

bandage. Some means of heating or cooking the curd will also be needed. This may be done on an ordinary kitchen stove, by setting the vessel containing the curd and whey on the stove, or by heating some of the whey to the desired temperature, and adding it to the whole mass.

MAKING THE CHEESE.

The milk for cheesemaking should be clean, sweet, and of good flavor. When at a temperature of 84 to 86 degrees, add the rennet at the rate of six to eight ounces per 1,000 pounds of milk, or at the rate of about four to six teaspoonfuls per 100 pounds (10 gallons) of milk. The rennet should be diluted in about a cupful of cold water, and then be thoroughly mixed through the milk by stirring with a dipper for three to five minutes. The milk should not be allowed to stand perfectly still until coagulation takes place. This is determined by inserting the forefinger carefully into the curd, then break on top with thumb, and raise the forefinger carefully. If the curd breaks clean over the finger it is ready to cut. If using curd knives, cut once with the horizontal knife and twice with the perpendicular, so as to have the curd in cubes. When cutting with an ordinary knife, cut the curd as carefully and evenly as possible into small pieces. In about five minutes after cutting commence stirring the curd very gently, and continue this for five or ten minutes, when heat should be applied and the whole mass cooked to 94 or 96 degrees. It is important to keep the curd in motion while heating to prevent scorching of the curd, and in order to secure uniform cooking. In about two hours after the rennet has been added the whey may run off the curd, or the curd may be dipped out of the whey and placed on some sort of a wooden rack to drain. If no rack be available, the draining may take place in the vessel used for making the cheese. The whey should be removed as fast as it accumulates. During this time the temperature of the curd should be from 90 to 92 degrees. When the curd is somewhat firm and shows a tendency to meatiness, it may be broken into small pieces, and the salt applied at the rate of one to two pounds per hundred pounds of curd, or at the rate of two to four ounces for 100 pounds of milk. Use the larger weight of salt on a soft, wet curd.

Thoroughly mix this salt with the curd, and as soon as it is dissolved, which will be in about fifteen minutes, the curd may be carefully packed in the hoop, and pressure applied gently. At the end of half an hour or more the curd should be taken out of the hoop and the bandage pulled neatly up about the cheese, allowing about one-half inch to lap over each end. A cotton circle may be placed on each end, and the green cheese be put under pressure again for twenty-four to forty-eight hours. The cheese may then be removed from the press, and be placed in a cool room, at a temperature not above 60 degrees. They require turning every day for about a month. When from two to three months old they should be in good condition for eating. They will ripen sooner if at a higher temperature, but it will be at the expense of the quality.

Square hoops which mark the cheese into pound and half-pound blocks may be used instead of the circular hoop, if the maker prefers this style. Owing to the large surface exposed it is very important to coat these cheese, or ripen them in a cool, moist atmosphere to prevent drying. It is somewhat difficult to secure the blocks of correct weight, owing to the variation in curds.

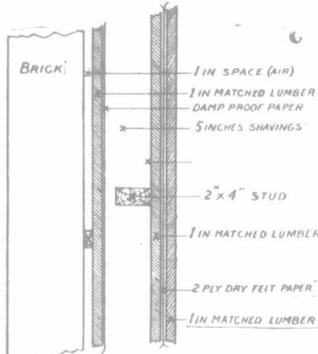
Harrietsville Factory and Curing Room.

In the "Farmer's Advocate" for August 3rd, in an article on "Cool-curing and Paraffining," reference was made to the Harrietsville cheese factory, where a modern curing-room, patterned after that of the Illustration Station at Woodstock, has been installed. As Harrietsville is one of the first Western Ontario factories to be thus equipped, and as the present plant has been remodelled from a factory such as many existing throughout the country, our readers will be interested in a description of it, particularly the curing-room. Last year the proprietor, Mr. S. E. Facey, transformed his old curing-room into a making-room, and built a new curing-room according to specifications and advices offered by Mr. J. A. Ruddick, Commissioner of Dairying in the Dominion Department of Agriculture. The main building, containing the making-room, is a substantial white brick structure, outside dimensions 48 feet by 72 feet. It is well supplied with windows, has a cement floor sloping towards a central gutter, and accommodates eight vats, six of which are equipped with modern agitators. In this room, also, is a 12-h.p. engine which is run by a 20-h.p. boiler. Everything is clean and convenient. The capacity is easily 45,000 lbs. of milk a day. Butter is made in winter, and the creamery equipment is utilized in summer by making butter out of the Saturday evening's milk. A system of proportioning the whey had been in vogue there a couple of years, but the automatic weigher became inaccurate, owing, ap-

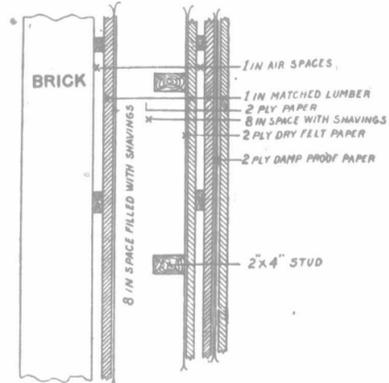
parently, to too light construction, and had to be discarded.

INSULATION OF CURING-ROOM AND ICE-CHAMBER.

The curing-room-and-ice-chamber annex is a 40 by 60 feet hollow brick structure running out from the south end of the main building. It is roofed with pitch and felt. On a close sheathing over the joists was spread a layer of special brand of thick roofing felt. A coating of hot pitch was swabbed on with a whitewash brush, and gravel was spread over that.



Plan of insulation submitted by Mr. Ruddick for curing-room walls, and closely followed by Mr. Facey.



Plan of insulation of ice-chamber walls.

The curing-room proper adjoins the making-room, and its inside dimensions are 43 feet by 36 feet by 9 feet. Its walls are insulated. Regarding this, Mr. Ruddick advises using on the inside a single instead of double coat of lumber, his idea being that another ply could be put on later if necessary.

The ceiling of the curing-room is similar to the walls, only that there is an 8-inch instead of a 6-inch layer of planer shavings, and, of course, there is no brick. It may be noted here

that the object of the damp-proof paper is to protect the shavings from dampness, as their effectiveness depends upon their being kept dry. The floor is cement concrete, about six inches thick, and the cheese racks run across the room, the ends facing the row of windows along the west side.

The shelf capacity of the curing-room is about 1,000 boxes.

The ice-chamber is 26 feet long, 12 feet wide and 10 feet high inside. At the west end of it is a little ante or storage room about 8 feet

across; this occupies the south-west corner of the building. Excepting the brick, the ceiling is constructed on the same plan as the walls. The floor consists of a bottom layer of six inches of coal cinders, a layer of hollow brick, and on top of all four inches of cement. A few pieces of boards thrown in serve to keep the ice off the cement.

CIRCULATION OF AIR.

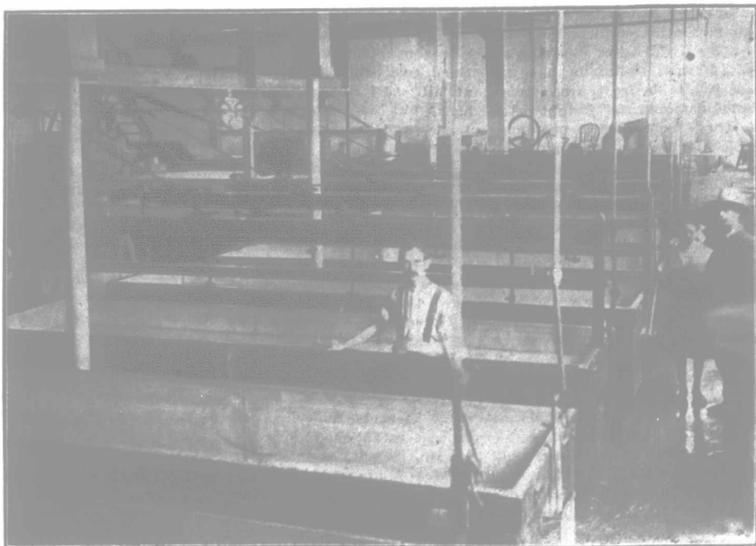
The two inlet flues through which the cold air passes from the ice-chamber are about the same as those described at the Woodstock Station, but the return flues, instead of starting at the opposite end of the curing-room, are merely conducted from openings in the ceiling almost directly above the intakes. Mr. Facey reasons that this will give a more uniform circulation than the other and more expensive method, and states that he has found no difficulty whatever in keeping an even temperature of about 60 degrees all over the room. The writer had the satisfaction of testing this for himself. The thermometer was taken from its usual position along a side wall and hung for an hour at a corner remote from intake and outlet flues. Examination showed that the mercury had remained at exactly the same place, viz., 59 degrees. Certainly, so far as sensation was concerned, we could detect no variation and no unequal draft, though a perceptible current was continually pouring through the vents.

SOME RESULTS OF COOL-CURING.

As the proof of the cheese is in the eating, we tried a number, including some made on the



The Modern Cool-curing Room at the Harrietsville Cheese Factory.



The Old Curing Room is Now a First-class Making Room.