

inches high. When the oats have been pastured off, the sugar cane comes along and provides two weeks' further feeding. Then the clover shows up. On warm well drained soils this pasture has given good results, but the cane seed is not easily procured, and the mixture is not well suited to all parts of the province.

A better mixture, one that is suited to all parts and one that contains only those grains of which every farmer has abundance for seed, is composed of one bushel each of oats, barley and spring wheat, with six or seven pounds of red clover seed. This is sufficient for one acre. It is sown thickly, so that it forms a mat and always has the ground covered. I have used it for four years; for two years of which I have kept accurate records to find out in dollars and cents what it is worth. By allowing an acre or even a half acre of this for each cow on the place, it can be made the biggest revenue producer of any of our farm crops.

Spring pastures take extra land, but land is the cheapest factor in farming to-day. Returns from the land are not great with cereal crops. A lot of farms with small fields, small machinery and depleted fertility, could be put to better use than competing with the rich, cheap land of the West in growing cereals, or growing common pastures that dry up when they are most needed.

#### Spring Pasture at the College.

At the College we have two herds of dairy cattle. One which is kept isolated from the rest consists of nine splendid producing cows of the Ayshire, Holstein and Shorthorn breeds. They are fed largely on dry feed all the year round. In spite of this handicap they have splendid records and last year produced on an average 14,000 lbs. of milk and 528 lbs. of butter fat, which is more than twice the average of production per cow in Ontario. This year we picked out nine cows of our outside herd giving the same percentage of butter fat, and having the same length of lactation period. They were not quite such good cows; giving 12,000 lbs. of milk and 460 lbs. of butter fat on the average, or 2,600 lbs. of milk and 58 lbs. of butter fat less than the others. The nine inside cows gave the return of \$1.72 for each dollar's worth of feed consumed. The nine outside cows, though they were lower producers than these, gave, during the four and a half months they were on the green pasture, \$2.10 for each dollar's worth of feed consumed, a difference of 40 per cent. in favor of the spring pasture. For the pasture months of June, July, August and September, the nine inside cows cost for feed 86 cents per cwt. of milk, and 22 cents per pound of butter fat produced. The outside cows on pasture cost for feed 45 cents a cwt. of milk and 11 cents a pound of butter fat for the same four months, or just about half as much as the others. This difference was accounted for because they gathered their own feed and saved labor when it was high in price and more profitably utilized at other farm operations.

#### What an Acre Will Do.

The year 1915 was a great pasture year. That season we had 36 acres of spring pasture and 50 acres of third year timothy sod, a total of 86 acres. This provided enough feed for 72 head of cattle, of which 40 were mature cows. No silage nor other feed, except a little meal, was given. Less than an acre was required for each cow. After September 1st a little second growth cow was available.

The summer of 1916 was the driest we have had at the college for 28 years. We had 36 acres seeded to a permanent pasture mixture of two pounds of alfalfa; two pounds timothy; two pounds of meadow fox tail; two pounds of tall oat grass and some clover. Besides this we had 34 acres in spring pasture, a total of 70 acres. In spite of the dry season this 70 acres carried 77 head of cattle, of which over 40 were mature animals, through the dry months. They did not

get an ounce of silage or other roughage, yet this pasture kept them till September 16th, after which they got a little second growth c'over in the day time. In spite of the drought that prevailed in Ontario we fed a larger herd and fed them better than ever before.

The clover that is sown with the spring pasture mixture is not utilized for pastures alone; it also seeds the land down for the next year's hay

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## The Twice-Champion Herd\*

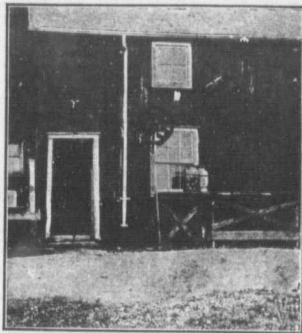
How It Was Cared For and Managed

JAS. BURTON & SON, Elgin Co., Ont.

FIFTEEN years ago our herd consisted of grade Durhams. We thought in those days any other breed wasn't much good, but as time went on we replaced some of our vacancies with Holsteins. We soon found that the general run of the Durham breed could not compare with the Holstein for high production; especially for persistency. We have not been raising any of our calves, selling them all when first born, as we thought it more profitable to buy matured cows than to rear them. This year we raised three, thinking that at the way the prices for dairy cows were soaring, it was high time for some of us dairymen to raise some. From our last year's herd of 18 we weeded out four of them, as it is always our custom every year to weed out the poor ones, replacing them to the best of our knowledge with higher producers.

As to the management of our herd care and regularity of feeding are the very essential points. We generally manage to have our cows dry for six weeks, or, preferably, two months. During this period it is our special desire to get them in as good condition as possible. A cow freshening in poor condition cannot produce like one in good heart. During the months that they are being stabled they are turned out twice daily for water and for exercise. We give them a little salt on a little chop or bran every day during this period. Some men advocate having it in a trough for them to help themselves, but we find that to be a poor way. We prefer feeding it for some cows when allowed will eat too much and others not enough. Our cows freshen in February, March and April. We feed them plenty of sugar beets along with their grain ration, composed of one-third corn and two-thirds oats chopped together. This, with clover hay for roughage gives them their diet until grass comes. About May 24 we turn them

\*The Burton herd won the silver cup twice in succession as the highest producing cheese factory herd in Western Ontario. Twelve grade Holsteins and two grade Durhams produced 119,553 lbs. milk, an average of 8,549 lbs. a cow in the factory season.



External Evidence of Hydro Electric.

The line shaft extending through the wall supplies power for outside purposes on the farm of R. A. Furbale, Elgin Co., Ont.

—Photo by an Editor of Farm and Dairy.

out to grass. We still continue the grain and roots for ten days of the week. At this period last spring they were giving an average of sixty pounds a day. By this time they are pretty well used to the change from dry feed to grass, so we take the grain away from them for three to four weeks. We think during this period, while the grass is very new and juicy grain is of little use to them. About July 10 we start giving them each about three quarts of bran twice daily. A little later we start giving them about two quarts of oat chop with three quarts of bran, as by this time pasture was getting pretty dry. About August this year we turned the cows into our second growth of pasture on the hay fields, being lucky this year to cut our hay early; we were nearly through haying by July 1. The clover thus got a start before the dry weather struck us heavily. We frequently change our cows from one field to another, even if it is no better pasture. During September and October, finding that the extreme drought was getting serious, we found it necessary to increase the feed in some way, so we fed a little linseed twice daily, along with the grain ration. We had plenty of grass, such as it was, but this season being so dry it was not juicy enough for the milk supply.

In 1915 the herd consisted of 18 cows, producing in the six months from May 1st to October 31st, 7,175 pounds per cow. By weeding out to 14 and giving them more attention the production was increased to 8,540 pounds each in 1916.



A Carload of the Butter we Hear so Much About—the Product of an Alberta Creamery. Of the total output of Alberta butter for 1916, about 1/3 was produced by the Edmonton creameries. Of this amount the Edmonton City Dairy, Ltd., one of whose cars is shown herewith, produced 2,520,000 lbs., or more than the entire production of the province five years ago. This was the 45th car of butter to be shipped from this creamery for the season. It was for the Montreal trade.