

SPECIFICATIONS FOR THE CONSTRUCTION OF A CREAMERY REFRIGERATOR—CIRCULATION SYSTEM.

GENERAL.

A refrigerator on the circulation system consists of :

1. An insulated ice chamber, where the ice is kept without any covering.
2. A cold storage room, where the packages of butter for export only shall be stored.
3. An ante-room, to receive retail butter, and to protect the storage room against the entrance of warm air.

Both cold storage room and ante-room are cooled by the circulation of the air which passes over the ice in the ice chamber.

Situation.—At the north end of the creamery, or sheltered from the direct rays of the sun if possible.

Size.—To be determined by the output of the creamery. Butter should be shipped every week wherever possible, and in this case the cold storage room should not be much larger than necessary to hold a week's make, with convenience for handling the packages.

A room 7 feet high by 8 feet square inside will hold conveniently 120 boxes, piled six high.

The ante-room should be large enough so that the door can be conveniently closed before opening the door of the cold storage room.

Light.—It is not desirable to have a window in the cold storage room. Sufficient light can be had from a lamp or a candle when necessary. A window may be put in the ante-room.

Good insulation on all sides.—All sides of the refrigerator, around cold storage room and ante-room, whether adjoining the ice chamber or any other part of the creamery, must be equally well insulated.

MATERIALS.

Wood.—All lumber employed must be thoroughly dry and sound, without loose knots or shakes, and must be odourless.

Spruce and hemlock are the best, in the order named. Pine is not suitable for inside sheathing on account of its odour.

All boards employed should be dressed as well as tongued and grooved.

Unseasoned lumber must be carefully avoided. When building in winter, fires must be kept going so as to have all materials as dry as possible. This is very important, as dampness in insulation destroys its efficiency.

Paper.—All papers used to be strictly odourless and damp-proof.

Damp-proof insulating papers can be had in rolls of 500 to 1,000 square feet, 36 inches wide. The following brands can be recommended, viz.: 'Neponset,' 'Hercules,' 'Ko-Sat.'

Tar paper, felt paper, straw paper, rosin sized paper, and all other common building papers are not suitable and must not be used.

Use double thicknesses of paper in all cases, each layer lapping 2 inches over preceding one. The layers should extend continuously around all corners. All breaks to be carefully covered.