developed at the particular time it is required for use. This treatment is also essential in the case of the mother starter, for on its condition the ultimate success depends.

The maintenance of a good starter depends not only on the selection of suitable milk, but on the care exercised from day to day to prevent it becoming contaminated with undesirable germs. A steam sterilizing-oven into which all utensils used in this connection may be placed and thoroughly steamed for an hour or more is to be strongly recommended. Many of our dairy companies could with advantage go further and have the sterilizing-oven of such larger dimensions as would accommodate all the smaller factory utensils.

FLUE-BARN CURING OF TOBACCO-LEAF.

A STANDARD DESIGN AND NOTES ON METHOD.

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As a rule, flue-barns for tobacco-curing are built to a standard size—16 ft. by 16 ft. inside measurement, and 20 ft. to the eaves—the reason being that the manner and methods of curing are the same throughout all tobacco districts. Any alteration in dimensions makes necessary an entirely different system of temperatures, amount of fuel, and times of processing; further, the size stated represents the most convenient capacity. The accompanying plans give all the dimensions and show internal fittings. Full-sized copies may be obtained on application to the Horticulture Division.

The roofing recommended is of malthoid or ruberoid tightly fastened upon closely timbered sarking; this is to make the chamber airtight and to prevent condensation of moisture. Iron roofing is not advised, as it is very difficult to make it airtight, and the drip from condensation is very bad at certain stages of the process. Windows in the structure are not recommended, as light—particularly sunlight—has a bad effect upon the colour of the leaf; also, the final heat of 170° to 180° F., if it happens to coincide with a cold southerly snap, is liable to break all the glass and cause great inconvenience and damage at a critical time. As indicated in the elevation drawing, the walls are constructed of poilite sheets over ordinary studs.

The process of curing tobacco-leaf in a kiln is shortly as follows: The barn is filled with 850 sticks of leaf, each stick carrying twenty-two bunches of three leaves of average standard size, 12 in. to 15 in. long, or two leaves 24 in. to 30 in. These sticks are placed about 8 in. apart on the tier poles. The leaf should all be uniformly ripe. The fire is started in the furnace and kept low to maintain a heat of 90° to 92° F. for thirty-six to forty-eight hours, with all vents tightly closed. This forms a saturated atmosphere if the leaf is freshly gathered and full of sap. A hygrometer is used to record the amount of moisture in the air, and a difference of 3° between wet and dry bulbs is correct.

When the leaf in the barn has turned a good yellow colour under these conditions the temperature is slowly raised, and requisite ventilation top and bottom is supplied to carry off the moisture as fast as it