

# United States Patent Office.

ARTHUR HOLMES, OF CORTLAND, NEW YORK.

*Letters Patent No. 62,334, dated February 26, 1867.*

## IMPROVEMENT IN PRESERVING WOOD FROM DECAY.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, ARTHUR HOLMES, of Cortland, in the county of Cortland, and State of New York, have invented a new and improved Mode and Composition for the Preservation of Wood and Timber.

The nature of my invention consists of a mode of preparing wood and timber by applying a preparation which fills the pores of the wood, hardens it, and forms upon its surface a coating which precludes air and moisture. The effect of the process is to secure the timber from any form of rot, and at the same time give to it firmness and solidity.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and use.

I first prepare the timber for the uses designed, so that no further cutting or boring will be necessary. The bark should be entirely removed and the surface perfectly dry, but need not necessarily be seasoned, as green and seasoned wood are used alike. To the timber thus prepared the composition is applied either by immersing the timber in it or covering the surface of the wood with the preparation by means of any convenient instrument. The composition is of a nature to penetrate the wood, filling the pores and giving to it solidity and strength, and by means of the coating, which forms upon the wood, the wood is protected from air and moisture. I use in my preparation, tar, quick-lime, mineral paint, and water-lime or hydraulic cement; and to give the composition a proper consistency, I take any substance of the nature of ground stone, fine sand, ashes, coal dust, mineral ores &c., which should be pulverized, and the coarse particles removed by sifting or otherwise, and apply such quantities as shall be required to reduce the composition to the consistency of paste. Any one or more of these articles may be used in the preparation. The composition which I use principally is prepared by taking coal tar, boiled to expel the water; add to this, quick-lime thoroughly slaked, water-lime, and mineral paint, in proportion of one part of each to ten parts of ground stone or fine sand, and used in quantities sufficient to render the composition of the consistency of paste. All ingredients should be dry, the elements thoroughly mixed, and the preparation applied while hot. I do not limit myself to the use of this scale of compounding the elements, but use them in any other proportion as desired; and also, in the place of ground stone and sand, use in part or whole any or all of the articles before named, and in the use of mineral ores the paint may be omitted.

Where the timber is to be used in constructing steamships and sailing vessels, I first immerse it in a solution of copperas heated to boiling, where it should remain from four to six hours. After it has been removed and thoroughly dried the application should be made of the preparation described above.

I do not claim as my invention the articles, as such, used by me, but what I do claim as my invention, and desire to secure by Letters Patent, is—

The mode of preparing and preserving wood and timber from decay by the application of a composition, and the composition itself, or any other substantially the same, as hereinbefore substantially set forth.

ARTHUR HOLMES.

In presence of—

D. H. BURR,

E. P. SHIFTER.