

UNITED STATES PATENT OFFICE.

EDWARD EARLE, OF SAVANNAH, GEORGIA.

IMPROVEMENT IN THE MODE OF PRESERVING TIMBER.

Specification forming part of Letters Patent No. 934, dated September 20, 1838.

To all whom it may concern:

Be it known that I, EDWARD EARLE, of the city of Savannah, in the county of Chatham and State of Georgia, have invented a new and useful Improvement in the Mode of Preserving Timber; and I do declare that the following is a full and exact description.

The nature of my invention consists in applying heat by boiling, and in combination with various ingredients, to the interior, by means of a central perforation, as well as to the exterior of timber, according as the size and kind of timber may render expedient, for the destruction and prevention of worms in it, as well as for the removal or correction of the sap, and the occupation of the timber by a preservative substance.

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

I first bore the timber, if it be of a size to require it, through the center, making the perforation of a caliber proportioned to its size—say an inch when it is five or six inches square, and so on to two or three inches, in proportion to the size of the stick—a circumstance which should be attended to in every part of the process; or, if it be of very large size, preferring several smaller perforations when no particular consideration forbids it. I then boil it in a solution of the sulphates of iron and of copper from two to five or six hours, or longer, as its size and kind may demand. When it has been thus treated it is to remain in the fluid to cool gradually, then to be removed to a shed in a dry, airy situation, and being laid so as to ad-

mit the air freely to every part, but protected from the sun, wind, and cold, it is to undergo a thorough but gradual drying, for which, in ordinary weather, even very large timber will not require many weeks. Finally, before it is used, the perforation is to be tightly plugged with wood of the same kind and treated in the same way. The proportions of the two sulphates may be one of the sulphate of copper to three of the sulphate of iron, and the proportion of the whole to the water should be from two to three pounds to every gallon, and during the boiling occasional additions should be made from a vessel of the prepared solution, that every part of the timber may be constantly submerged. The dilution of the fluid by the steam employed to boil it should also be considered and guarded against.

What I claim as my invention, and desire to secure by Letters Patent, is—

The boiling of timber, as described, in a solution of the sulphates of iron and of copper. I apply this fluid to the interior as well as the exterior of timber, by means of the central perforation, when the size of the timber requires it, as the most effectual mode of preserving it from the ravages of insects and from rot.

I do not claim the saturating of timber by a solution of the sulphates in water when applied cold, but confine my claim to boiling it, as above set forth, in that solution during two to five or six hours, or more.

EDW. EARLE.

Witnesses:

B. K. MORSELL,
D. S. WATTS.