

To begin with the lower, or cellar story. My house is located on an oval knoll, digging off the top of which furnished me with nearly all the stones, large and small, used in putting up its walls. All my cellar, therefore, is *above ground*, except two holes, C L and M, alongside of my ice-house.

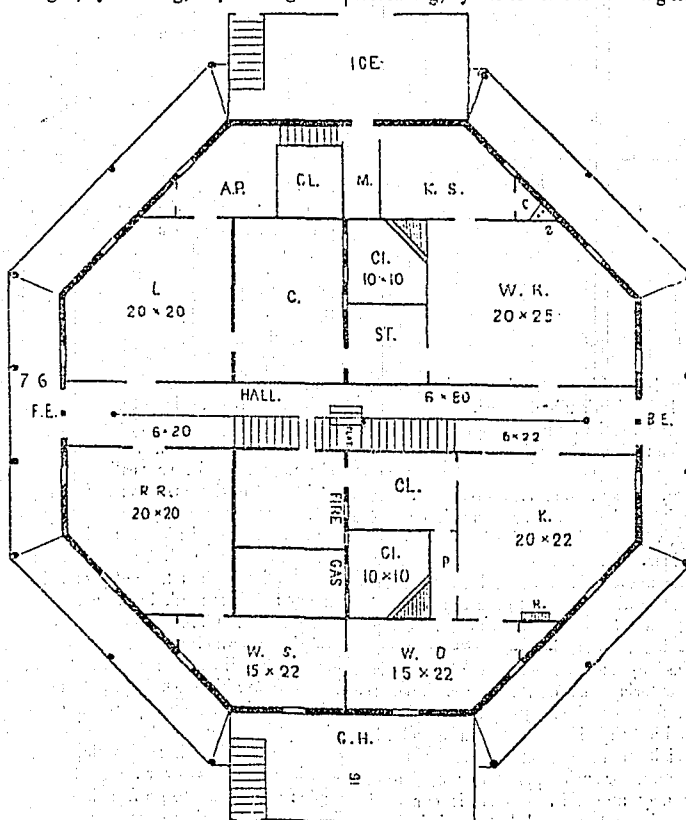
You should begin at the basement by erecting studs as for a wall. Lath and plaster *both sides*, and finish the outside as you do your house. This furnishes a place for *dead air*—the best none-conductor in the world—superior, says Prof. Silliman, to tan-bark, or even charcoal. In the plastering use a little cement. Then erect another set of studs, first having nailed on your lath before they are raised; then raise and fasten them, and plaster on the *inside*, or *between* the studs; this gives two confined air-chambers. Then lath on the *inside* of these studs, and plaster, and you have air-chambers all around to form an ice-house and a preservative for both stories. Next lay your floor for the *bottom* of your ice-house and top of your preservative, and make it *water-tight*, by caulking, or plastering with

cement, or in some other way; and having this floor descend a few inches from the middle each way, so as to carry off the water and resting this floor on rows of studs below, which serve both to support the ice and fasten shelves to, and to the *outside* row of studs lath plaster and cement, so that the ice drippings may run off *behind* this inner wall of the preservative, or between it and the two rows of studs above described. Your preservative is now perfectly dry, and of one temperature the year round. Its bottom should also be double, so as to be dry yet let water pass under it. In mine the ice water is gathered at the door, under which another set of studs, first having nailed on it runs through a lead pipe, bent upward like your lath before they are raised; then raise a new moon, which allows water to pass *out*, but prevents air from passing in. It passes into this cellar C L, and my milk closet M which also has two stories, the lower for preserves and what else we want to keep yet do not think worth the trouble of going into the preservative, and the top for milk, having two floors, which admits the cold air up into the milk-room, yet prevents dirt from descending, by the lower one catching it.

from under the preservative, both having shelves. A like arrangement at C L gives two large cellars, one above the other; on a like principle.

The entrance to my preservative is with two stairways leading to it; one from the side toward the kitchen, for the cook, and the other larger, for the gardener to take down barrels of beef, fruits, and the larger articles. Thus *all* the cold of my ice is saved, and cools *five* rooms, the preservative and the other two double-storied rooms contiguous. Even the cold which escapes in opening the preservative door passes into these rooms, besides cooling the room marked A P, for apples, potatoes, etc., and that marked K S, for kitchen stores, both of which are fitted up with shelves. Now I submit whether here is not a plan worthy of imitation (unless it can be improved on) in any house whose owner can afford an extra \$100, the utmost it need cost. And how soon will it quit cost by buying butter, eggs, fruit, etc., when abundant and cheap, and keeping them as good as new till scarce and high, and then selling, to say nothing of the luxury of having fruit, grapes, and perfectly sweet May butter the year round, for they experience no sensible deterioration in flavour.

In the closet C one angle S carries up a stove-pipe hole, made out of that very material described for making the wall, and drawing up, as you filled up, a round stick the size of the flue desired—a cheap way of making chimneys; and as good as the very best. A wash-boiler is stationed in the adjoining room W R, having a cistern, C, I, 10 by 10—it can easily be made larger or smaller—which receives the surplus water from the cisterns above, and the roof having at one corner three straight walls, one of which extends from bottom to top of the cistern, made of this same wall material, or of brick, and cemented *both sides*, having holes at the *bottom*. The other two are a foot or eighteen inches high, and say a foot on each side of the other, also cemented, and the spaces between them and the high wall filled in with charcoal and coarse gravel, so that the water rising to the low wall runs down through this filtering charcoal through those holes at the bottom of the high wall then up through charcoal and coarse gravel on the other side, and thus doubly filtered, makes the very best drinking water in the world. Observe, too, that it joins on the cool milk closet M, and hence imbibes considerable coolness from the ice-water. If I had ever so good well or spring of water, I should want these cisterns, because double-filtered rain-water is preferable to *all* other water for drinking and culinary purposes. Observe, also, that this water gets a double filtration in the cisterns *above*, before entering this, or four filters in all. And how much more handy to turn a faucet and draw water direct into a pail, than to raise it from the



All required to make this floor is, having laid your floor timbers, nail a floor to their *under* side, leaving a space an inch or two wide at one side, and a shelf over this crack will prevent much dirt from getting down,

and then nailing another floor to the *top* of these timbers, having another opening on the *other* side of the floor. M for milk; the cold air passing up from the bottom story, into which the water runs