Provide for an air-space in that part of the outside wall which will be exposed to the direct rays of the sun, as follows:—Cover stude with two thicknesses of boards and paper, lay furring strips 2 x 2 inches, and nail aiding on the strips, leaving spaces open at top and bottor: for circulation of air. (This provision not shown on plan.)

The inside of the frame to receive two thicknesses of boards, with paper between.

Geiling.—Joists 2 x 8 inches at 16-inch centres. Spaces between joists must be filled with shavings. Sheet underside of joists with two thicknesses of boards and paper, and cover top with one ply of boards, two papers and 1½-inch planking. (Smashing floor.)

Partition.—Partition between cold storage room and ante-room to have a 6-inch space filled with shavings, with two thicknesses of boards and paper on each aide.

Doors.—Opening between cold storage room and ante-room to be fitted with a door consisting of a 2-inch skeleton frame, covered on both sides with two thicknesses of boards and paper. Edges to be bevelled and covered with felt. This door to be fitted with a wrought iron door fastener, as shown in plan.

Ante-room to have two doors, each consisting of two thicknesses of boards with

paper.

Cylinders.—Cylinders to be 12 inches in diameter and made of No. 22 gauge galvanized iron.

The cylinders should be placed on one side of the room, 4 inches from the wall, and extending from the bottom of the trough to the top of the smashing floor, through the ceiling. Pack carefully around the cylinders, where they go through the ceiling.

The cylinders should be open at the bottom, and rest in a trough or box 13 inches wide, and 6 inches deep, made of 1½-inch stuff, and lined inside with galvanized iron. The inside of the trough should be fitted with 1 x 2-inch strips to allow for drainage of water.

The trough should have a slope of 2 inches towards one end, and be fitted with 1 inch drainage pipe, which passes through the wall, and discharges outside through a trap to prevent passage of air. The opening around the pipe, where it goes through the wall should be carefully packed with oakum, or similar material.

Cut small openings (6 x 4 inches) in cylinders, near bottom, and fit them with

sliding doors, to allow removal of dirt (sawdust, &c.) which may accumulate.

Close cylinders on top with bags filled with dry sawdust, or with tight-fitting wooden plugs.

Five cylinders will be required for a room measuring 8 x 8 x 7 feet. One or two will be needed in the ante-room.

Window.—The window in ante-room should be small and have two tight-fitting sashes with two panes of glass to each sash, and a shutter on the outside hinged at the top. Before putting in window frame, cover sides of opening in wall with two thicknesses of paper. There should be no windows in the cold storage room.

Shellac.—The inside of both cold storage room and ante-room to receive a coating of shellac or hard oil.

## INSTRUCTIONS FOR THE ORDINARY STORAGE OF ICE.

1. Provide for drainage by filling the area of the ice-house with broken stones or cobble stones, covered with cinders or gravel. A few inches will do on the top of a gravelly and porous soil. On a heavy clay soil a greater depth will be necessary. A tile drain should be laid in the earth, under the gravel, along the centre of the building.

2. Lay 2 x 6-inch sills, double, and binding at corners, or one sill 8 x 8 feet, on posts. Set up 2 x 6-inch studs at 24-inch centres, topped with 2 x 6-inch plates, double.