

most trouble is likely to be experienced in summer months. Ideally, cold-stored butter should be defrosted in chambers that can be air-conditioned, but this is impracticable under commercial conditions, and, in any case, present losses do not warrant these precautions in temperate climates.

It is quite clear that the thickness of timber exercises a distinct influence, $\frac{1}{2}$ in. white-pine timber developing less mould-growth than $\frac{1}{4}$ in. That this is not likely to be due to differences in the insulating property of the different thicknesses of timber has been shown by McDowall(5). The more likely explanation is the capacity of the thicker timber to absorb more moisture without becoming soaked. On

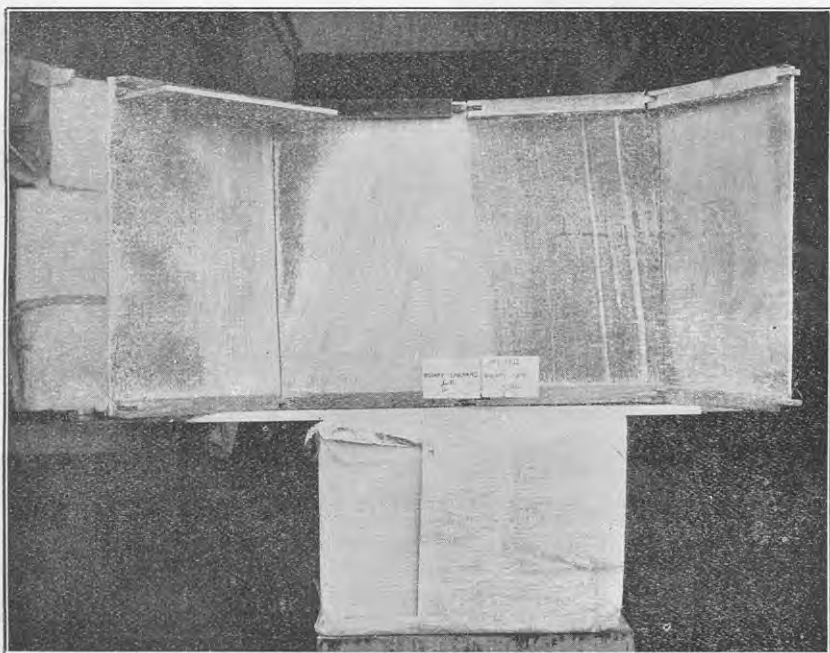


FIG. 6. ROTARY-CUT SARANAC, INFECTED, RESTING ON CONTAINED BUTTER PACKED WITH ALUMINIUM-FOIL PARCHMENT.

[Photo by H. J. Drake.

removal from a cold store the moisture content of butter-box timber is lower than when admitted to the store. This is illustrated by the fact that the wires on waxed boxes never became so loose as those on unwaxed. During the defrosting process the wood thus absorbs some of the dew as it is formed, and if it can do so at a rate commensurate with that at which the surplus collects there is not likely to be sufficient for mould spores to germinate. The thicker the timber the less free moisture may be expected to accumulate. This may therefore be the explanation of the benefit of using $\frac{1}{2}$ in. or $\frac{3}{8}$ in. instead of $\frac{1}{4}$ in. timber.

The admission of air apparently plays an even more important part. It is a significant fact that in these experiments mould-growth was