

TECHNICAL NOTE NUMBER 137

FOREST PRODUCTS LABORATORY - U. S. FOREST SERVICE - MADISON, WISCONSIN

A PORTABLE ELECTRIC OVEN FOR USE OF KILN OPERATORS

The Forest Products Laboratory has devised a portable electric oven for drying moisture-determination sections. It consists of a sheet-iron box 4" X 13" X 6 $\frac{3}{4}$ ", lined with a layer of asbestos one-half inch thick. The heat for drying is supplied by two 40-watt, carbon-filament lamps placed in the bottom of the box. Immediately above these lamps is a wire screen on which the sections to be dried are placed. Ventilation is obtained by eleven holes $\frac{3}{8}$ inch in diameter, six of which are in the cover, three in the back near the bottom, and two in the front. A cord and plug attached to the drier make it possible to connect it to any lamp socket.

Inch sections are easily dried in this apparatus in twenty-four hours. The maximum temperature attained is 230° F., which is reached only if the sections are allowed to remain in the drier for several hours after they are bone-dry. A slight scorching of the sections occurs under these conditions, but this scorching does not cause any appreciable error in moisture calculations.

