

# TECHNICAL NOTES

AI2005.117

FOREST PRODUCTS LABORATORY

U. S. FOREST SERVICE

MADISON, WISCONSIN

No. 117

## BOOK PAPER FROM SOUTHERN PINE AND RED GUM

The possibility of using southern pine and red gum for the production of high grade book and magazine paper has been demonstrated in recent trials at the U. S. Forest Products Laboratory, Madison, Wis. Book paper requires for its manufacture two kinds of woods - a long-fibered wood, such as spruce, to impart strength, and some short fibered hardwood to give the formation, finish, opacity, and other printing qualities. The southern pines are long-fibered woods, excellently suited for the manufacture of wrapping paper and fiber board, but their pitch content and the difficulty of bleaching them have heretofore been obstacles in the way of their use for white paper. These obstacles, it has been shown, can be overcome in a large measure by proper cooking conditions and improved bleaching methods. Red gum is typical of many southern hardwoods that might be used with the pines in the manufacture of the better grades of printing paper.

The laboratory experiments indicate that one cord each of loblolly pine and red gum are capable of yielding one ton of paper, at a cost which should allow a good profit under prevailing conditions.

The utilization of the southern pines for book paper would spread the burden of the pulpwood supply over considerable territory which is favored with a large annual growth of timber. In fact, although the bulk of the standing timber of the United States is in the Far West, the bulk of the annual growth is now in the South. Pines and hardwoods are distributed throughout the southern states in proportions well suited for the manufacture of book paper, and the forests are near the centers of paper consumption as well as the supplies of coal, chemicals, and other necessary raw materials.

Additional information and samples of the paper made in the trial runs of pine and red gum may be obtained from the Forest Products Laboratory on request.

DEC 20 1920