

UNITED STATES PATENT OFFICE.

HUGO GALLINOWSKY, OF GALVESTON, TEXAS, ASSIGNOR OF ONE-HALF TO
ISAAC HEFFRON, OF SAME PLACE.

WOOD-PRESERVATIVE.

SPECIFICATION forming part of Letters Patent No. 542,247, dated July 9, 1895.

Application filed April 20, 1895. Serial No. 546,538. (No specimens.)

To all whom it may concern:

Be it known that I, HUGO GALLINOWSKY, a citizen of the United States, residing at Galveston, in the county of Galveston and State of Texas, have invented certain new and useful Improvements in Wood Preservation; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to protecting or preserving wood.

The object of my invention, more particularly stated, is to protect piles in water from the action of deleterious and destructive forces which tend to destroy the wood. The toredo is a notable example, for instance.

While the specification will be limited to the protection of piles in sea-water, it will be understood that my invention may be applied to the preservation and protection of all forms of wood which enter into the construction of walls, bulkheads, piers, bridges, jetties, and other stationary structures. It is also well adapted to covering ships' bottoms and other movable craft.

For these purposes my invention consists of a fibrous material, either vegetable or mineral, treated in the hereinafter-described method, the novel features of which will be set forth in the claim.

In exemplification a cotton fiber is treated by being exposed to a weak solution of oxalic acid for a short time, which gives the fiber a soft plastic quality, which yields more readily to the hereinafter-described treatment than in its original state. The fiber is then taken from the oxalic-acid bath, the solution being

pressed out, and is then placed in a second solution consisting of about ninety per cent. of magnesium chloride, (25° to 30° Baumé, arimometer,) about five per cent. boracic acid, and about five per cent. oxalic acid. To this is added magnesium oxide in powder and mixed therewith. After the compound is half settled it is subjected to slight pressure, strong enough to squeeze that salt out which did not enter or combine with the magnesium cement. This operation leaves the fiber in a condition slightly saturated with the cement compound in proper proportions. The fiber thus treated is placed around the pile in any suitable practical way to the desired height or thickness, and is preferably secured by copper fastenings. The fiber thus treated forms a bone-like covering of great toughness and tensile strength and which adheres perfectly to the pile.

It has been demonstrated by practical experiments that the toredo worm hesitates to take its way through tough fibrous masses. Salt-water also has but little or no effect upon this covering.

I claim—

A compound for coating piles and other timbers, consisting of a fibrous material, oxalic acid, magnesium chloride, magnesium oxide, and boracic acid, substantially as set forth.

In testimony thereof I affix my signature in the presence of two witnesses.

HUGO GALLINOWSKY.

Witnesses:

WILLIAM T. SHERWOOD,
LENT M. HITCHCOCK.