

• EXCERPTS & ABSTRACTS •

ALAS SAYS PI WOODS MUCH IN DEMAND IN US

Former speaker Antonio de las Alas, president of the Philippine Lumber Association, who just returned from a world trip, said yesterday there is an unlimited demand for Philippine Mahogany in the United States.

Speaking at a banquet tendered by the association in his honor, Alas stressed that the problem now of the Philippine lumber industry is how to supply the actual needs of consumers. American dealers, he reported, are anxious to establish connections with Philippine wood exporters to insure a steady supply for their customers.

"There has been considerable interest everywhere in the United States for Philippine woods," he said. He expressed the opinion that the forest reserve of the country could be its biggest asset if encouraged and properly developed. In order to give incentive to lumber producers, he said the government should give more interest and support to the industry to enable it to meet the increasing demand for Philippine woods in the U.S.

While in Washington, Alas conferred with Ambassador Carlos P. Romulo, Central Bank Governor Miguel Cuaderno, Councilor Urbano A. Zafra of the Philippine Embassy, and Daniel W. Bell, chief of the economic survey mission to the Philippines. They discussed the Philippine position in its fight for the retention of the name "Philippine Mahogany" for Philippine woods.

Alas was optimistic that the organized fight being waged by the government and the Philippine Lumber Producers' Association would result in a favorable decision by the Federal Trade Commission on this country to retain the term "Philippine Mahogany".

He warned that "enemies" of Philippine mahogany are waging an organized campaign to undermine the prestige of Philippine woods. He therefore cautioned members of the association against slackening of the campaign in behalf of Philippine mahogany.

Among those present in the banquet were director Florencio Tamesis of the Bureau of Forestry; Winslow L. Gooch, forestry management specialist of the MSA in the Philippines; Carlos P. Fernandez, of the Nasipit Lumber Company; Tomas B. Morato, of Sta. Cecilia Sawmills, Inc.; Gaudencio E. Antonio, of Western Mindanao Lumber Co., Inc.; Jose G. Bonoan of Taggat Sawmill Company, Amado B. Pineda, of Golden Ribbon Lumber Co., Inc.; A. W. Robert-

son, of Findlay Miller Timber Co.; and Pacifico de Ocampo, secretary-treasurer of the association.—*Manila Times Nov. 29, 1952.*

* * *

ALL-WOOD MINE-SWEEPERS BAFFLE MAGNETIC MINES

Laminated Wood Used in Navy's Newest Shipbuilding Program in New Orleans.

Adopted from *Southern Lumberman*, Sept., 1952
The Higgins, Inc., a local world-famous shipbuilding plant, has under construction a new type wooden mine-sweeper designed to defy Russian magnetic mines. This is the most important shipbuilding project in the Navy today according to the Navy's Bureau of Ships.

Higgins has a contract to build 10 such vessels at a cost of around \$15,000,000. Oak and fir laminated woods are used in the construction of these 165-foot mine-sweepers. After being carefully screened the planks are dressed and sized in the plant's mill and ends cut for the "scarf" or diagonal joints. Glue is applied to the diagonal joints if the planks are jointed into one long piece, and the ends are placed in contact and the joint placed in a scarfing machine which applies heat and pressure.

To make a large section, a number of these long planks are run through a glue machine and then placed one at a time into a special jig. Then the coated ones are locked in a jig, giving the "bundle" of planks the proper shape. Huge tarpaulins are thrown over the jig and live steam brings the assembly to about 110 degrees F for a duration of about ten hours. When the tarpaulins are removed the jigs are unlocked and the solid piece of many planks being bonded into a solid piece is trimmed and planed to the desired tolerance.

It has been announced that Navy tests have shown that the strength of this laminated wood is equal to, and even greater than, the strength of steel, and three times the strength of solid wood.

No iron or steel is being used in the hulls of this new type of mine-sweepers. These mine-sweepers will be powered by non-steel engines which are diesel operated.—C. B. Serna

* * *

EFFECTS OF TENSION WOOD IN HARDWOOD LUMBER AND VENEER

By MAXON Y. PILLOW

Technologist, Forest Products Laboratory
Forest Service, U. S. Dept. of Agriculture.

From *Southern Lumberman*, August 1, 1952

This research conducted at the Forest Products Laboratory, Madison, Wisconsin, explains the effect

of tension wood in hardwood lumber and veneer. An understanding of this important cause of unusual behavior in hardwood lumber, veneer, and products from these materials is essential in the wise use of lumber or veneer.

What is Tension Wood

Tension wood is a type of wood found in hardwood species that includes few to many of the peculiar fibers technically known as "gelatinous" or commonly as "tension wood" fibers. The name of of tension wood came probably from the fact that most of its particular kind of fibers occurred on the upper or tension side of leaning trees. However, in certain species tension wood fibers were also found, to a less extent, on all sides of the tree.

Tension wood tends to differ in color from the normal wood. In mahogany, it is darker in color and appears denser than the normal wood. In some species it may have a silvery or lustrous appearance. Tension wood has a much greater shrinkage along the grain than normal wood. Ordinarily, the nominal longitudinal shrinkage between green and oven dry conditions in hardwood species is less than 0.3 per cent, while in tension wood it has been found to be as high as 0.9 per cent.

Effect on Lumber

Warping—Defects such as bowing, crooking, and twisting otherwise known as warping often occur in lumber that contains tension wood. This defect often become so serious as to prevent the use of valuable wood, containing even little amounts of tension wood, as stiles and drawer separators for cabinets and furniture which require exact fitting. Internal stresses in pieces having both normal and tension wood have been seen to be great enough to cause splits extending 1 to 3 feet from ends of railway ties.

Surface defects—Tension wood fibers frequently cause unusual behavior of surfaces of lumber. Projecting fibers and torn grains are common on planed surfaces of tension wood. These defects are more serious than chipped grain such as may occur when normal lumber with cross grain is planed against the direction of the grain. Fussy surfaces also result when turning pieces to circular cross section as when manufacturing furniture parts. The seriousness of the machining defect of tension wood lies mainly in greater depth of tearing of surface fibers and greater or larger extent of projecting fibers on turned surfaces than is encountered usually in normal wood.

Collapse.—This defect is also found to be more serious in lumber containing tension wood. However, the heartwood shows a greater tendency to collapse than the sapwood.

Effects on Veneer.

The intrinsic characteristics of tension wood affect the behavior of veneer in much the same ways as in lumber. Buckling of the veneer and fussy surface are characteristic defects in pieces containing a good amount of tension wood. Hence the usefulness of veneer is impaired.

What To Do About Tension Wood

Losses due to the presence of tension wood in the manufacture of cabinets, furniture, crating materials, etc., can be minimized by means of practical selections of lumber and veneer. The requirements of the end product should be kept in mind in making the selection.

Detection in lumber and veneer.—Projecting fibers on sawed surface are a reason to suspect that tension wood is present, particularly when the fussy areas are mainly confined to part of the surface. Warping in rough, dry lumber, springing of pieces out of shape when ripped from lumber, and tearing of grain during the first planing of cabinet lumber are also indications of the presence of tension wood. Sometimes it is possible to detect tension wood by visual inspection by the differences in texture and color between tension wood and normal wood.

Material to reject.—Tension wood should be rejected only for purposes in which effects of its undesirable behaviour are serious, and pieces including tension wood should be used where its effects are of small consequences. However, there is no rule-of-thumb by which material with tension wood can be classed as acceptable or not. The requirements of the end product should be an important consideration in this respect.—C. B. Serna

Wood utilization has been developed to a point in some plants that 70% of the entire tree, branches, tops and bark go into commercial products.

Creosote is a wood preservative of long and excellent performance as attested by actual service records. Telephone poles that are fully creosoted have lasted from 40 to 50 years. Railway ties treated with creosote may last as long as 25 years under heavy railway traffic.

A recent study of circular sawmills seems to show that where equipment is used to clean logs before sawing of dirt and grit, filing required is reduced more than 50%.

The most important properties of wood required for ship and boat decking are: moderate weight, low moisture absorption, low shrinkage, adequate hardness and compressive strength across the grain, and good resistance to decay, warp and weathering.