

degrees Fahrenheit. At this temperature it filters readily through absorbent cotton, the medium by which any dirt it contains is extracted. "I see you do not use a clarifier," I remarked to Mr. Coule. "No," he replied, "our policy is to encourage our patrons to keep the dirt out of the milk at the farm. If the milk is kept clean there, we have no trouble with it here. In order to keep the patrons informed of the condition of their milk we make sediment tests of the samples, and if the dirt shows up badly, the patron is communicated with and an endeavor made to stop the contamination at its source. In this we usually meet with hearty co-operation on the part of the producer." Asked if he thought the sediment test a reliable indication of the sanitary condition of the milk, and if he thought that patrons could not, by straining milk through cheese cloth, disguise its unsanitary condition, he replied: "Not altogether. Show me two sediment tests, one of milk that has always been kept clean, and the other of dirty milk that has been strained through cloth, and I can tell the difference. A discoloration will be found on the absorbent cotton, caused by dirt which had passed through the comparatively coarse material which it would be necessary to use in straining it on the farm."

After passing through the filter the milk goes directly to the pasteurizers. Here it is heated rapidly to 144 degrees F., and held at that temperature for one-half hour. The use of three pasteurizers prevents the use of the holding method of pasteurization from interfering with the steady flow of milk through the plant. After being pasteurized the milk flows by gravity through a pipe to the cooling room situated on the floor beneath. This room is entirely enclosed with glass and is dust and germ proof. It is never entered except by an employee, and by him only seldom. This precaution is necessary because here the milk is exposed to the air. It is cooled by being exposed over pipes which are cooled by the ammonia system of refrigeration. At the top of the cooler the milk enters at the temperature of pasteurization. It flows off at the bottom only two degrees above the freezing point.

From the cooling room the milk is piped to the bottling plant on the first floor. Here specialized machinery takes the place of human hands. The bottles are filled, sealed, each one is carefully inspected, and they are then placed in a crate all ready for handing into the delivery rigs. They then pass along a conveyor to the cold storage room where they are held at a temperature of 40 degrees until next morning when they are distributed to the worthy citizens of Toronto who are fortunate enough to be able to secure their milk from this source. Upon their return the empty bottles are washed, sterilized with live steam and dried with hot air in much the same way as the milk cans.

Handling the Surplus—When There is One.

The supply of milk varies. Just now it is impossible to secure enough to satisfy the demands of the customers. Sometimes, however, the supply is greater than is required for city consumption, and special arrangements have been made for handling the surplus milk and thus accommodating the patrons. What is not needed for the city trade is separated and butter is made and sold. Formerly the skim milk was turned into the sewer, but the present manager, Mr. R. D. Hughes, conceived the idea of turning it into money. Upon his recommendation a casein plant, costing \$850, was

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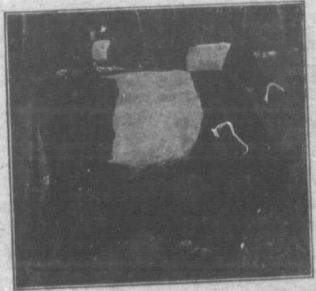


A Flourishing Field of Alsike in New Ontario. A modern dwelling, with a shaded lawn, also graces the Farm of Alex. Skene, in the Rainy River District.

A Silo in the Barn

It Requires Abundance of Barn Room

It is usually recommended that silos be built outside the barn, but there are conditions under which it is permissible, or even desirable, to build them inside. Such conditions exist on the farm of Mr. A. T. Stainton, Durham Co., Ont. While looking through his stable recently, I noticed the base of his silo in one corner and enquired why it was that he had built an inside



Dutch Silted Cattle—Seldom Seen in Canada.

silo. "My principal reason," he said, "was that I had lots of barn room, both above and below. Where the barn room is limited I would not advise building the silo inside, but there are certain advantages in having it located there, which should not be overlooked when one is not crowded. The first of these is that it can be more cheaply constructed inside than out. My silo is 12 x 29 feet, and cost me only about \$75 in cash outlay. It is built, as you see, of two by four inch scantling, lined with two thicknesses of half-inch planks, six inches wide, and is on a cement foundation. I now have it filled for the third time, and it is still in perfect condition. When not exposed to the weather, the lumber does not dry out and the joints keep tight. It will last much longer than an outside silo, or rather, it is not necessary to take permanence into consideration when building beneath the shelter of the barn roof. No silo roof is required, and there is less freezing, because the silo is at least partially surrounded by straw or hay. There is

the additional advantage that the chute comes down nearer the centre of the stable, and the silage is therefore much handier for feeding."

Mr. Stainton, who is of a mechanical turn of mind, turned his gift in this direction to good advantage last fall at silo filling time. He has two gasoline engines, one five h. p., the other, which runs the milking machine, one and one-half h. p. The big one was not strong enough to run both the ensilage cutter and the carrier, so he conceived the idea of bringing up the small engine from the stable beneath and running the carriers with it, the power of the larger engine being therefore utilized in running the ensilage cutter alone. The scheme worked to perfection, for he filled 23 feet of the silo in one day. This experience brought out another advantage in favor of the inside silo under certain conditions. Since the barn floor is nine or ten feet above the base of the silo, a shorter carrier is needed, and the little engine had no difficulty in running a sufficient length of carrier to reach the top.

The advantage of having a silo filling outfit was brought out on Mr. Stainton's farm this fall, as it has also been in numerous other instances where the full silo capacity is required to accommodate the corn crop. The silo was refilled after the corn had settled. Several loads of corn were therefore disposed of which would otherwise have been left in the stook or stood upon the barn floor. At the same time, what would otherwise have been lost space in the silo was fully utilized.—R. D. C.

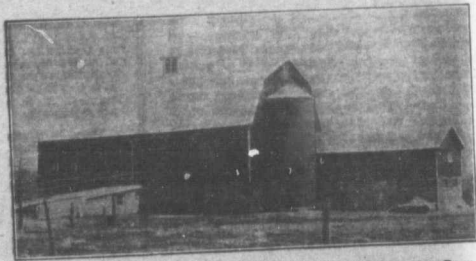
Winter Killing of Alfalfa

(Hoard's Dairyman.)

WE notice a good deal of complaint relative to the winter killing of alfalfa. This is a difficulty we have never had on the Hoard's Dairyman Farm since 1901. We attribute much of our exemption to the methods of procedure.

First, we aim to always plow our alfalfa land in the fall after first giving it a dressing of manure and 1,000 pounds of raw rock phosphate to the acre. Alfalfa needs a firm, well-settled soil, and it gets that on fall-plowed land. In the spring the land is thoroughly disked, but not deeply, and well harrowed. Then the alfalfa is sown early, say, in April or the first half of May, with three weeks of barley as a nurse crop. The result is that each alfalfa shoot gets a firm, deep root before freezing weather sets in. The barley stubble is cut as high as possible so as to help hold the snow.

Another thing, we never cut the young alfalfa or graze it, leaving it get all the growth it can before winter sets in. The manure and phosphate help feed the young plants so that they are well prepared to resist the cold weather. Try our method and see how it works. Don't forget the necessity of well-settled, firm soil, which you get by fall plowing.



A Neat, Well Proportioned Barn Adds to the Attractiveness of a Farm. This modern structure is 1909 of Mr. C. V. Robbins, Lincoln Co., Ont.