with the rented land, some 500 acres are in pasture.

Everything that is grown on the farms, with the exception of a little winter wheat, is fed on them, and the large amount of manure made serves to keep the portion of the land under cultivation in a high state of fertility. This, Mr. McBean considers one of the strongest points in favor of cattle-feeding. Maintaining soil fertility is an advantage not to be despised. The business is a specialized one, requiring good judgment and skill in buying, as well as skill in feeding. Heavy winter-feeding is not necessary where the cattle are finished on grass, but enough must be given to keep every animal thriving and making substantial gains in weight. Pasture land may be rented in this locality at two dollars per acre, and in conjunction with the land under cultivation, it can be handled to good advantage with steers, labor and all other things being considered. This past season has been a particularly good one. The cattle purchased last summer have practically doubled in value, and from figures already given it is easy to see that a handsome profit on the land rented, as well as that owned by the proprietors, has been realized. Every year is not as good as this one, but, one year with another, to the man who is interested, and who has a thorough working knowledge of the principles of the business, there is a good profit to be made from extensive cattle-feeding.

A great deal depends upon the class of cattle fed. As before stated, and as will be seen by the accompanying illustrations, these cattle are the right type, mostly grade Shorthorns or a Hereford-Shorthorn cross, with short, wide heads and strong muzzles, great spring of rib, smooth and compact, with fine, silky hair and a soft, pliable skin. They give every indication of being good feeders, and results prove the point. None others are wanted. It is found that the first cross of a pure-bred Hereford bull on the Shorthorn cows gives a little smoother steer than when a Shorthorn bull is used. They are also just a little heartier and a little better rustlers, being what Mr. McBean considers the ideal feeding steer. Further crossing is disastrous, poor feeders of an inferior type resulting. The Shorthorn steer is also a favorite. A few Angus have been tried, and made very high-quality cattle, but did not get the size of the Shorthorn-and-Hereford cross or the Shorthorn, so these latter two breeds now form the bulk of the purchase.

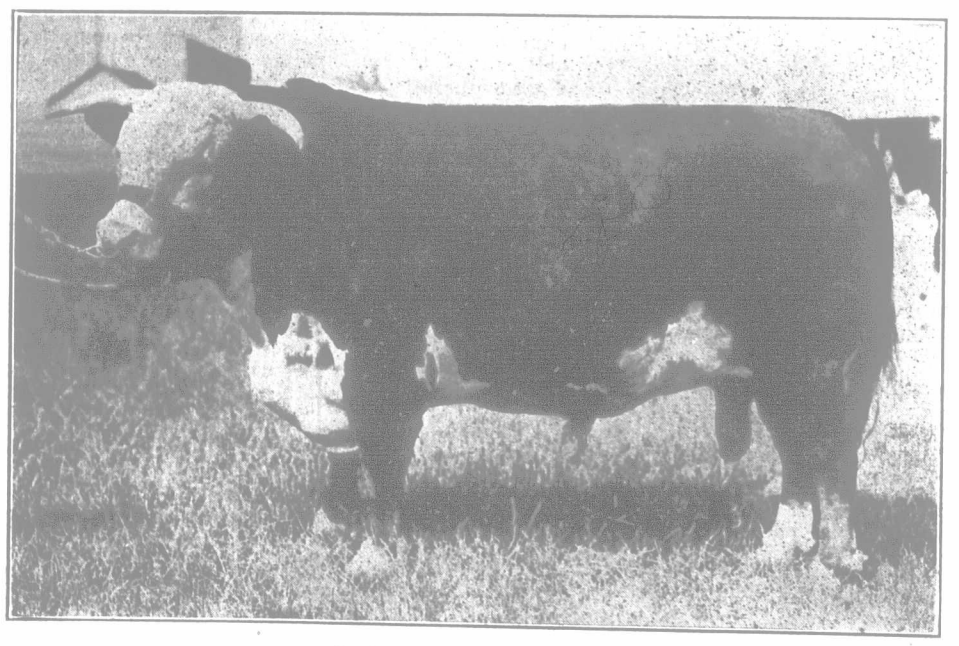
Asked what he thought of the prospects for the dairy Shorthorn in Ontario, Mr. McBean replied: "It is in the interests of the man engaged in mixed farming to raise dual-purpose cattle as there is always a good demand for the right kind of stockers, even if the man cannot finish them himself." He considers the man that sells two-year-old stockers at $50 each, and at the same time gets the milk of good milking cows, cannot make money much faster; and, at the same time, the man who makes a specialty of cattle-fattening is enabled to secure the kind of cattle which feed easily, make a good profit for him, and find ready sale in the open market. The difficulty in the future is likely to be in the obtaining of suitable stockers. Dairy produce has almost doubled in price during the last few years, and this has given the special dairy breeds a great boost, but their stock are of little good for feeding purposes. The dual-purpose cow would solve the difficulty all around, giving the raiser of stockers a good profit, as well as the finisher of the cattle.

Steer-feeding, where they are finished on grass, does not require anything like the amount of labor that milking cows necessitate, and in localities where good grass land is abundant and cattle available, the beef-cattle industry may be pushed, with profit to all concerned.

British ruminants and swine are again barred from entering Canada, owing to an outbreak of foot-and-mouth disease. See notice elsewhere.

A Good Type of Steer.

A three-year-old grass-finished bullock, finished by J. A. McBean, Lambton Co., Ont.



A Champion Hereford.

Curfew; owned by Sir J. R. G. Cotterell, Bart. First and champion at the Bath and West Show.

THE FARM.

Value of the Disk Harrow.

If properly understood and used, no better implement can be used on the farm than a good disk harrow. This information has been gained by actual experience in the field, and from experience of the best farmers.

All good farmers know that if they properly prepare their corn ground before planting, they not only raise a better crop, but less cultivation is required after the crop is planted. Disk the ground before plowing, is a good plan to follow with any condition of soil. Suppose the ground is corn stubble: the disk successfully cuts the stalks, leaving them on the ground as a fertilizer, as well as serving the purpose of keeping the ground loose. When plowed, this loose dirt is turned under, and when disked again, a good seed-bed, as deep as the furrow, is procured.

Suppose the ground is a heavy blue grass or timothy sod: if disked well before plowing, it will plow better, the sod will lie flat and not stand up on edge, causing dry spots on which the corn will not grow or be a bother in after-cultivation. A meadow of blue grass, timothy or alfalfa that has become sod-bound can be placed in proper condition better by the use of the disk harrow than by the use of any other implement.

Very often the ground is dry enough to allow the top to be worked one or two inches, but is too wet to be plowed; by disking, this ground can be put in proper condition for plowing much sooner, and the seed-bed will also be improved. A seed-bed which has been prepared, but which has since been packed down by heavy rains, can be put in better condition, with less expense and time, with the disk harrow than with any other implement.

The question of size is important. Whether it should be a four, five, six, seven or an eight-foot harrow depends entirely upon the condition of the soil and the amount of horse-power at the farmer's command. Whether the disk blades should be sixteen, eighteen or twenty inches in diameter, is another matter. Of these three, the 16-inch is the proper size, for it will disk the ground five and one-half or six inches, which is as deep as practical, and it will cut the ground better and easier, and has less draught than the larger sizes. A disk is not a wheel running over the ground and carrying a load like a wagon; it is a plow, or a spade, cutting and turning the soil.

To better illustrate, draw three circles, one 16 inches, one 18 and one 20 inches in diameter, then draw a straight line across each of them, say four inches from the edge; which one of these three circles will require the most weight to put it in the ground up to the line? Which one will have the largest body of dirt to move at one revolution? Which one will stir the ground best on account of speed? Then, consider that on the disk harrow there are eight, ten, twelve, fourteen or sixteen of these circles. Look at it from another standpoint. Does not the front wheel of a wagon, when loaded equally, cut deeper into the ground than the hind wheel, and does it not break or cut a rail in two that the hind wheel will almost jump over without marking?

The 20-inch disk harrow is sometimes unsatisfactory, and the farmer who has made the mistake of investing in a harrow not adpated to his soil gets an entirely wrong opinion of its usefulness. The owner of a good disk harrow finds it the best implement that can be used on the farm.—[Geo. M. Logan, Indianapolis, Indiana.

Cut the Hay Early.

As the haying season is at hand once more, and it being an important matter to save the hay crop in such a manner as to preserve the quality and nutritive properties as far as possible, I will deal in a few words with our method of curing, though in all probability it is already familiar to most readers of "The Farmer's Advocate."

Alfalfa being the first to be ready for cutting, I will refer briefly to some of our experience in harvesting this crop, and the results obtained from feeding same. When we first began growing alfalfa, we went by the rule laid down in different farm journals, to cut when one-tenth of the growth was in bloom. This appeared all right, until we came to feeding it, and was satisfactory as to the second and third cuttings; but, in feeding the first cutting, it was noticed that the cows began to drop off in the weight of milk produced. We resolved to investigate, and concluded that the first cutting of alfalfa had been allowed to get too far advanced, the stalks being more woody, in comparison with the second and third cuttings, all three crops being harvested at the same stage of growth. Last year, 1911, we cut the first crop a few days earlier, just as the blossoms began to appear. This seemed to remedy the defect as to the feeding quality noticed the year before. We are cutting this year at the same stage. As to the curing, we usually cut in the morning and rake toward evening, using the tedder directly after dinner, if crop is heavy enough to require it. The hay is usually rather green at this stage of curing, but if put up in small coils it will take no hurt, and will be ready to draw to the barn in about three days, if the weather is fine. If the weather should turn wet, we may have to throw out the cocks, but do not like to do so if it can be avoided, on account of the leaves breaking off, causing a loss of the most valuable part of the hay.

Our method of curing red clover is much the same as for alfalfa, except that we may allow it to dry more before raking, and thus are able to draw a day sooner.

Had we a large quantity of hay to handle, we would probably use a side-delivery rake and hay-loader, believing this method much more expeditious, but cannot speak from experience as to the quality of hay produced.

We usually cut red clover before the blossoms begin to turn brown, finding that the horses, to which it is usually fed, relish it much better and keep in better flesh than if cut at a later stage.

I will not refer to the curing of timothy, as we have grown none for some years.

Norfolk Co., Ont. J. AUSTIN.