

United States Patent Office.

BENJAMIN H. DETWILER AND SAMUEL G. VAN GILDER, OF WILLIAMSPORT, PENNSYLVANIA.

Letters Patent No. 111,045, dated January 17, 1871.

IMPROVEMENT IN PRESERVING WOODS.

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

To all whom it may concern :

Be it known that we, BENJAMIN H. DETWILER and SAMUEL G. VAN GILDER, of Williamsport, in the county of Lycoming and in the State of Pennsylvania, have invented certain new and useful Improvements in Process for Preserving Wood; and do hereby declare that the following is a full, clear, and exact description thereof.

The nature of our invention consists in a new process of preserving wood by ejecting the sap by use of steam, and then introducing resin, pitch, asphalt or its equivalents, held in solution by the use of petroleum or any of its distillates, as will be hereinafter fully set forth.

The wood which it is desired to preserve is first subjected to the usual steam process, whereby the sap and all extraneous matter is ejected, thus coagulating the albumenoids, and at the same time expanding the woody fiber, preparing the wood so as to receive the solution.

Any one of the following materials, namely, resin, pitch, asphalt, paraffine, &c., are then dissolved in suitable proportions by the use of crude or refined petroleum, benzine, liquid paraffine, or any product whatsoever manufactured out of or from petroleum.

This solution is forced into the opened pores of the wood by the use of steam or atmospheric pressure, and also by capillary attraction, the wood thus becoming thoroughly impregnated with the same; and the pores becoming hermetically sealed, prevent the water from entering, and hence completely preserve the wood from rotting.

Having thus fully described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

The above-described process for preserving wood, consisting of the ejection of the sap by steam, or otherwise, and the introduction of resin, pitch, asphalt or its equivalents, held in solution by the use of petroleum or any of its distillates, substantially as herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 3d day of January, 1871.

B. H. DETWILER.
S. G. VAN GILDER.

Witnesses:

C. L. EVERT,
J. M. MASON.