

UNITED STATES PATENT OFFICE.

ARCHIBALD B. TRIPLER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PROCESSES FOR PRESERVING WOODEN PAVEMENTS FROM ROT.

Specification forming part of Letters Patent No. 126,592, dated May 7, 1872.

To all to whom it may concern:

Be it known that I, ARCHIBALD B. TRIPLER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Process for Preserving Wooden Pavements from Rot, &c., of which the following is a full, clear, and exact description.

Letters Patent No. 104,917 were granted to me June 28, 1870, for preserving wood for railroad ties and other purposes, in which the use of chloride of arsenic, or arsenic and chloride of sodium combined, are claimed as the preservative agents, as therein described. In my present application for Letters Patent I use the same antiseptics, after first preparing the blocks and foundation timbers or planking of the pavement, in a manner as follows: The foundation timbers or planking and the blocks forming the pavement are first placed in a suitably-constructed cylinder or other receptacle, through which a volume of superheated steam is passed to free the pores of the wood from sap. When sufficiently steamed, a current of superheated dry air is then passed through the cylinder until the blocks and planking are sufficiently dried, which leaves them in a cellular condition, and in a state to receive the antiseptic, which thoroughly permeates the tissues of the wood and prevents dry rot or fermentation. The foundation planking of the pavement is then laid securely in position, and the antiseptic spread upon it so that the wood will cover it, and it is then ready to receive the blocks. These latter are also immersed a sufficient length of time in the antiseptic solution or compound until they are likewise thoroughly saturated, and their upper ends are then immersed in a suitable water-proof composition—it may be of asphaltum or mineral pitch, coal-tar, and charcoal, or other available substance, to render their surface impervious to moisture and prevent the antiseptic, which is highly soluble, from be-

ing diluted by rain, &c. Or the blocks may be placed in position, and the water-proof composition spread over and between them, as may be found most desirable.

The process herein described I have found to remedy the great objection heretofore urged against the adoption and use of wooden pavements, for the moisture arising from the earth cannot injure the foundation planking, the sap and all perishable matter having been removed therefrom, and in its place the antiseptic acts as a barrier between the moisture of the earth and the blocks, while the latter, being similarly treated, and coated upon their upper surface with a water-proof composition, are incased, as it were, between stratum of preservative agents, through which moisture cannot penetrate.

Instead of a foundation planking being used, the blocks may be placed directly upon the sand. In this case the antiseptic compound may be used in a dry state, and either be mixed with the sand or be placed upon it, in either of which cases its preservative action on the wood above it will be the same.

Having described my invention, I claim—

1. The process herein described for protecting wooden pavements from rot.
2. The blocks constituting a wooden pavement, saturated with a solution of chloride of arsenic, or arsenic and chloride of sodium, and coated on their upper surface with a water-proof compound, as herein described.
3. The interposition of an antiseptic compound between the blocks forming the pavement and the earth by the saturation thereof of the foundation planking, or its admixture with sand, as herein described.

In testimony whereof I have hereunto signed my name.

A. B. TRIPLER.

Witnesses:

JNO. J. NORTON,
H. H. YOUNG.