TECHNICAL NOTE NUMBER 169
FOREST PRODUCTS LABORATORY - U. S. FOREST SERVICE - MADISON, WISCONSIN

WHY NARROW CHIPPING INCREASES THE YIELD OF RESIN FROM PINES

In chipping pine trees to promote the flow of resin far better results are obtained from very narrow chips 1/4 to 1/2 inch high than from big cuts. The stimulus from the cut is most intense nearest the wound and gradually decreases farther away from it. If chips 3/4 to 1 inch in height are taken off, the greater part of the responsive tissue, containing the best machinery which the tree could develop to produce gum, is removed, and a serious and unnecessary reduction in yield takes place.

It is the experience of the Forest Products Laboratory that the greatest yield for the longest period may be had by removing from the surface the least amount of wood that will insure a renewal of the activity of the resin-producing cells. This amount is much less than turpentining operators customarily regard as necessary to keep ahead of the "lightwood," or wood which has become more or less impregnated with gum. It is not alone because the resin-producing cells become clogged that the gum stops flowing, but also because at the same time the cells on the exposed surface are injured so that they cease to function and die a short time after the cut is made.

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