

Oats, barley or wheat may follow the corn, and these should be seeded down with grasses and clover. The following mixture is costly, but the yields amply justify the extra expense of the seed: red clover, 6 pounds; alfalfa, 2 pounds; alfalfa, 6 pounds, and timothy, 6 pounds.

The land should be left under this mixture for one year, or at most two years, depending on the length of the rotation. When the farmer has a

permanent pasture for the three year rotation, viz. corn, grain and hay, is the best rotation for profit in Eastern Ontario. If it is necessary to have the rotation include pasture, then the four year rotation, corn, grain, hay and pasture is the best one.

Although experience and experiment have proved the beneficial effect of short rotations on our aggregate yields of field crops, still it can

safely be said that only one or two percent, of the farmers of Canada are closely following such a rotation. We are becoming more and more convinced of the necessity of following crop rotation if we are to get the results that we should. The object of the farmer should be to drive the land to its limit, for the harder it is driven the more liberal is its response to the work put upon it.

## All Around the Farm---Suggestions From Our Folks

The Production of Clean Milk  
L. HANRATTY, Hastings Co., Ont.

"If a job is worth doing at all, it's worth doing well."

This is an old adage and applies equally well in the production of milk, whether it be for immediate consumption or to be manufactured into dairy products. A first-class article, either of butter or cheese, cannot be made unless the raw material is first-class, i.e. I have learned that the following precautions have to be carefully adhered to if a first-class article must be produced:

(1) The cows should be groomed daily, and their udders washed previous to milking.  
(2) The fore milk should be rejected.

(3) Feeding should always be done immediately after milking.

(4) Cleaning operations should be finished, some considerable time before milking to allow the dust to settle.

(5) Narrow mouthed pails should be used, and the milkers should wash their hands several times during milking.

(6) Milk should not be exposed to the air of the stable after milking, but should be immediately removed and cooled down to 40 degs., at which temperature bacteria cease to develop.

(7) All utensils should be thoroughly steamed before using.

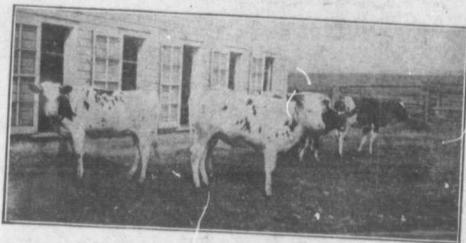
(8) The use of unclean cloths is a frequent source of bacterial contamination, and should be carefully avoided.

### Experience With Ground Limestone

J. A. Macdonald, Kings Co., P.E.I.

THE use of lime—not burnt lime, but ground lime rock—as a fertilizer in the last couple of years has attracted the attention of many wide-awake farmers. On one farm—the writer's—ground limestone was applied a year ago last spring to alternate strips on a field that was being sowed to oats and seeded down to clover and timothy. The experiment was repeated last year. In 1914 little if any result was observable in the oats, but in 1915 the clover on the limed land was nearly double that on the untreated land. Last year the oats on the lime treated land were somewhat better than on the untreated land, due possibly to the fact that the limestone used was somewhat finer ground.

Now, these are matters of fundamental importance. If ground limestone will accomplish nothing else than cause a big increase in the clover fields of the country, it will pay to apply thousands of tons of it to the farms of Eastern Ontario, Quebec and the Maritime Provinces, for everyone knows that clover is a great soil enricher, and that once the farmer has established the clover crop on his



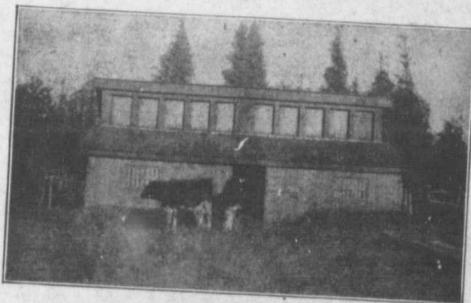
A Calf Barn With Many Commendable Features.

Particularly notice the amount of window space. This barn is long and narrow, with just one row of box stalls and a feed passage at the back. The photograph was secured by an editor of Farm and Dairy on the farm of G. A. Brothert, Peterboro Co., Ont.

farm, he has, to a large extent, solved the whole question of soil fertility. More clover and yet more clover has changed many a run-out farm into productiveness, and has laid the foundation for the successful growing of all kinds of crops and for the feeding of live stock.

Now limestone is abundant, and transportation facilities should make it accessible to the Western county farmers. The question, therefore, arises, Can I afford to do without lime? What can I afford to pay for it? Should the farmers in my section of the county cooperate to buy a portable limestone grinding machine? How much limestone shall I apply per acre? And so on. These and many other questions in regard to the use of limestone are, or should be, up for discussion during the present winter.

Mind that many a person has a mistaken notion in regard to the use and value of lime. It is not a fertilizer. It is a soil amendment that corrects acidity and improves the physical texture of the soil, and so makes it possible for manure and fertilizer and cultivation to do better work. It is necessary to understand this fully before one makes up his mind definitely as to what he will do.



This House, Too, Has Its Good Points.

The monitor type of roof with windows facing the south is desirable where there are two rows of stalls and the feed passage in the centre. Sunlight is the cheapest of all gericides, and we can't get too much of it in the calf barn.

### Handling Corn Land

Elias B. Martin, Jr., Waterloo Co.

AS soon as the snow is off the field, but while the frost is still in the ground, I like to handle the manure. I do not like to haul it on the snow as too much is lost by leaching, and we find that it doesn't rot so much in our yard until the spring rains and warm weather come. Our yard is but small with a wall around it, and the cattle keep the manure tramped down firm. About the middle of May, or when the clover has made a good start, I plow it down about six inches. I intend to get a subsoil lance to put on my plow for plowing sod and then to plow six inches, and to work up about three or four inches more with the lance. I prefer the walking plow to the sulky plow, as I have yet failed to see one make as good work as I can make with my walking plow.

After plowing I go on with disk and roller. I have only a common 16 inch disk for two or three horses, but I would prefer a double disk as it makes better work and disks twice in one operation. When the weather is fit and the seed bed ready I sow my corn, usually White Cap Yellow Dent, in rows three and one-half feet apart. In about a week I go over with my level harrow and repeat again in a week or so to kill all weeds that might have germinated and to keep the soil loose on top to stop capillary action. As soon as the rows can be seen I start my two row cultivator and go over as often as necessary to keep the soil loose on top.

We usually go over twice with the hand hoe. If the field were very weedy I would prefer to plant in hills three feet apart each way, but my land is fairly clean, and I find I can get more fodder if sown in rows and the stalks aren't so hard and woody. I get a fairly good amount of ears, too.

### Clean Turnip Seeding

E. F. Eaton, Colchester Co., N.S.

WE have a plan here, followed when seeding turnips on a weedy field. The land is thrown in ridges early in the spring. The weeds soon leave the field. Just before seeding we draw the chain harrows (a plank drag would do), over the top of the ridges. This cleans a space to sow the seed in. The weeds between the rows are then killed with a scuffler. The seeding space is free from weeds, and the removal of the top dry soil leaves a nice moist soil for the seeds.

We don't like weedy fields, but when we have them we must make the best of it, and the foregoing hint has often proved valuable to us. In our moist climate weeds grow more readily than in Ontario, but even there the hint may prove of value.

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LAST spring Dairy Co. ville, Que., a much impression on spring. The portion and winter-winter top dress killed." Dairy Farmer winter top dress recent issue full as follows:

"Have you freezing out? ever stopped of these most cause of severe do freeze out no farther south. You know that heria and that. "But you a fafa winter-k raised more g are milked; a milk and but profitable. Co and keep at the year. Les be purchased. Prosperity sou "What is the freeze up wh "They are h

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"When spring lived all winter surface of the again, it cracks. The tiny root of clover is broken the plant dies. usual procedure fields of these. Where one p frozen out by s ther, thousands alternate thawin in climates with ther and snow iste in spring, gradually thaws frost leaves the away until a comes, little tro ened from wi clover and a teaches a valua we can keep th ground until spr to stay, we can alfalfa. Th be done by top now when they are covered with "The covering ground, until lon has melted. It until long after is not covered. "The crop will tiling ingredie leach into the soil plant will hasten and the sun w greater to pay fo will result even lived without the