

good plan, as the ice is removed during the summer, to throw out from time to time the driest of the sawdust where it will be under cover and continue to dry out and thus be in better condition to be used again the following year. The ice should be cut in blocks of uniform size and packed as closely together as possible.

If it is necessary to erect a special ice-house, the roughest kind of a shed that will keep out the weather is all that is necessary. Poles may be driven into the ground and lined up on the inside with rough lumber or slabs, leaving a space of about three-eighths of an inch between each board, and the whole covered with a roof to keep out the rain.

Plan No. 1 shows the construction of a building with 2 by 4-inch studding lined with rough lumber inside, and a space of three-eighths of an inch left between each board. If for any reason a building with a better finish and appearance is desired, the outside of the studs may be covered with clapboards, shiplap or other siding, with ample ventilation above the ice. Ventilation can be provided by leaving the spaces between the rafters open, or by placing louver openings in the gable ends. It is also advisable to leave a two-inch space at the bottom and top of the clapboards, which will provide a circulation of air between the studs, and help to keep the sawdust dry.

If sawdust cannot be obtained, planer-mill shavings may be used for packing the ice, or in cases where neither is available, hay may be used as a packing or covering material.

Marsh or "slough" hay or any fine wild hay which grows in low places gives the best results. If hay is used, the space around the ice or between the ice and the walls instead of being only one foot, should be at least two feet, into which the hay must be well packed. The ice should also be covered with about two feet of the hay.

## SPECIFICATIONS FOR AN INSULATED ICEHOUSE.

### PLAN NO. 2.

*Drainage.*—If the ground is dry and porous, or of a gravel or sand formation, no special drainage need be provided, but if it is impervious clay or heavy soil, the area of the floor should be excavated and filled to a depth of six to twelve inches with small stone, coarse gravel or cinders, first laying drain tile to ensure proper drainage.

*Framing.*—Bed 4 by 12-inch sills in cinders or other filling and set on proper foundations. Half the sills at the corners and spike or bolt together.

Erect two rows of 2 by 4-inch studding, staggered, as shown in plan, spaced at 24-inch centres.

Lay a 2 by 6-inch plate with joints broken over outside row of studs.

*Roof.*—The roof rafters should be 2 by 6-inch set at 24-inch centres and heeled over plate and spiked. Cover the rafters with one-inch lumber dressed on one side, and shingles laid four and one-half inches to the weather, or other roofing material.

*Walls.*—Cover the studs on the inside with one ply of heavy waterproof paper, with joints well lapped, and one course of rough lumber. Cover the outside with one course hemlock lumber dressed on one side, two-ply building paper, and finish with either clapboards, shingles, metal or frame siding.

*Filling for Spaces and Floor.*—Fill spaces in the wall and cover the floor area with 12 inches planer-mill shavings or dry sawdust. The sawdust or shavings to be well packed so that there will be no possibility of settling.

*Ceiling or Covering for the Ice.*—An insulated ceiling may be constructed with 6 or 8-inch joists lined underneath with two ply of damp-proof paper and one course