

TECHNICAL NOTE NUMBER 196

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

IDENTIFICATION OF PULP WOODS

Spruce, hemlock, balsam-fir, tamarack, and jack pine are the five principal softwoods used for pulp in the Lake States, Northeastern States, and Southeastern Canada. These woods differ considerably in price, quality, and pulping properties; and the wood pulp manufacturer often finds it desirable to examine his wood in the log or bolt form before buying or cooking it to insure himself that the species are not mixed. The following key, prepared by the Forest Products Laboratory of the U. S. Forest Service, Madison, Wisconsin, gives the distinguishing characteristics which are most obvious to the unaided eye.

- I. Exudations of resin, pitch pockets, and pitch streaks common in the wood. (This does not refer to the bark.)
 - A. Heartwood white and same color as sapwood; odor not pronounced; bark thin and scaly.....SPRUCE.
 - B. Heartwood distinctly darker than sapwood.
 1. Sapwood mostly less than 1 inch wide; heartwood russet brown; odor not pronounced; exudations of resin scant; bark light reddish brown, thin scaly, not ridged.....TAMARACK.
 2. Sapwood mostly over 1 inch thick, heartwood reddish brown; odor of wood like pine pitch; exudations of resin usually abundant; bark dark, thick and ridged, especially at butt JACK PINE.

II. Exudations of resin, pitch pockets, pitch streaks, and pitchy odor absent. Heartwood and sapwood of about the same color.

A. Wood light brown with reddish tinge; bark usually ridged and scaly except on very small stems, without resin blisters.....HEMLOCK.

B. Wood white; bark usually thin, fairly smooth, with resin blisters.....BALSAM FIR.