

too wide, and then keep it in shape with the split-log drag, with two plates on, like the one I have, which belongs to the council.

Our council haven't made any special effort to have the roads scraped systematically, any more than to supply part of the levellers; but I think they should offer a number of bonuses in different parts to the farmers who will undertake, with the leveller, to keep up the roads in front of their own places; and every farmer should take pride enough in the road in front of his own property to keep it in proper shape. I know of no better way that a farmer can keep his horses in condition for spring work than by going out on the roads and scraping them two or three times a week. If he gets too much dirt in the center, put a pair of light harrows over it, and then roll, and he will soon have a road which the water won't lie on, and the automobiles can't hollow out.

I get no compensation from the council, nor ask any, as they put my road in shape with the grader for me, and I do what I do for the satisfaction of having a nice piece of road in front of my own place, which pays me for all I do.

I must not close without thanking you for the interest you have taken in our roads. The success of the split-log drag is all due to the way you have kept it before the public in your valuable paper.

W. H. SPEERS.

Halton Co., Ont.

Sow Buckwheat.

A buckwheat farmer is generally regarded as an agriculturist who is on his last legs. Now, while no one would recommend anyone to make buckwheat-growing his sole occupation, there are certain advantages about this crop that demand more attention than they ordinarily receive.

First, there is the benefit that accrues from the fact that buckwheat may be sown late. One, for example, has a field that is dirty, and requires cleaning, but which one does not care to run fallow, nor to put into corn or roots. This field may be worked throughout June, and for a week or two in July, and then sown in buckwheat. This crop being a quick grower, it usually gets the start of the weeds, and in this way, for the two reasons mentioned, the field is cleaned. Further, when an old strawberry patch is plowed after the season's yield has been marketed, ideal conditions are provided for a fine harvest of buckwheat. A field that is late for oats or barley, affords a chance for this crop.

A second advantage is that buckwheat, both in sowing and reaping, occupies the farmer's attention during periods of the year when other farm operations are out of the road. Add to these benefits the facts that this is an excellent grain for at least moderate and occasional feeding, that it is a fairly certain and prolific crop, and one that commands a paying price in the market, and we have abundant reason for the farmer's planning for utilizing at least one field annually for this valuable crop.

J. K.

A Discouraging Season.

Editor "The Farmer's Advocate":

Your editorial regarding the "Tripod of Successful Seeding Practice," viz., timeliness, thoroughness and despatch, is very difficult to follow this spring, as in the past three weeks there has been such rains as to make it out of the question to work even on lands that are thoroughly drained. I sowed a field of oats on the 17th of April, and the land was in the best of condition, being very mellow, and it was worked up very rapidly. Today (May 10th) this field looks as if it had not been worked at all, it is so battered down with rain, and the grain has not shown up yet. Moreover, it is raining now, as I write, as though it had never rained before. Not one-tenth of the grain crop in this district has been sown yet, and the farms are presenting a very dismal sight, indeed. Any fool can prepare a field when it is dry weather, but if you or Prof. Zavitz can tell us how the good seed-beds can be made in such mud as we have, you will be bestowing a boon on the farmers that they would very much enjoy.

Northumberland Co., Ont. A. J. RUSSELL.

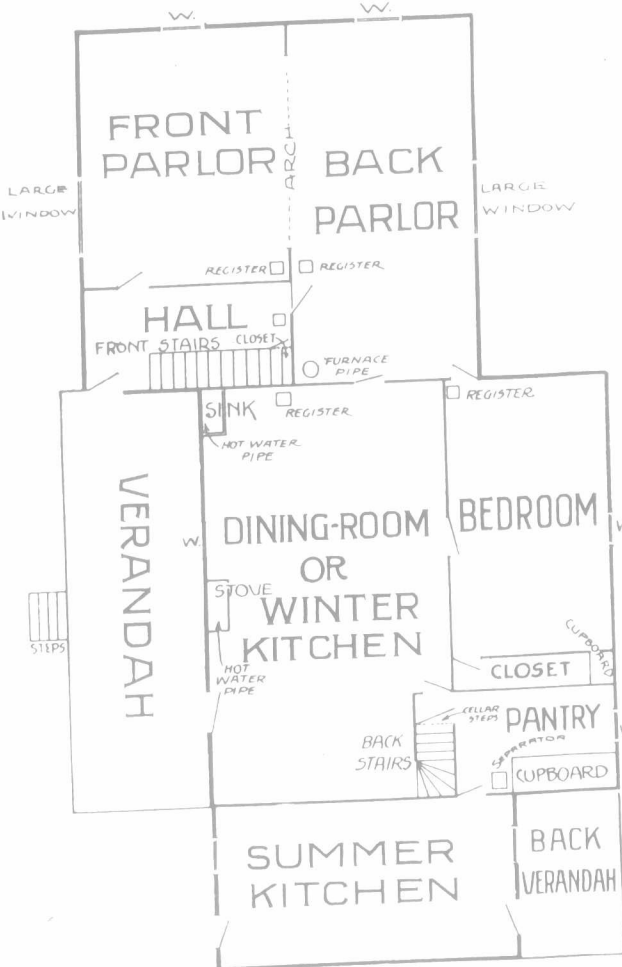
Scots to Farm on a Large Scale.

One of the members of the Scottish Agricultural Commission, which visited Western Canada last summer, has been in the West, with the intention of purchasing 10,000 acres of land for wheat-growing purposes. He represents a syndicate composed of the commissioners and a few of their friends, who purpose taking up a tract of land of about this acreage, and settling it with Scotch plowmen. The delegates last year were much impressed by the possibilities of farming irrigated lands, and it may be they will purchase in the vicinity of Lethbridge, or, if they decide on a mixed-farming section, the Red Deer country seems their choice. The farm is intended to be managed along progressive lines, and operated in the most practical manner.

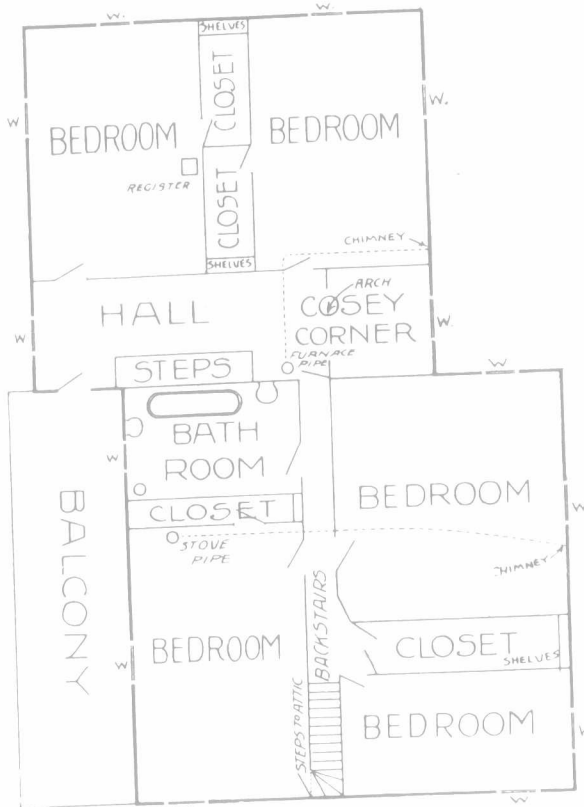
Another House Plan.

Editor "The Farmer's Advocate":

Having noticed in a recent issue a plan for a house, I thought I would send mine, for we find it a very handy house to work in. Of course, one could change this to suit his taste. I could not give the cost, as lumber is somewhat cheaper than when I built three years ago, and then, others might not care to use the same kind of material. You will notice closet under front stairs in front hall, which we find very handy to hang our coats in. Also, in the clothes closets you will notice shelves, which I find handy for



Ground-floor Plan of Daniel Frost's House, Northumberland Co., Ont.



Second-floor Plan of Mr. Frost's House.

keeping bedding on for each room. You will also notice that we go down cellar under back stairs, and then there are steps up to the attic over the back stairs. This is a very handy pantry. The separator stands close to the door leading to summer kitchen; also a cupboard is built in for dishes; it is large enough to do most of the work in. Before the extreme cold weather sets in, the back part of the house is heated with coal stove, and hot water boiler being in bath room, helps also, and keeps it warm until time to start the furnace. The two doors going out on veranda, also balcony door, have glass in, which takes the place of a window.

We have taken "The Farmer's Advocate" for

some time, and have saved most of the papers, and would not be without it if it cost twice as much.

DANIEL FROST.

Northumberland Co., Ont.

THE DAIRY.

Calculated Value of a Pure-bred Sire.

A few poor cows may do little permanent harm to the dairy herd, but a poor sire will do untold damage. Frequently, dairymen hold the penny so close to the eye it is impossible to see the dollar a little farther off, and this is just what a man is doing who has a good dairy herd of grade cows, and thinks he is economizing by buying a poor or even common sire.

If the good pure-bred sire improves the milking capacity of his daughters only 1½ pounds of milk at a milking above the production of their dams, this would mean an increase of 900 pounds of milk for the ten months or 300 days an ordinary cow should give milk. The daughter would also be a much more persistent milker—that is, would give milk for a longer time in the year—and she would regain her flow of milk better after an unavoidable shortage of feed, as in a summer drouth. These daughters may certainly be credited with 1,000 pounds more milk per year than their dams produced. At the low estimate of \$1 per 100 pounds, this extra amount of milk would be worth \$10 per year. The average cow is a good producer for at least six years, or until she is eight years old. It will, on the average, be four years after purchasing the sire, before his first daughters will have brought in the first extra \$10. Eight dollars and twenty-three cents, kept at compound interest for these four years, at 5 per cent., will equal \$10, so the daughter's improvement or increase of income the first year is worth \$8.23 at the time her sire is purchased. The cash value of the daughter's improvement (inherited from the sire), figured in the same way for each of the last six years she gives milk, is shown in the following table:

Improvement first year	\$ 8.23
Improvement second year	7.83
Improvement third year	7.46
Improvement fourth year	7.11
Improvement fifth year	6.77
Improvement sixth year	6.45
Improvement for six years	\$43.85

The total increased income of a cow over her dam by having a good sire is, therefore, \$43.85.

In an ordinary dairy herd of thirty-five to forty cows, an average of seventeen heifers per year should be obtained, and twelve of these should be worth raising, making it easily possible for a bull to earn twelve times \$43.85, or \$526 per year. This would amount to \$1,578 in the three years that a bull is ordinarily kept in service.

Cost of providing every heifer one good parent:

	Pure-bred.	Scrub.
Cost of sire	\$150.00	\$ 30.00
Interest, 3 years, 5%	22.50	4.50
Cost of keeping 3 years	100.00	100.00
Risk, 3 years	50.00	10.00
Total expense, 3 years	\$322.50	\$144.50
Value at end of 3 years	100.00	30.00
	\$222.50	\$114.50
Extra cost good sire, 3 yrs.	\$108.00	
Extra cost good sire, 1 yr.	36.00	
Extra cost good sire, one daughter	3.00	

Considering the male calves as worth no more than if sired by a scrub, it would then cost \$36 to provide one good pure-bred parent for the twelve heifer calves which are raised each year, or \$3 per heifer. Where else can such an investment be found? Three dollars expended brings an average return of over \$7 per year for six years, or \$43.85 in all. This makes a clear addition of \$43.85 to the income of each daughter, or a net profit of \$40.95, and of \$1,470 for thirty-six daughters in the three years. Here is nearly 1,000 per cent. profit on the investment. The original cost of the good sire looks very small beside the \$4,170. It really pays as nothing else on the farm pays to put \$150 into the right kind of a dairy sire that will return practically ten times \$150 within three years.

An examination of details will show these estimates to be conservative. There is plenty of margin left for failures and unfavorable conditions. One thousand pounds of milk per year is a conservative estimate of the improvement of the daughter's production to credit to a good sire. But the details of figuring it may be varied to