

oats with grass seeding; third year, hay; fourth year, wheat with grass seeding; fifth year, pasture for cows. For this line of farming it would be better to be near a good industrious village from where you could ship your cream. If you were located near a city, dairying or fruit growing would be more profitable.

Middlesex Co., Ont.

"FARMER TO BE."

Managing a 100-Acre Farm.

EDITOR "THE FARMER'S ADVOCATE":

The farm that I would desire to manage would be one containing one hundred acres of high, rolling land, not more than one mile from town and railway. The buildings should be situated back from the road about one-third the length of the farm. I would want a spring creek flowing across one corner, and a bush covering ten acres at the back. The soil of clay loam with a sub-soil composed of as much gravel as possible, would be my opinion of an ideal farm.

I would choose a one-hundred-acre farm because if it becomes necessary one man can successfully operate it. Some will doubt this, but, with a boy during harvest, a diligent and industrious man will be able to keep his farm a model for neatness. This farm would be fenced off into six fields containing fifteen acres each, leaving ten acres for the bush which would be used for growing timber only. The field which the creek flows through would be left for a permanent pasture, the remainder would be under cultivation and cropped by a three-year rotation.

I would follow mixed farming to a certain degree, but specialize in breeding Holsteins. My plan would be to purchase seven female calves from registered stock. These would not be bred until they were almost two years old. I think the small cattle I have seen in this part of the country is due to the breeding of immature stock. I have known farmers to use bulls under a year old for breeding purposes. How could they expect thrifty stock? Yet, the bulls which have been tried and proved reliable are sold for canners as soon as the owner needs to change them, to prevent in-breeding. If farmers who raise their cattle would buy these, they would soon see the advantage over the use of young bulls. Some of the farmers here breed their heifers when they are very little over a year old. This is a great mistake, for it not only stunts the animal's growth but weakens her constitution. A cow to be profitable must have good digestive organs, so as to make the best use of feed.

I would have the heifers come in between two and three years of age, and milk for at least one year. Never milk for a shorter period, for after the second time they come in they will be inclined to dry at about the same time they did during the first milking period. If I had sufficient help on one hundred acres, I would go in for dairying, but when working it alone I would milk only four of the seven cows and let the calves milk the rest. The males would be sold for veal at one month of age, and pure-bred female calves purchased to take their place. These would be taken off the cows at six months and fed good succulent feed, until the frame is developed. They would then be bred as I have already described, and sold just before they freshened.

I would also raise between ten and fifteen pigs every year. After the pigs are weaned they would be fed a certain quantity of skim-milk, in order to keep them growing, besides other feeds which at first would be largely composed of middlings. When about three months old, I would add to this pulped roots, in winter and green clover in summer, with beans also used during the winter, besides a little ground grain which would be gradually increased with the age of the pigs. To finish the hogs they would be fed largely chopped grain morning and evening, and sugar beets or mangels at noon. I think no animal on the farm will give quicker returns than the hog, nor larger profits if fed the by-products of a dairy.

Poultry would also be kept. About one hundred hens would be all I could properly care for. These would be kept in a hen house instead of the stable, where a great many farmers have kept and are still keeping the poultry. But, there has been a great improvement along these lines during the past two years, and we are beginning to realize more and more the importance of poultry on the farm. When the chicks are first hatched, I would feed them bread crumbs or rolled oats, then small wheat with a mash of corn and oats mixed with skim-milk, also ground bone and buttermilk, with roots or green vegetables. When it came to fattening the cockerels, I would put them in a small pen, and give them all the feed they would eat. There is a great difference of opinion existing regarding the proper ration to feed hens when laying. I think different breeds require different methods of feeding and feeds. Therefore, no definite ration can be used with success under all conditions. The Barred Plymouth Rock is my choice for general purpose farm fowl.

Wellington Co., Ont.

SAM PAGE.

THE DAIRY.

A B. C. Dairy Record.

EDITOR "THE FARMER'S ADVOCATE":

In a recent issue of your journal an account is given of the most creditable year's performance of the junior two-year old Jersey heifer, Brampton Central Princess. It must surely be a gratifying event to every Jersey enthusiast in Canada to find this heifer establishing such a good standard of production for her class, and the Dominion Experimental Farm at Ottawa, is to be

congratulated for its possession of such combined type and production as is represented in this individual. It appears, however, as though someone has been over-zealous in attempting to claim for this heifer the Canadian butter-fat record for her class and breed.

Only a few days ago it was my good fortune to pay a brief visit to the farm of a very modest and unassuming but hardworking farmer, Wm. MacIntyre, at Chilliwack, B. C. Mr. MacIntyre has not a great many pure-bred Jerseys, but he has a few very good ones indeed, in his herd, and he is using as a herd sire a bull that is just about as well bred, from a production standpoint, as one could easily obtain anywhere in Canada.

Mr. MacIntyre invited me to look over not only his cattle but also their records of performance, and amongst these I found a certificate from the Live Stock Commissioners' Department at Ottawa, issued last Fall, for the yearly record of performance of the cow, Lady Pauline, and this certificate gives the following information:

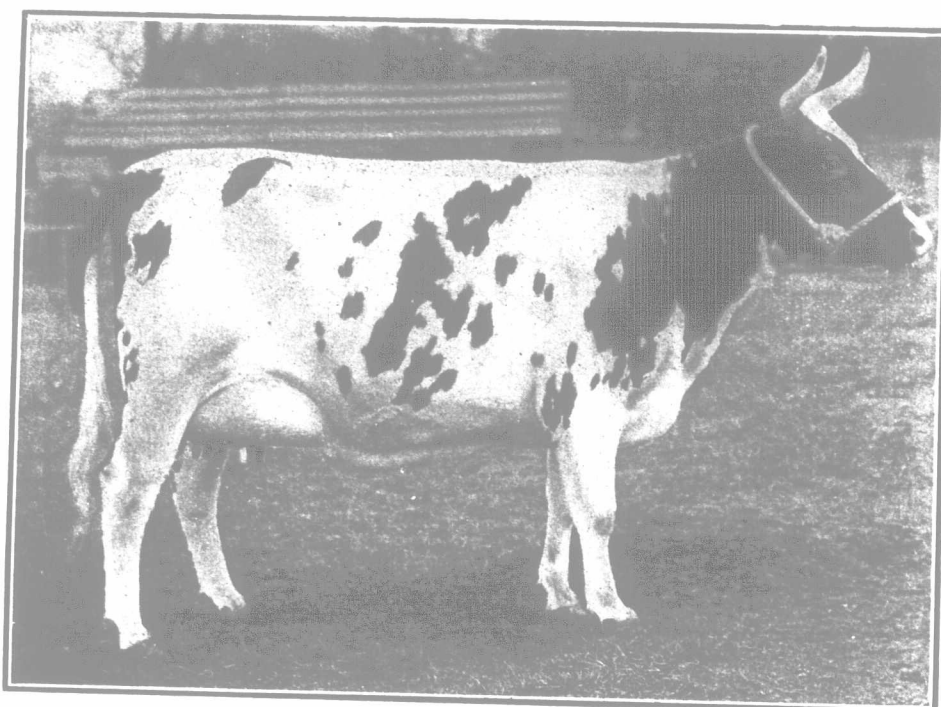
"This heifer began her work at two years and sixteen days of age, beginning about March 7, 1915. She worked for 365 days and calved on May 12, 1916. During the 365 days she produced 10,023 pounds of milk and 491 pounds of butter-fat, with an average test of 4.89%."

This would give Lady Pauline an advantage over Brampton Central Princess of .815 pounds of butter-fat, and an advantage of 781.5 pounds of milk if Brampton Central Princess' record is correctly stated in your issue at 9,241.5 pounds of milk and 490.185 pounds of butter-fat. It is also interesting to note that Lady Pauline began her record at 121 days earlier age, which would indicate a still greater superiority in her.

Lady Pauline was bred in British Columbia, her sire being Tyee George, No. 1849, and her dam, Pansy of Pender, No. 1845, but a study of her pedigree reveals a distinguished ancestry from the standpoint of ability to produce. She did not receive particular care. She was handled in the same way, fed in the same way and milked at the same milking periods throughout the year as the rest of the cows in Mr. MacIntyre's small herd. It is a matter of congratulation not to British Columbia, but to Jersey breeders in Canada and to dairy cattle breeders generally throughout Canada, to find that such excellent performance is indigenous to our dairy cattle herds.

B. C.

J. A. McLEAN.



A Model of Ayrshire Type.

Champion Ayrshire cow of the Ayr Show, Scotland, 1916.

The Herd is Built up by Retaining the Best Cows.

EDITOR "THE FARMER'S ADVOCATE":

Many years of mercantile business developed in me rather highly the commercial spirit. In my years of monetary prosperity I purchased what seemed to me the finest farm in the district. Through the course of another eight years or so I had, one way and another, disposed of my various business enterprises and found myself a plain, common farmer, knowing only too little of the most difficult of all businesses to really learn. I am trying to build up a dairy herd and I write this letter in order that some of my fellow-farmers endowed like myself with too much commercialism may not fall into the same trap which I have several times done, but henceforth, I hope, no more. In this rather isolated section there is no regular market for anything in the way of live stock. It is just as you can happen to sell or buy. Having always had a certain amount of money at my command, people in the neighborhood with cattle to sell and no one especially wanting them, came to me and offered them at a price that always enticed me to buy whether the animal was good, bad or indifferent. The same when buyers would come; I would set a price on my best animals. The consequence is I have at present a barnyard full of nondescripts, neither tempting for buyers nor satisfactory for the owner. I always sold at a profit, but under this system how long would I be developing a dairy herd that would give me that inward feeling

of satisfaction which comes from something of which one is justly proud.

Last fall I purchased for \$60 a two-year-old heifer, whose sire and dam I had previously owned, and this calf was dropped some months after disposing of the dam. It developed well and had every appearance of making a fine dairy animal. Its breeding was good. After purchasing it I didn't bring it home, as it was running on vacant land with other cattle. A month later a townsman asked me what I would take for the heifer. I said \$75 and her calf. I got her calf—a heifer—when a few days old, and valuing it at \$10, I figured that I had made \$25; instead, I lost maybe an untold amount. The heifer is only getting dry prairie grass and a little bran, no succulent feed of any kind and yet she gives from 35 to 40 pounds of milk per day. On a good ration of roots, silage, alfalfa and mixed grains, I believe she would double the flow. What then would her value be as a breeder, as well as a milk producer? I knew her chances for being a good cow were ninety-five per cent. but I was making \$25 in a few weeks, without even taking her home, and I could not turn down the chance. Fellow-dairymen beware! You can hardly set a price on the extra good cows. When a buyer comes, grit your teeth no matter how much you need the money. You can't be a dairyman and a dealer. Sell the poor cows.

British Columbia.

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Do Pure-Bred Dairy Cattle Pay?

EDITOR "THE FARMER'S ADVOCATE":

The value of pure-breds was impressed on me more forcibly than ever the other day when a young farmer, to whom I had sold a sire some two years ago, came to me and made this remark: "I have a beautiful heifer calf at home and as I was looking at it this morning, I concluded it was worth about ten dollars, but the thought also occurred that if it had been pure-bred I would not take \$100 for it."

In considering the matter of the relative values of pure-breds and grades I have since wondered if this young man's ten to one comparison was correct and I thought of how the pure-bred business had worked out with me. I therefore commenced to figure and found the following result: On March 3, 1906, I made my first investment in pure-bred Holsteins, which consisted of two calves one week old, a male and female. Since that time I have invested \$1,955. Now, what have I received? After carefully estimating the herd on hand and what I have sold during that time it amounts to \$11,700. This amount does not include the milk from the herd—and they have been heavy producers—during that time, nor does it include the services of the sires on our own herd or outside services, although I have charged up the amount paid for sires. Now the knocker, if he believes this statement at all, will say "look at the feed and care they get." However, they have had no better care nor feed than any herd should get, be they grade or pure-bred, to make them a paying proposition. I may also add this herd had been in the care of hired help at least three quarters of the time.

I have neighbors who have been in the same business and I believe they can make an equally good showing, and there are numbers throughout Ontario who can do the same. I am therefore convinced that there is no better paying investment for any farmer than the reliable pure-bred Holstein cow.

A PRINCE EDWARD COUNTY FARMER.

Milk Records and Sale Prices.

The average yield of milk and butter-fat of the Ayrshire cows, qualifying for entry in the Advanced Registry shows a gradual increase. For the quarter ending March 15, 1917, there were 102 entries of cows and heifers with an average yield of 10,587 lbs. of milk and 420.87 lbs. of fat. Thirty-nine of these were in the mature class where the average yield was 12,429 lbs. of milk and 484.85 lbs. of fat. The average per cent. fat for the 102 entries was 3.98.

From February 15 to March 15 there were 29 Canadian Ayrshire cows and heifers which finished their test and qualified in the Record of Performance. Some of the three-year-old heifers which qualified had a considerably higher record than the mature cows. The highest record for milk in the mature class was made by Rose of Verschoyle. Her milk yield was 10,823 lbs. Lady Betty 2nd headed the class in production of fat with a record of 472 lbs. The four-year-old class was