

# UNITED STATES PATENT OFFICE.

CHARLES TENNANT LEE, OF BOSTON, MASSACHUSETTS.

## PROCESS OF PRESERVING WOOD.

SPECIFICATION forming part of Letters Patent No. 419,858, dated January 21, 1890.

Application filed October 24, 1889. Serial No. 328,080. (No specimens.)

*To all whom it may concern:*

Be it known that I, CHARLES TENNANT LEE, of Boston, county of Suffolk, State of Massachusetts, have invented certain new and useful Improvements in the Process of Treating Wood, Wood Fiber, or other Vegetable Fibrous Structure to Render it Impervious to Moisture and Capable of Resisting Atmospheric Influences, of which the following is a specification.

The object of my invention is the treatment of wood or vegetable fibrous material in such a manner as to quickly and effectively render it impervious to moisture and capable of resisting atmospheric action, in order that the durability of the material may be largely increased, great hardness obtained, and checking, cracking, or warping prevented. I am enabled to gain this result cheaply and effectively in the following manner: I prepare a bath of resinate of glycerine dissolved, preferably, in naphtha, although other solvents may be used. The resinate of glycerine may be made by heating together any resin—such as rosin, copal, shellac, and the like—and glycerine, five per cent. to thirty per cent. of the glycerine being used, according to the resin employed. After the bath of naphtha solution has been prepared the articles to be treated are immersed therein until they are

sufficiently saturated, as some kinds of wood, for example, require a longer time to become impregnated than other kinds. The length of time for any given material is best determined by experiment. After the articles have become thoroughly impregnated they are removed from the bath and subjected to heat to drive off the naphtha, after which they are ready for use or for further manipulation.

As will be obvious, material or articles which are to be employed for certain purposes may be used without driving off the naphtha or other solvent of the resinate of glycerine, leaving the solvent to spontaneous evaporation.

What I claim is—

1. The process herein described of treating wood or other fibrous material, consisting in immersing it in a solution of resinate of glycerine and naphtha.

2. The process of treating wood or other fibrous material, consisting in first impregnating it with a solution of resinate of glycerine and afterward subjecting it to heat, substantially as set forth.

CHARLES TENNANT LEE.

Witnesses:

WM. A. MACLEOD,  
ROBERT WALLACE.