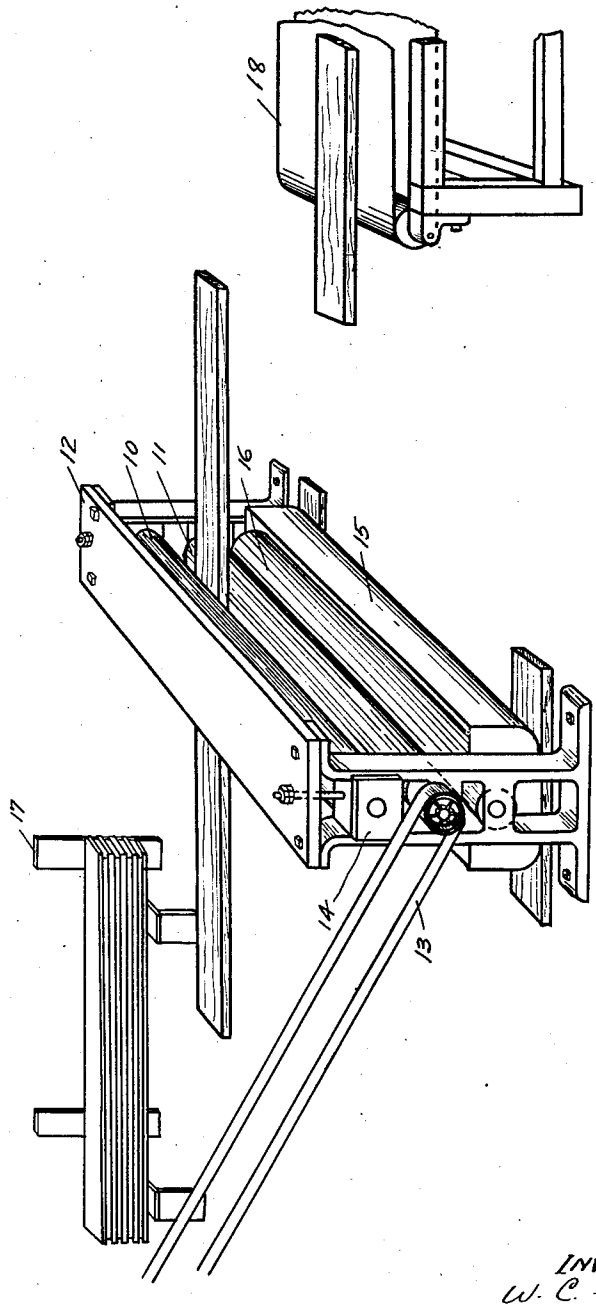
July 12, 1927. 1,635,665

W. C. GARDINER

PROCESS FOR THE TREATMENT OF LUMBER

Filed Oct. 29, 1925



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UNITED STATES PATENT OFFICE.

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PROCESS FOR THE TREATMENT OF LUMBER.

Application filed October 29, 1925. Serial No. 65,706.

The invention relates to the treatment of lumber, and the objects of the invention are to eliminate the warping, couping and heaving of the boards laid in the construction of floorings, platforms, walls and other structures; to maintain the boards in good condition and lengthen the life of same; to avoid interference with the exposed surfaces and thereby insure a good finish; and generally, to provide lumber of a superior quality for construction purposes, and it consists essentially of the novel substance and method of application as set forth more particularly hereinafter and pointed out in the claim following the description.

The drawing is a diagrammatic view, showing a preferred means of applying the substance.

An application for the product of this or a similar process is on file as Serial #65,705.

In various treatments of lumber to prolong its life and otherwise make it impervious to moisture, the boards have as a general rule been immersed in a bath of creosote or other substance so as to fill the pores and generally close up all the interstices, but this renders the board quite unfit for fine surfacing such as is required in a well finished flooring; therefore in this invention, it has been found desirable to avoid touching the surface to be exposed.

The boards are preferably finished or milled on one side and inserted between rollers, which are driven in any suitable manner to maintain the constant movement of the lumber, these rollers being indicated by the numerals 10 and 11, and the frame carrying them by the numeral 12, while 13 indicates a belt drive. The bearings 14 for the roller 10 are adjustable to accommodate the machine to different thicknesses of boards. The frame 12 rises from a bath 15 and the friction roller 16 journaled in said frame 12 dips in the bath 15 constantly in rotation and transfers fluid substance from the bath to the roller 11 which it is continuously rubbing.

This substance is a composition made up of denatured alcohol, turpentine and copal gum, and as the boards are passed through by the rollers 10 and 11, they gather on the unfinished or dressed side the treating substance which is pressed into the pores and other interstices by the same pressure as causes their forward movement.

The boards pass from the machine and are dried, or in most cases, may be used immediately following the treatment because the properties of the substance make the necessity of drying almost negligible; nevertheless, in the event of a change of substance or differences in the application, drying racks 17 may be used, as the invention is not confined to specific performances or exact proportions or the precise ingredients mentioned. The boards may be conveyed to the rollers by belt conveyors 18 or by any other suitable means.

It may be stated that in the substance as set forth there is merit in the gum which enters the wood and positively closes it up, so far as the penetration of moisture is concerned, and as the dampness of floorings is mostly from the underside, it is important to have that surface thoroughly treated, especially as the usual surface finishing of the exposed side effectually closes the outside surface to moisture from above. It has been found in many instances, that the treating compound is forced through the lumber and appears upon the surface in the form of small beads.

What I claim is:

The herein described treatment of lumber comprising the drawing of the lumber between rollers, and the application of a mixture of denatured alcohol, turpentine and copal gum on its dressed or unfinished face.

Signed at Toronto, Canada, this 16th day of September, 1925.

WILLIAM CECIL GARDINER.