

diameter, the less the cost, as far as capacity is concerned. It all depends on how much you can feed each day. All the rest of the work, drawing stone, water, digging foundation, boarding men, is not counted in the cost. The roof is lumber, 8-inch, cut to a point, with 2 x 8 circular plate, and center ring for boards to be nailed to. A window for filling, on the side remote from the barn, is the only opening in the roof, as the chute only goes as high as the top of the highest door. Four teams and eight men filled the silo in four hours, after the corn was cut down in field by hoes. I like the hoes better than a corn harvester, as they leave a much shorter stubble. I paid the blower outfit \$5.00, and think I have a cheap feed for the money expended.

Bruce Co., Ont.

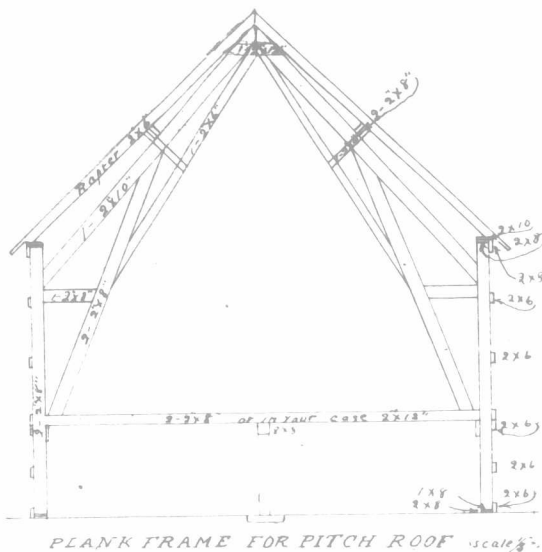
T. W. LAMB.

[Note.—While figuring the work done by farmers themselves in constructing improvements makes the final cost of these improvements seem much greater than where the cost of material and builder's fees are the only items listed, is there any justifiable reason why the work done by the farmer himself or by his men and teams, should not be valued? If these men and teams went to work for someone else, there would be a price set at once upon their labor. Are they not worth just as much, and often more, to the owner at his own work, and should the work they do not be charged up against the particular part of the farm on which it was done, whether it be building, cultivating or rearing?—Editor.]

Plank Frame Barn with Ordinary Pitch Roof.

Editor "The Farmer's Advocate":

I am intending to build a 30 x 30-foot addition to my barn, which is 50 x 30 feet. Would like to build after the pattern explained by Alf. A. Gilmore in February 1st issue, but do not want the hip-roof. Would the frame be strong enough if a 2 x 10-inch or 2 x 12-inch plate were bolted from the top of one post to the top of the other in the interior bent, and the upper part or purline post and roof support were not used, but the bents would be fastened together in the same manner as though the roof support were used?



Posts will be 18 feet; roof, 2 feet less than one-half pitch. Wish to use lower part for sheep house, and store hay above. If I used a stick of timber 8 x 10 inches through center, lengthwise, well supported, how far apart would 2 x 12-inch joists need to be to support the hay above, joists to be 6 feet above lower edge of sill? What would be best method of supporting the joists on outer ends next to wall? How are rafters fastened on the plate? C. C. W.

Of late, most of the plank frames that have been shown in this paper have been designed with a gambrel roof, and, no doubt, have led this subscriber, as well as others, to suppose that an ordinary pitch roof could not be used with a plank frame. This is a mistake, as this style of frame is well adapted for any kind of roof, and the only reason that most of the designs shown had gambrel roofs was that most of the farmers are using this kind at the present time.

In answer to your first question, I am submitting an elevation of a bent for a pitch roof, and I think that you will be able to understand it without much explanation, as the only difference that amounts to much is in the roof support and the sub-support, as the latter is below in this roof, while in the other design it is above.

The construction you speak of might do, but the plank would certainly be in the way of spreading the hay, and would be in the center of the rafters unsupported, which throws a tremendous thrust on the wide plates from the roof.

Good 2 x 12-inch joists, under an evenly distributed load, over a span of 15 feet, will require to be set on 18-inch centers.

The extreme ends are supported on each end

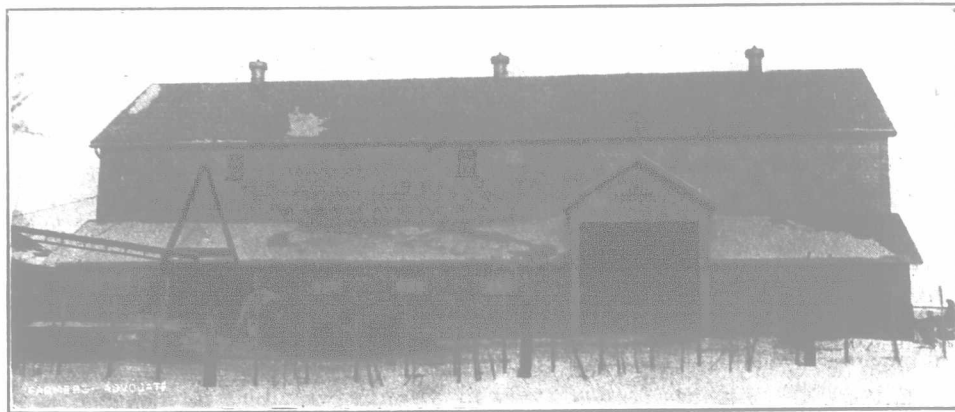
side walls, while another piece 2 x 10 inches, or 2 x 12 inches, is spiked to the inner edge of the side posts to further support them, while additional strength may be added by spiking block of 2 x 8 inches between side nailer and this piece of 2 x 8 in., which acts as a bridging.

The rafters are spiked to both the main and purline plate, the same as for any kind of frame.

In the issue of "The Farmer's Advocate" of February 22nd there appeared a design for a plank frame, in narrow barns, that might be altered some to suit your pitch roof, and if this was done, the saving would be quite an item. To do this, it would be necessary to lower the top ends of the purline posts and give them more slope, so the purline plate would come under the center of the rafters. However, you will have a good safe roof by using either design.

Huntingdon, Que.

A. A. GILMORE.



A Remodelled Barn.

Front view of the barn of R. R. McConnell, showing drive floor on the basement level; also pole for litter-carrier and the position of the lean-to.

THE DAIRY

Kerwood and Strathroy Reports.

The annual meetings of the Kerwood Cheese and Butter Factory and of the Strathroy Creamery, both under the proprietorship of the well-known and highly efficient creameryman and cheesemaker, W. Waddell, were held the third week in February. From the audited reports we glean a few interesting figures. The Kerwood factory has swung almost entirely to butter, the statement showing receipts of \$7,093.03 from cheese, while, for butter, buttermilk, casein, etc., the receipts were \$77,616.35, this including an item of \$91.30 for bank interest. The yield of cheese was 10.74; the average price per cwt. of milk for cheesemaking was \$1.03, plus drawing, or \$1.11 delivered; average price of cheese, 13.45 cents. Of the butter, a large proportion is made from gathered cream, an increasing number of patrons desiring the skim milk to feed. From 262,580.33 pounds of butter-fat, 308,617 pounds of butter were made, besides a small amount of cream otherwise disposed of. The average price paid patrons per pound of fat was 25.33 cents. Gross receipts for the year reached the impressive total of \$841,709.38.

At Strathroy, 131,227 pounds of butter were

made during the summer. The average price per pound of fat was 24.07 cents, this being for the summer only. The Kerwood average is higher, being for the whole year. The same price for fat is paid at both creameries, month by month. Total receipts at Strathroy were \$31,257.21. The patrons of these two plants are to be congratulated upon the clear statements of a very satisfactory year's business. Kerwood creamery butter has a high reputation, and commands a price above the average on London markets.

Reconsider Your Ration.

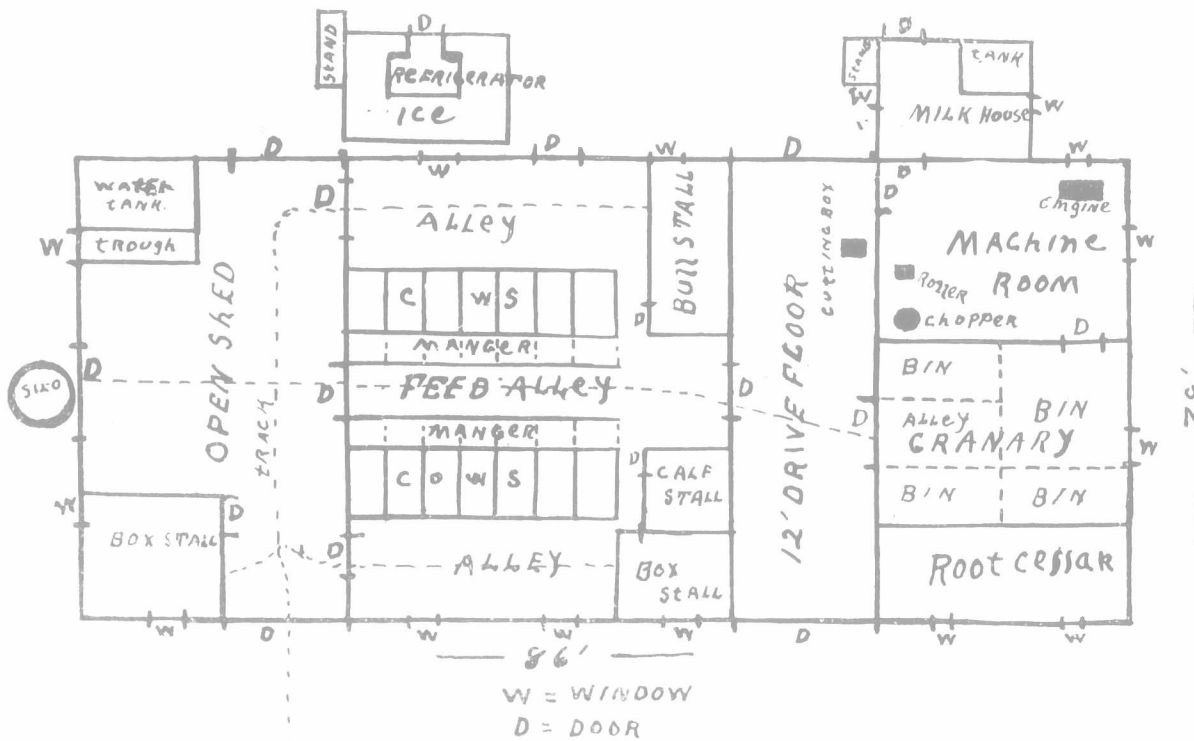
It pays every dairyman to reconsider his ration at frequent intervals. For instance, a little experience soon lets one know if he is getting the milk yield he should from the money value of the ration fed. If the returns in pounds

are not there, it is generally safe to conclude that something is wrong with the balance of the ration, with its palatability, or with the grinding of the grain. Many a farmer has allowed his profits to slip away just because this link in his chain of success has been weak. For instance, this season, clover has been out of the question, and it is the dairyman's business to make up for this defect. He will find this to be about as hard a task as he as clover is the milk-producer's best friend. Yet, the lack must be made up, or loss will be sure to follow. The task is made all the more difficult this year, as the oats are generally light and of very inferior quality. A very good plan is to increase the amount of oil cake or cottonseed meal fed in the grain ration. Pea meal is good, but the price this year is almost prohibitive. The nice point is to feed the cows all they require, and yet to have them "humming" for their food every feeding time.

The vigorous appetite of the cows will indicate whether the food is well digested or not. Weighing the milk and the feed will determine the profit, while the ratio between the feed and the milk will make clear, to a certain extent, whether or not the ration is balanced.

When feed is so high-priced, and when it is so hard to get fodder of good quality, the dairyman needs to exercise his thinking powers. With milk at the present price, and butter soaring, it pays the farmer to study his dairy herd, with a good deal of detail. Dammess must be kept out of the stable, the windows clean to let in abundance of sunlight, the currycomb and brush used plentifully, lice cleared out, and the cows allowed an abundance of quiet hours. There are difficulties in the way of making a dairy herd pay this year, but a man who cannot overcome difficulties has no place in the dairy business.

W. D.



Basement Plan of R. R. McConnell's Barn.