

weekly to avoid forcing the colt to stand on heated manure, and the feet should be trimmed to their normal shape every month. This not only prevents deformity, but teaches the colt to submit to handling. In order that the operation of trimming the feet may be performed, it is necessary that the colt be "halter-broken," and taught to stand tied. A little time spent daily in teaching him to lead and stand tied is not time wasted, but will be found valuable when, at a later stage, it becomes necessary to teach him to go in harness, and the fact that he is accustomed to have his feet dressed will avoid rough handling, and probably abuse by the shoeing-smith, when it becomes necessary that he wear shoes.

"WHIP."

Should the Horse's Feed be Ground.

Horsemen express very diversified opinions as to whether or not it pays to grind the feed which they give to horses. In some cases it undoubtedly does, while in others there is little to be gained by it. Where the animals have good sets of teeth, and if their mouths receive the attention they should, there is no reason why nearly every horse should not have a fairly efficient set, they should be able to grind their own feed, unless they are doing very strenuous work. Where the animal is worked hard, the demands made upon his energy are such as to deprive the digestive organs of some of the energy necessary for the best possible digestion of the food. When a horse has only a limited time in which to digest his feed, and when his reserve energy is being almost entirely used up at his work, some gain might follow the grinding of the feed.

Very fibrous foods are not easily masticated, nor are they easily digested, but there is little to be gained in digestibility by grinding, providing the horse masticates the whole product thoroughly. The work of mastication does not draw very heavily on the animal's energy, but if the food passes on down the alimentary tract without being thoroughly crushed and mixed with the saliva in the mouth, such food may require a large proportion of the energy which it produces in order to digest it and pass it on through the digestive organs. With the hard-worked horse, or even with the fattening horse, more or less food preparation will usually increase the facility of digestion, provided, of course, this preparation does not alter or impair the constituents of that food. A healthy, vigorous animal is able to digest the food with greater ease and more quickly than a run-down animal; the latter is generally much benefited by grinding the feed.

The main secret lies in the work of the horse's teeth. If the horse can by any means be induced to grind his own feed thoroughly, there is little use of employing human labor and artificial machinery to do it for him. Nature provided the horse with a mill to do his own grinding, and, to keep it in the best working order demands that it be used constantly. In case it is found that portions of the food go through the body undigested, some remedy must be sought. Oats are very often found thus passing, and a good remedy is to mix them with a little bran or wheat chaff. The trouble often arises from greediness, the animal bolting the food much too rapidly. There are cases where grinding is very beneficial, but where the horse is in good condition, is healthy and vigorous, is not being overworked, and has a good set of teeth, he can prepare his own feed to good advantage, and should be allowed to do so.

LIVE STOCK.

In selecting steers for winter feeding, quality should be made one of the strong points. Poor-quality cattle seldom give good returns for feed consumed, and usually sell at a reduced price when finished.

The sheep shed need not be very warm. A protection from storms is all that is necessary, but it must be situated on high, dry land. Sheep cannot stand dampness, whether coming from over head or underfoot.

A flock of sheep can be wintered up to year's time very well on roughage. A few roots and good alfalfa or clover hay is all that is necessary, and the time required to feed this is only a few minutes a day.

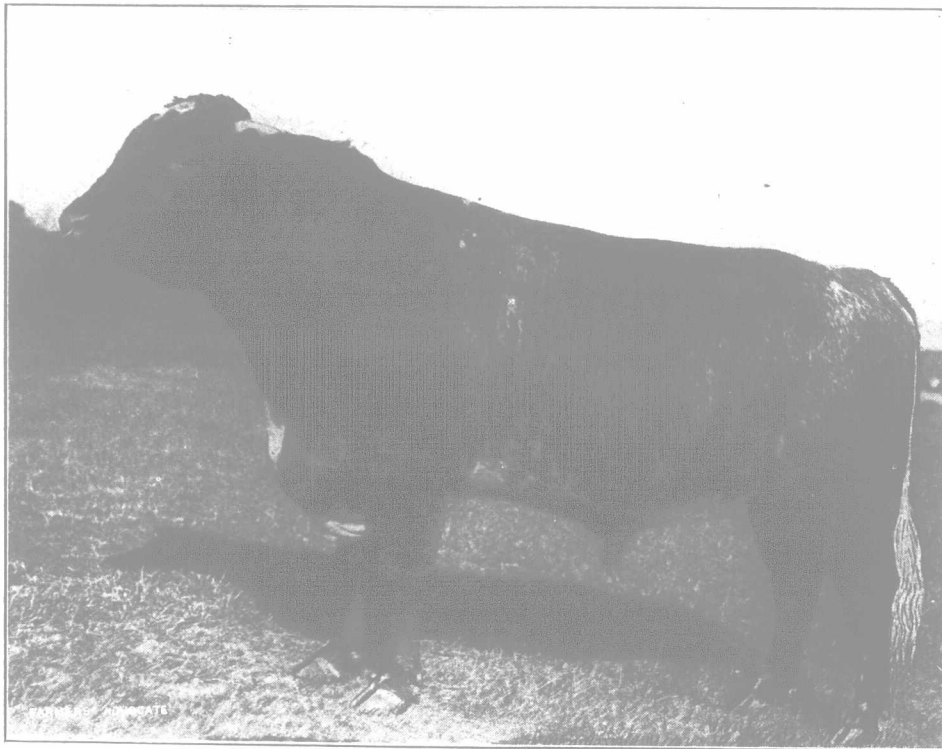
There is nothing that will be better relished by the calves during the winter months than a few roots. Nothing has yet been found to take their place for the calf. A few pulped and mixed with the ensilage and grain ration will add materially to its value.

When winter sets in, do not allow the stock to roam over the fields during the day. If a thaw occurs, they punch the land full of holes, and the frozen herbage may cause trouble if eaten in considerable quantity. A barnyard enclosed by a good fence is a necessity.

Great care should be exercised in commencing feeding the fattening animal. The grain ration should be very light at first, and gradually increased until a full feed is being given. If suddenly placed on a heavy grain ration, the animal's digestion is interfered with, and his appetite falls off, very often causing him to lose flesh, rather than gain. Sudden changes of feed must always be avoided.

A little oil cake can often be used to good advantage in feeding calves. It seems to keep the animal's digestion in good condition, and at the same time act as an appetizer, to say nothing of its high feeding value. Of course, it must not be fed to excess, or the opposite condition will result.

When the flock is brought in from the fields, do not place the ewe lambs and older ewes together. The old ewes will invariably get more than their share of the feed. The lambs will usually be a little timid, and will take some coaxing to get them to eat well, and this cannot be managed where the old "boss" ewes are feeding from the same trough.



Gloster 20th.

Shorthorn bull; second in class at Ottawa Exhibition, 1911, and head of the herd of W. A. Wallace, Kars, Ont.

One of the problems in hog-raising is the furnishing of sufficient exercise for the pregnant brood sows in winter. A good plan is to allow them free run of the barnyard, and have a small, portable house for their shelter when the weather is very cold or rough. This house should be well supplied with dry straw, and should be placed in a sheltered position.

The barnyard and straw stack may furnish a fair pen for the brood sow, but it is a poor shelter for young pigs. The latter cannot stand the cold well, and should always be placed in a fairly warm pen, with plenty of good bedding, as soon as the cold weather arrives. Large gains cannot be expected when the pig's energy is nearly all utilized in supplying the heat necessary for the body.

By breeding large numbers of live stock, it is possible to keep the summer laborers the year round, and the owner is able, by good management, to make the returns from his farm as large in winter, if not larger, than those obtained in summer; besides, caring for live stock furnishes interesting employment. Most farm laborers like to feed stock, and a man will generally do well with that which he takes an interest in.

Don't Fail to Attend the Winter Fair.

Since the inauguration of fat-stock shows and winter fairs, farmers have still something to look forward to after the fall shows have come and gone. These winter shows are primarily stock shows, although, in connection with them, many very valuable and instructive lectures are given, which interest the grain farmer, as well as the stockman. Those who had the excuse, for not attending the fall show, that farm work was too pressing, can scarcely rely on this for a reasonable explanation for their absence from the winter fair. The winter live-stock expositions are held at a time when the greatest number of farmers and stockmen should best be able to leave their work for a few days or weeks, and spend their time to good advantage by following closely the judging and lectures at the winter fat-stock show.

Winter fairs offer opportunities which the autumn fairs do not. The good feeder gets his innings at these shows to a greater extent than at the fall exhibitions, the latter being largely shows of breeding stock, the market classes not receiving such prominence as is the case at the winter fair, where they hold first place. This does not mean that the animals which capture the money at these shows are not well bred. Many of them combine the best of breeding, but a market class is essentially different from a breeding class. Prizes won at winter shows are largely tributes to the feeding ability of the stockman, which is a great encouragement to stock-feeding throughout the country.

The date of holding these shows is such that the feeder has more time at his disposal in which to prepare his stock. He is not hampered in the final touches by the intense heat which often characterizes the time of preparation for the fall fair. There are no flies to irritate the stock, making it

harder to get them to lay on flesh and show the bloom necessary to win in keen competition. Stable-feeding gives better results during the cool weather, and conditions generally are more favorable to the finishing of the fat animal.

The amateur feeder is given an opportunity at most of these winter shows classes, being catalogued from which professionals are barred. The professional breeder and feeder also is encouraged to compete. Prizes are large and well divided, and exhibitors have a good opportunity of advertising their stock. Prospective buyers are usually present in large numbers, and the show, being

purely stock and agricultural throughout, does not offer any counter-attractions, which cannot be said of some of the larger fall exhibitions, where other departments are often made the feature. From the exhibitors' viewpoint, then, the winter fair is deserving of their best patronage.

The interested visitor has a chance at these winter fairs to gain a large amount of knowledge. It is education in the principles of their own business that our farmers need. As an educator of this kind, the winter fair or fat-stock exposition stands at the head of all fairs. Opportunity is given here, as in few other places, of seeing the animals both in the stalls and in the judging-ring. The largest winter shows provide a judging arena with a large seating capacity, where the onlookers can sit in comfort and see experts place the awards. This is one of the best features of these shows, as there is no method of fixing type in the people's minds like watching carefully the work of the judges in the well-filled classes of animals of unusual excellence, such as are found in the rings of the winter shows. The kind of stock that the market demands can usually be learned from a careful scrutiny of the prize-winners in the various market classes. The best type to breed from is shown in the breeding classes, and, altogether, a short time cannot be more profitably spent than by studying the animals which come before the judges at winter shows.