

down the roof. Some tiles are made with a projection to answer the purpose of the pins, but in continuously machine-made tiles holes and pins are necessary. As each row of tiles is hung, the part to be covered by the succeeding tile is plastered with mortar, which is cut or scraped off even with the edge of the tile; the joints are all baked, and when finished there is no better roof for effective purposes than a tiled roof; but they are subject to some drawbacks. They are expensive, and require skilled labour to put them on; they are heavy, and a strong frame is necessary to support them; they must be made of so strong a clay as not to chip or shiver with the frost, and they must not travel too far for fear of breakage. In the old country, even on their good roads, tiles are seldom carried farther than four or five miles. This kind of tile is made by machinery, like drain tiles, but flat instead of circular. The clay must be equal to pottery clay, and one that varieties sufficiently to give resistance to the frost, whilst at the same time it must be impervious to the wet. Almost all our Canada clay would have to be washed and extruded into a proper fineness and freedom from flint-stone before they could be used. Limestone spoils all baked clay.

There is a cheaper kind of tile, called pantiles, used in the old country; these are waved, and curved on one edge, so that in hanging them the curved edge of one covers the straight edge of the next, and no break of joint is required. These pantiles are also laid in mortar, and where made of good materials and of sufficient strength, form a most excellent roof. Being all curved, they form a kind of series of spouts, extending from the top of the roof to the bottom, each channel carrying its own quota of rain to the eaves. For covering farm buildings in the old country they dispense with the mortar; but for all house purposes the mortar is necessary. Many old houses in London, England, are pantiled.

There is another kind of tile, heavier and stronger, flat, with the edges turned up, and the edges are covered by narrower tiles fitting one into the other. These tiles, like all others, lap over one another, but they do not break joint. Unlike the pantiles, the joints are covered by a separate formation. None of the tiled roofs will bear people on them with safety, and one of the most serious offences which boys can commit where they are used, is climbing on and over the roofs.

All tiles are burned in kilns, like bricks. Sometimes when bricks are burned in clamps (as is usually the case in Canada) the tiles are burned in the interior of the kiln, and near the arches, where they will be exposed to a vitrifying heat. They are packed in sixes on their edges, and each separate parcel angling a little over the others, so as to prevent slipping and crushing.

We are not far from the tiling age, and in a very little while tile kilns will be a very common institution. We shall leave other materials of roof covering for a future occasion.

Household.

Preserving Ice.

It would be well if those farmers who intend to make butter while grass is plenty, took a little pains to save some ice for summer use. The ideas on the subject of ice houses have been greatly modified of late years, and it is found that ice can be kept just as well in any building as in an expensively constructed ice house. Fix up a corner 12 feet square in the workshop, or any other outbuilding that can be spared, or put up a small house near the dairy for the purpose. It may be made by nailing rough boards close together on upright posts on the top of the posts lay a sill, and put poles or boards across from wall to wall; then put on the rafters make a pent roof. Fill the space between the poles and roof with straw, cover the floor of the building, which may be bare earth, with first about a foot of sand, then lay rails or poles on it, and cover them with a thick layer of straw, cut your ice in blocks of about 2 feet square, and pile them up on the straw, as closely packed together as you can, filling up the spaces with pounded ice, and pour in some water to make it solid. Leave a space of about two feet between the wall and the ice all round, and when the ice is all in, fill that space with clean dry straw, tramped in; cover the top with loose straw, and have a pipe through the roof for ventilation. When ice is to be taken out, shut the door when you go in, remove the straw on top of the ice, take out a block and cover up with straw again before opening the door to take out the ice. Some prefer to have the house made partly in a hill side facing the north, with the roof only above ground. Stone walls are preferable to boards, but the main thing is to have straw enough; good rye straw is best; clean chaff is still better, if enough can be had; sawdust or tan bark will answer the purpose of protecting ice equally well, and would be best if they can be readily procured, as the same material can be used several years in succession, while straw requires to be renewed with each crop of ice put in the house. If the building is too much exposed to the sun, plant some evergreens on the south side, or place green pine boughs on the roof in summer. Where the cellar is large and but little ice is needed, a small ice room may be made in it, the floor to be dug 18 inches below the level of the cellar, and the walls made of brick one brick thick; the poles on which the floor of straw is laid are placed at the level of the cellar floor, leaving the space below for drainage of the water from ice that may melt, and the ice, when packed in, need only have a space of one foot between it and the walls, to be filled with chaff, sawdust or straw. There

must be a window for ventilation, which may also be made large enough to allow of the blocks of ice being put through it when filling up the room. The goodness of the ice will depend greatly on the time it is taken into the ice house. If the ice is very hard and solid, and the weather has been very cold for some time previously to its being put up, it will keep much better than if it is taken up in mild weather, or after a thaw has set in. The lower the temperature at which ice is formed, the longer it will keep.

Kenway Farm.

J. M.

Vinegar from Maple Sap.

To the Editor.

SIR,—I noticed in your December number an article headed "Economic Vinegar," the writer of which seems to have forgotten that vinegar could be made of other material than apples or cider. He says that "in a new country, where fruit is scarce, it becomes a matter of no small importance that all should be made the best of. We all like good pure vinegar, and can be sure of it only when manufactured from apples." I think every back settler, living on timbered land where maple timber is growing, has ample means for making equally as good if not better vinegar than can be made from cider; that is, vinegar made of maple sap, which flows freely in April and May. Take the last runs after the buds begin to swell and the sap becomes unfit for sugar; save up all the remnants of sap, and boil, say two into one, and strain into a tub or vessel of some kind to cool, then add yeast sufficient to cause fermentation. After fermenting, remove, and put it in a vinegar cask, leaving all settleings out. Set in a warm place. The bung should be left out, or what is better, cut a square hole large enough to dip out vinegar when wanted; cover with thin cloth and a piece of board. Some brown paper should be added to make mother, or you can procure some from your neighbour's vinegar barrel, and add to your vinegar, in order to keep up a plentiful supply. The barrel should be filled by the addition of suitable materials as vinegar is taken out, such as cold tea with a little sugar, or any sweet slops. The juice of the rhubarb plant is excellent food for vinegar. Our vinegar began to get low last year on account of having to build. My wife went to the garden and got some rhubarb stalks, sliced them fine, and soaked them in soft water over night, then drained off the liquor, and added one quart of molasses to three or four gallons of liquor, and she says she never had better vinegar than it made.

A FARMER.

PREVENTION OF SHRINKING IN FLANNELS.—A correspondent of the London Field says:—"In washing flannels, or other woollen articles, have the suds ready prepared, by boiling up and so dissolving small pieces of soap in rain water, without soda; but do not use the suds when boiling; let them be lukewarm only when the articles are put in.