

pitch, has left little ground for the Eastern barrel-packed apples. To Mr. Clement it is quite evident that there is bound to be competition between the Eastern Provinces and B. C., but this will largely be a matter of advertising. In the Eastern Provinces they have what he terms the common varieties while B. C. specializes on the dessert apples like Grime's Golden, Jonathan (neither of these seem to do well in the East) McIntosh Reds, Yellow Newton, Spitz, etc., and it is for the East to increase the consumers' appetites in cooking apples and for B. C. to impress on the consumer that box-packed apples are each one selected, and when he gets a box he can use every apple in it.

He is satisfied that B. C. is surpassing the East in quality and quantity per acre, and while the East has the advantage in cheap labor, cheap land, and proximity to markets, still B. C. is not likely to take second place in the race of extending markets.

The boys and girls of B. C. have been taking hold of agricultural contests, and Mr. Hopkins has some very interesting contests to tell about. He calls them "eye-openers to the older farmers" and all his contestants must give the result of their success to the public in an essay, which in itself is a good training and encourages

them along a line that will help them to take their places in public life.

One girl took potatoes and on her 1-10 acre she reported a ton and a half, and made a profit of \$23. The winner in 1915 potatoes was a girl also, and on her 1-10 acre grew 2 tons and won a registered Ayrshire heifer.

Those trying poultry had keen competition. Pure-bred stock only was permitted, most of them reported that on \$1.75, or thereabout, they could mature a dozen chickens and get their best pullets of the heavy breeds to lay in October.

With the pigs there was good work done. One boy at a cost of \$6.50 for feed of all kinds, green feed and all, got his pig to weigh 200 lbs. at six months. Another boy got his pig up to 260 at eight months.

Mr. McCulloch, reporting on sheep, found 1916 a bad one, largely on account of the inroads of the coyote. These pests have increased so rapidly that they have cleaned up all the rabbits and must call on the farmer to support them. They have become so insistent in some places that the sheep have to be dropped for a few years. In other sections the old hay meadows that have been cropped so heavily to supply construction camps have refused to yield anything but weeds, and sheep are

needed to put back the fertilizer that has been robbed and to eat up these weeds. He is urging the farmers all over to go in for sheep on these facts: sheep give three crops each year, these crops (so called) are harvested at as many different times of the year, a ton of alfalfa will keep eight to ten sheep over winter, housing is inexpensive in our mild climate.

His suggestion is Shropshires for a breed for B. C. on account of short wool. In the Cariboo the shippers this year broke away from the itinerant buyers who gave very low prices, and they shipped this year to the Alberta Wool Sale and have received enough extra to insure a repetition of this. It is probable that a date will be set for shearing and a bigger shipment sent next year if the majority will adhere to this date.

The Department of Agriculture has just issued a notice that along with the usual winter packing schools which are open to any one, there will be a two week's session held in the upper grades of the public schools. Last year's classes helped out considerably in the packing of the crop, and it is believed that it will have the same effect this year.

B. C.

WALTER M. WRIGHT.

Canada's Young Farmers and Future Leaders.

Topics for Discussion for Young Farmers.

Each week we shall announce topics for discussion in this department. Topics will appear each week during the winter season, with the dates upon which manuscript must be in our hands. Readers are invited to discuss one or more topics as they see fit. All articles published will be paid for in cash at a liberal rate. Make this department the best in the paper. This is the boys' and young man's opportunity. Here are the topics:

1. Spring Seeding of Grasses, Clovers, and Grains.

How many pounds of the different kinds of grasses, clovers and grains do you sow per acre? Why do you sow that amount? Are the small seeds sown behind or in front of the grain spouts? Why do you prefer your method? Are the grains sown broadcast or with hoe or disk drill and why? State the difference if any made in the kind and amount of seeds sown for hay or pasture. Mention the nature of the soil. Essays should reach this office by February 24.

2. Have You a Vegetable Garden?

State the kind of soil, where on the farm is the garden located and how much land is devoted to vegetables and small fruits. What varieties of vegetables do you grow? Do you plant so as to permit of using a horse cultivator? Do you use hot bed to start certain crops? What attention is given the garden during the summer? What system of grouping the different vegetables is followed? Do you make a practice of successive cropping? What is the estimated value of your garden crops? Make the essay to the point and mail the copy to this office by March 3.

Would Feed all he Grew.

EDITOR "THE FARMER'S ADVOCATE":

Managing a farm implies having a farm to manage. If I were buying a farm I would try to get one convenient to railroad station, church and school, with rural mail service and good telephone connection, and within a reasonable distance of a good market. I would not ask to be located too near a town or city, as the labor question would be more difficult when in close competition with manufacturing and other interests. The farmer with an automobile who is located six, eight, or even ten miles from town is only half an hour from town. Besides, land values and taxes are much lower there than close to a large centre. Of course, if a good road was not accessible, I would prefer to pay a good deal more and be nearer town.

I would insist on a farm being well watered either by springs, a running stream or never-failing wells convenient to buildings. I would want at least 100 acres of good deep soil, well drained, or so situated that it could be drained, with 10 or 15 acres of woodland and perhaps some pasture land, say 150 acres all told.

With these main essentials and a railroad station, say within a couple of miles, I would proceed to stock up with about fifteen of the best dairy cows I could get and some of them, if I could afford it, would be pure-bred, gradually working into a herd of pure-breds. I would get the best pure-bred sire I could afford and raise all the heifer calves to replace cows that fell below the average of the herd. In the course of time the sale of pure-bred cattle would become one of the main sources of revenue.

I would aim to have about half of the cows freshen in the fall, and half in the early spring; would ship cream to the creamery during the winter and send milk to a cheese factory during the busy summer months. This arrangement would furnish work throughout the year, for a man and be a fairly constant source of income every month in the year.

The by-products, namely skim-milk and whey, would be fed to calves and hogs. The amount of grain raised would determine to some extent the number of hogs kept, although I would keep enough to consume the skim-milk and whey, even if I had to buy grain to finish them. I would keep only enough horses to do the farm work, say four or five, one of which would be a brood mare, and a colt each year would keep the farm

supplied with horses, with an occasional one for sale. A colt broken at two or three years of age could be hitched with its mother to do some of the lighter work and thus pay for part of its keep. The farm should be laid out in fairly large fields, say 20 acres each, and one man could drive three or four horses on most of the machinery, (the farm to be worked by two men) leaving the other man to do chores and other work not requiring horses. Wide implements should be used, plow, cultivator, harrows, and seed-drill all requiring at least three horses. I think I would let the neighbors run the tractors for a year or two until I accumulated enough capital to get one.

Regarding crops grown I would keep at least 20 acres in alfalfa, the first crop cut for hay and the second and third crops for hay or pasture, as needed. The balance of the worked land I would put under a four-year rotation as follows: First year, clover; second year, barley or fall wheat, with the land given a thorough after-harvest cultivation; third year, hoed crop, corn, beans, potatoes; fourth year, oats, seeded down again with clover. In actual practice this rotation seems to suit me the best of any I have tried for keeping the weed crop in subjection. It gives one a chance at all of them. They hay crop kills the thistles and similar weeds, while after-harvest cultivation gets many weed seeds sprouted, and helps eradicate quack and wire grass which get too much start if land is left more than one year in sod, while the hoed crop following gets nearly everything that is left.

A silo is a very essential part of dairy farming, and corn enough to fill it would be grown, say 12 acres, while beans prove a very profitable side line at present prices. I would feed everything grown on the farm, except the wheat and beans, and would bring back the equivalent of these in concentrates, such as oil cake, cotton seed and bran.

Prince Edward Co., Ont.

MORRIS HUFF.

He Would Have a "Model" Farm.

EDITOR "THE FARMER'S ADVOCATE":

In selecting a farm, I would look for one which is suitable for mixed farming, and located on a good road leading to a live town or city, so as to facilitate the marketing of produce. The size of farm would depend on circumstances, but, considering the cost of operating and the help problem, 100 acres proves satisfactory. A farm of this size can be managed to employ one man the year around, or, by changing the system slightly, it is possible to manage, if necessity arises, by the aid of a day laborer during the rush season, or by changing work with a neighbor during haying and harvest. Two neighbors working together agreeably can harvest the crops on two 100-acre farms.

I prefer clay-loam soil, well drained, either artificially or naturally. Experience has proven that under-drainage pays, and almost any crop required on a mixed farm can be grown on properly drained land. If the farm wasn't drained when I commenced working it, I would aim at putting in a complete system of under-drainage at some time, so that a rotation of crops could be followed. I prefer a four-year rotation, that would include grain, corn and roots, hay and pasture, and would follow it as closely as possible, although the hoed crop would barely take as much land as hay and grain. To offset this a piece of land used for early pasture would be broken up in early July and given two months' summerfallow in preparation for wheat. A small acreage of wheat would be grown for a cash crop and to furnish straw for bedding. A small acreage of oats and barley would be sown separately for seed, but the bulk of these grains would be mixed, as I have noticed that as a rule the yield is heavier than when these grains are sown separately. All the land devoted to grain crops would be seeded down each year to red clover and a little timothy and alsike. What was not required for hay or pasture would be plowed under to increase the humus. I believe in doing as much fall plowing as possible early in the season, and then keep the ground cultivated until it freezes up. This has a tendency to destroy noxious weeds, such as

sow thistle and twitch grass. The last cultivation in the fall would be with the wide-toothed cultivator to partially rib the soil to give the frost an opportunity to work. A clover sod would be chosen for corn and it would depend on the soil whether or not I would plow it in the fall or spring. While an endeavor would be made to have silage to supply succulent feed all winter and during midsummer, I want enough mangels and turnips to permit of feeding a few to the stock all winter.

Holstein cattle, bacon hogs, Clydesdale horses, and Barred Rock fowl would be the stock kept, and the number would be regulated by the amount of feed I could grow. While I might not be able to commence with all registered stock, the best grades possible would be secured and I would aim at improvement through high-quality sires. By means of scales and tester the cows to breed from would be picked out and the boarders disposed of. I consider four horses to be sufficient, and, where possible, wide implements would be used. To make their use easier as few permanent fences as possible would be erected, as I believe temporary fences are more economical.

All feeds grown, with the exception of wheat, would be marketed through live stock. From observation I have noticed that twice-a-day feeding gives good results and saves time, compared with three times a day. As much of the manure as possible would be drawn directly from the stable to the field and spread on the corn and turnip ground.

Time would be set aside to keep a small orchard, consisting of apples, plums, cherries and small fruits, pruned and sprayed. A vegetable garden would be cultivated to supply the table with vegetables summer and winter. I would want a good lawn and flower garden to surround the house and improvements and conveniences would be put in the house as well as in the barn and stable. I would aim at bringing each branch of the farm up to a high standard, and to do this visits would be made to other farms to get ideas. Meetings and conventions would be attended and books and farm journals read in order to keep abreast of the times.

Wellington Co., Ont.

Q. W.

The Little Things are Important.

EDITOR "THE FARMER'S ADVOCATE":

To run a farm and continue to be successful is not merely to turn everything into money, for it is not always the man making the most ready cash who can be truly termed a successful farmer.

I think that two hundred acres is plenty of land for the ordinary farmer and yet I would insist upon having a farm that size with the usual amount of unworkable land, such as a woodlot, swamp, and the land taken up for buildings, etc., thus leaving somewhat less than two hundred acres of workable land.

A clay loam is best, slightly rolling, as it is easier drained and in case of a wet or backward spring, we can usually get on the land earlier and if properly worked it will hold the moisture fairly well on a dry year. It is best to seed down with clover or timothy often, thus it will help to keep the land clean, but it should be broken up the third year. I believe in sowing alsike with red clover or timothy. It will stay in the land for a long time, and those who are fortunate enough to have a few colonies of bees will find it a great benefit.

A farm that is not farther than eight miles from town can do a good market business from eggs to finished beefs. The Shorthorn type seems to be the best all-round cattle, though one cross with the Hereford makes excellent grass cattle, but if any are kept for cows this cross will curtail the milk flow. I believe in liberal winter feeding; it is better by far to sell off in the fall all those we can't winter properly. And we shouldn't be afraid of the grass getting too much of a start on the cattle in the spring. The second week in May is usually early enough to turn them on grass.

The sheep industry is a link in farming that has been dropped out by a great many farmers. I prefer the Leicester breed, and believe in keeping from ten to fifteen. Sheep are easily cared for, except in lambing