern, is coincident with the application of a protective tariff in Canada. There is, and has been, a persistent demand from all independent farmers' organizations for the cessation of this policy; and now, just as success is in sight, comes this proposal for increased woollen duties, which would rivet our fetters more firmly than before. Let the farmers of Canada beware of strengthening in any way the hands of those who are already working them so much injury.

I have every sympathy with the efforts of the sheep-breeders to revive an industry which should be a great factor in Canadian agriculture. When, however, leaders in this matter come out in support of a measure of such doubtful value to sheep-raising as a protective duty on wool, especially where the support of this measure would mean the weakening of the whole position of the farmers on the tariff question, they appear before the public in a very doubtful light. They are either very badly informed on the sheep question, very easily duped, or are influenced by other and more sinister influences. Let them stick to the policy of education, establish—if necessary—more demonstration flocks, and rouse the department of farmers' institutes until the same attention is paid to sheep that has been paid to bacon and dairying. In these efforts they will have the hearty support of all who have at heart the agricultural well-being of Canada, and there is little doubt as to their meeting with early and complete success.

—E. C. DRURY, Master Dominion Grange.

## HORSE

### Straw for Horses

Professor J. H. Shepperd, of the North Dakota Agricultural College, answering a question recently anent wintering horses on straw, says:

The North Dakota station did a considerable amount of work in horse feeding a number of years ago and made extensive trials with oat straw, as compared with hay for roughage. In the trial it was found that some horses did about as well on it as they did on hay. While others were very much harder to carry, chiefly because their appetites for roughage were too light to cause them to eat enough of it. Aside from those dainty animals there was little trouble in keeping them up on oat straw as roughage.

The oat straw used was that of a normal season, which was coarser and more woody than that which has been obtained this year. The trial consisted of a period of sixty days' feeding with oats as the grain ration against a similar period with oats and hay, and sixty days' feeding with a mixture of half and half bran and shorts by weight with hay compared with sixty days' feeding bran and short with oat straw.

During the first thirty days winter conditions were present and the horses were used only about enough for good exercise. During the second thirty days they were worked at harrowing, discing and seeding and had nearly all of that work the last half of the month. The horses receiving oats and hay as a ration required nine and one-third pounds of oats with hay to carry them, while those on oats and straw consumed eleven and one-half pounds of oats per day. During the thirty days that they had light work, the horses on hay gained 176 pounds and the three on straw 169 pounds. During the thirty days when they had heavy work one-half of the time, those on hay lost 340 pounds, and those on straw 345 pounds.

The similar lots of horses fed on bran and shorts half and half by weight gained during the winter conditions, 88 pounds when fed hay, and 83 pounds when fed straw. When they were on the straw ration with heavy work for one-half of the month they lost 225 pounds, and on the hay ration 235 pounds.

These results indicate that horses can be carried almost as successfully on straw as roughage as they can on hay, provided enough additional grain is given them to supply them with sufficient nourishment. The additional grain required is about one-fifth. If the feeder has facilities for chaffing the straw and will moisten it and mix the grain fed with it during the season when the animals are required to do very little work, a smaller amount of grain will carry them.

### A Question in Breeding

EDITOR FARMER'S ADVOCATE:

Have you or any of your readers ever had any experience crossing a smooth-legged horse

on a hairy-legged one? Would such cross be considered advisable? I have a Kentucky-bred mare, weight 1,150 pounds, and some advise me not to use a Clydesdale stallion on her. I would like some information along this line.

Sask.

R. O. H.

As a general proposition crossing two individuals so unlike in type and character as a Kentucky Thoroughbred and a Clydesdale is not advisable. The offspring may resemble the sire sufficiently in size to make them useful draft animals, but the chances are they will take after the dam strongly in some points and resemble the sire closely in others, making up a combination of Clyde and Thoroughbred characters in one individual not blended in harmony. We have seen mares strong in Thoroughbred blood crossed with purebred Clydesdale stallions. We do not remember having seen offspring satisfactory in size and draft quality resulting, for as a rule the man who crosses a light mare with a heavy stallion does so to secure fair-sized colts of some use for draft purposes. In one case the offspring resembled the dam in feet and legs and had their sire's head and neck and a body that was a blend of the two breeds. In other cases we have seen them the other way about, or with varying characters taken from one or the other parent.

Crossing is almost the exact opposite of grading. The breeder takes two distinct breeds—assuming he is working with purebreds—and attempts to bring into harmonious combination two lines of blood that have been distinct for as many generations as alien blood has been kept from the breed. From such a cross one never knows what will result. The offspring may resemble either or both the parents or neither, for once the ancestral lines of two distinct and long bred breeds are broken and turned into one the chance that determines what the new line is to be may make it like either or both the parents, or like something generations back in either or both their ancestors. Crossing distinct breeds as a rule is not to be advised. We would breed a Thoroughbred mare to stallions of her own breed if they were available, or to stallions of the other light breeds if Thoroughbreds could not be had. The corner stone of successful horse breeding for the man who has a few unregistered mares is grading, not crossing. Crossing might accidentally produce offspring most desirable in every way, but grading carried on for some time would ensure the production of such offspring with certainty.

### Suggestions on Licensing Stallions

EDITOR FARMER'S ADVOCATE:

In a recent issue you ask for opinions as to whether it would be advisable to have more stringent legislation enacted in the matter of licensing stallions. I consider the law governing the licensing of stallions for public service is not as stringent as it should be to ensure the breeding of sound horses. I would suggest that the officials of all shows and fairs insert a clause in their entry forms requiring that all sires entered be subject to veterinary examination, and



TEAM OF CLYDESDALE FILLIES OWNED BY P. M. BRETT & SONS, PRIZE WINNERS AT WESTERN EXHIBITIONS, 1910