

UNITED STATES PATENT OFFICE.

WILLIAM JAMES WATSON, OF LADYSMITH, BRITISH COLUMBIA, CANADA.

PROCESS OF PRESERVING WOOD.

1,015,862.

Specification of Letters Patent.

Patented Jan. 30, 1912.

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To all whom it may concern:

Be it known that I, WILLIAM J. WATSON, citizen of the Dominion of Canada, residing at Ladysmith, Vancouver Island, in the Province of British Columbia, Canada, have invented a new and useful Process of Preserving Wood, of which the following is a specification.

This invention relates to a means for preserving wood containing an acid against decay.

It comprises the impregnation of the wood containing an acid with a salt of iron that will combine with an acid in the wood and form an acetate of iron. If the impregnation is satisfactorily performed the wood so treated resists decay indefinitely and is immune to the attack of the teredo.

I have found satisfactory results to be attained with the use of carbonate of iron prepared and applied in accordance with the following directions. The carbonate is obtained in any suitable manner: It may be attained by digesting iron or a compound of iron such as chalybite (FeCO_3) in water saturated with carbon di-oxid. The wood to be protected is permeated with this strong carbonate of iron either by immersion which may be sufficient for cut wood of ordinary thickness such as is used for inside woodwork; but where the thickness of the wood is considerable or when full protection is desired to be rapidly attained the wood to be treated may be placed in chambers from which the air can be exhausted. After time has been allowed for the air to be withdrawn from the interstices of the wood a strong solution of the carbonate of iron is charged in and even pumped in under a considerable pressure.

If the solution of the carbonate is not a strong one the iron is withdrawn from it in

permeating the outer thickness leaving an impoverished solution to penetrate the inside and adequate protection is not attained. But if satisfactorily performed the treatment confers a lasting preservative property on the wood.

The compound is cheap and easy to apply the only expense worth considering being the outlay on the plant if the timber to be treated is of large size.

I claim—

1. A process of preserving wood containing an acid which consists in permeating wood with a salt of iron that will combine with an acid in the wood to form an acetate of iron.

2. The process of preserving wood containing acid which consists in permeating such wood with a strong solution of carbonate of iron in water containing carbon di-oxid.

3. The process of preserving wood containing an acid which consists in exhausting air from the interstices of said wood and substituting therefor a strong solution of carbonate of iron in water containing carbon di-oxid.

4. The process of preserving wood containing an acid which consists in exhausting air from the interstices of said wood and substituting therefor a strong solution of carbonate of iron in water containing carbon di-oxid under a pressure in excess of that of the atmosphere.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM JAMES WATSON.

Witnesses:

G. B. KITTO,
R. CARMICHAEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."