

There is rather too much plowing, however, each year if the work is followed out as indicated here; rather more than the average farmer would manage to get through with. But it keeps the place clean.

DAIRYING AND LIVE-STOCK

The dairy herd consists of fifteen cows. It is pastured during the summer up among the sand hills to the west, and fed in winter much the same as dairy cows in this country generally are fed. The product is sold in the form of cream down in Carberry, selling there in summer for about eighty cents per gallon, and bringing in winter a rather better price, generally a dollar. When we visited the farm in August they were selling five or six gallons a day from the fifteen cows, besides what was used at home, and the owner seemed satisfied with the returns.

In addition to the cows, steers are winter fed, and the young stock pastured in summer. Some of the steers fed are bred on the farm; the rest are purchased. Last winter three carloads were fattened, fed in the stable, tied up and turned off in the spring at 1,285 pounds per head, selling at five cents. The steers are fed on hay, straw, and chopped grain, barley and oats.

The cattle stables will accommodate a hundred head. The stalls are conveniently arranged. A gasoline engine pumps water and grinds feed. In addition to the main barn, there is a fair-sized implement house, hog pen and hen house. The residence has been built recently. It is a modern brick cottage, set in among shade trees and flowers. Back of it, to the north, one may see one of the farm finest gardens in Manitoba, a garden containing a selected lot of small fruits and the vegetable crops ordinarily found in kitchen gardens.

The competition in Carberry was closer, perhaps, than in any other in the province. There are some exceptionally high-class farms on the Carberry plains, particularly north. Professor Rutherford, and Mr. Golden, deputy minister of agriculture, acted as judges.

One thing about the chain tie is that it does not fill the stable up, as stanchions do, with a mass of wood work or iron work that furnishes an excellent lodging place for dust. The best stanchions, too, are rather more expensive than chains but they accomplish the purpose required of them rather better than chains, and permit of as nearly perfect freedom to the animal as it is possible for any tie to give. A swing stanchion fastened at the top and bottom with a short chain answers every requirement for convenient, safe and comfortable tie, and can be installed at a moderate cost.

Sunlight In Cow Stables

In these "bacillian" days it is interesting to know that one of the most active agents in the destruction of germ life is sunlight. Bacteriologists have demonstrated that the tubercle bacilli may be killed by exposing them for ten minutes to direct sunlight. Most other bacterial forms are as effectually and speedily destroyed by the action of the sun's rays. Some organisms, of course, resist the effects of light for a longer time than others. The tuberculosis germ is among the least resistant. Neither is sunlight a very convenient germicide at all times to use. The point to remember, however, is that the presence of light is unfavorable to germ life, and that where it penetrates, disease producing germs have one of the most efficient of the great natural destroyers of their kind to contend with. It has been frequently demonstrated that cattle are less liable to succumb to tuberculosis when kept in well-lighted, well-ventilated quarters. Dark stables are invariably dirty ones, and where dirt lurks bacteria generally flourish. Light shows where the dirt is and makes it easier to keep the barn clean. Plenty of windows in a stable make it healthier for the cattle and a more cheerful place for the men who care for the stock to work in.

We cannot remember seeing a stable in this country, or anywhere else, that had too much window space. We hardly think it possible to get too much light into cow barns. At any rate, we never heard of anybody building up the window space after the stable was complete because too much sunlight was getting in, but we have seen quite a few of those dark, dismal old barns that have been improved by cutting holes in the walls and putting in windows.

The amount of window space required in a cow barn depends upon the width of the building. If the stable is made for a double row of stalls, and is about thirty-five feet wide, there should be at least four square feet for each cow. A window three feet square behind every other cow will furnish sufficient supply. If the stable is double, and can only be lighted from one side, larger windows are required. They should then be practically continuous along the whole side of the barn, leaving space only for the necessary posts.

First Lesson in Buttermaking

EDITOR FARMER'S ADVOCATE:

As I am a new subscriber, this being my first year in the country, and have no experience in butter-

making, would you please give me the necessary information of the process from the cow to the market, and what would be a fair yield for one cow, giving from seven to eight quarts at a mess?

If the cow is actually giving 7 quarts twice a day of fairly rich milk, she might be expected to yield 7 to 9 pounds of butter a week, but unless the milk has been weighed or accurately measured, it is a fair assumption that the yield of milk is considerably less than stated.

Man.

READER.

The cow, it is probably needless to say, should be kept clean, and should be milked in a cleanly manner. Where six or more cows are kept, it is wise to have a cream separator, but if, as we suppose is the case, only one or two cows are kept, shallow pan creaming would be most economical. Strain the milk as soon as possible after milking into a regular milk can, and set in cold water or hang it down a well, simply draw the milk off and put the cream in a clean crock in a cool place, or in another can down the well. Keep cream cold and sweet, stirring well each time fresh cream is added, until sufficient for a churning is collected, which should be twice a week. Warm to a temperature of 65 degrees twenty-four hours before churning, adding about 10 per cent. of a pure culture of good-flavored sour skim milk or buttermilk. When the cream commences to thicken, it may be gradually cooled to churning temperature. This is from 58 to 65 degrees in summer, and 65 to 72 degrees in winter. Scald the churn—a barrel or box churn is best—with hot water, then rinse with cold water before pouring in the cream. When the butter is like grains of clover seed a dipperful of water may be added to assist separation. When the butter granules are the size of wheat grains the churning is completed and the buttermilk should be drawn off through a strainer. Pour cold water on the butter and wash by revolving the churn rapidly. Salt to taste, or to your customer's taste, sifting the salt over the butter granules in the churn, or after the butter is removed from the churn.

Work without grinding until butter is close in texture, the salt evenly mixed throughout, and buttermilk and excess of moisture removed. Do not overwork, or it will be greasy. Butter for immediate consumption sells best in pound prints, wrapped in parchment paper, or it may be packed in crocks or parchment-lined boxes.

DAIRY

The Small Topped Milking Pail

One of the best ways to reduce the amount of dirt falling into the milk is by reducing the size of the opening in the top of the milk pail. Many milkers claim that it is impossible to use a small opening in the pail, because so much milk is wasted. Repeated tests have proved that the milker who wants to keep the milk clean, and is willing to give the small-topped pail a fair trial, will have no difficulty in hitting a four-inch hole with practically every stream of milk. There are a few cows that have large udders which hang low and must be milked with a wide-topped pail, but that is no excuse for using the old "dirt-catcher" on all the cows.

The use of the strainer in the pail while milking is not necessary, and, in fact, is of little assistance in keeping the milk clean. The simplest pail is the best. The opening is on the edge of the pail where it can be easily reached. The cover is fastened solid to the pail, and cannot be taken off, put on a dirty shelf, or on the floor, while the milk is being emptied, and then put on the pail again when the milker is ready for the next cow. The cover is of such a shape that every seam and part of the inside of the pail can be seen when being washed. It is balanced so that it may be turned over a steam jet and sterilized as easily as any milk-can. The shape of the cover and the way it is fastened to the pail acts as a brace, stiffening the pail and making it strong and durable.—*Storrs' Bulletin.*

The Essentials of a Good Cow Tie

The method of tying cows is important. A satisfactory cow tie is one that will secure the cow safely, and yet at the same time allow as much freedom of the head as possible. There are two general means of tying cows in the stable, one is by a chain hooked about the neck and sliding up and down on a rod or pole; the other is by means of stanchions. A chain tie allows considerable freedom to the cow. She can move the head up and down readily enough and do most of the other things which a cow tied up needs to do, but it has a number of disadvantages, and, on the whole, does not seem to be as favored nowadays as the stanchion.

HORTICULTURE

Fruit Packing in Vancouver Island

Uniformity in output is one of the principal things to be aimed at in putting fruit on the market. This cannot possibly be attained where each grower does his own packing and grading. In order that the best results may be obtained, it is necessary for the growers to combine and erect packing houses in which all the packing in the immediate neighbourhood is done.

Vancouver Island fruit growers are just beginning to understand the value of careful packing. A determined effort has been made during the past season to have uniformity of grades, and the effort has met with considerable success, although there is still a good deal to be desired in this respect. Many of the fruit farms are too remote from their neighbors to allow for the erection of packing houses, or even for expert packers to visit them. A number of packing houses were planned during the spring, but the attempt to finance them proved abortive. Out of several which were proposed, only one was built,



FRUIT PACKING HOUSE, VANCOUVER ISLAND.