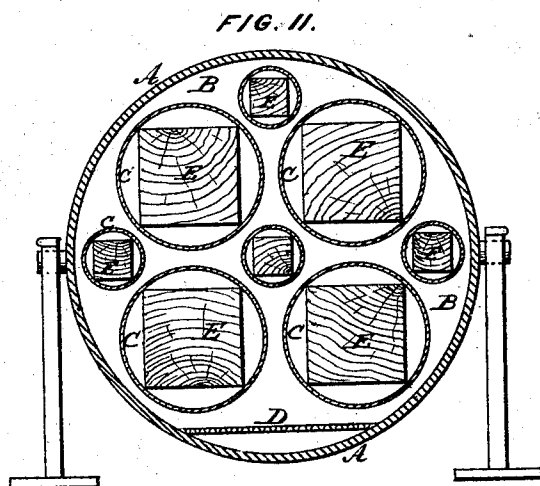
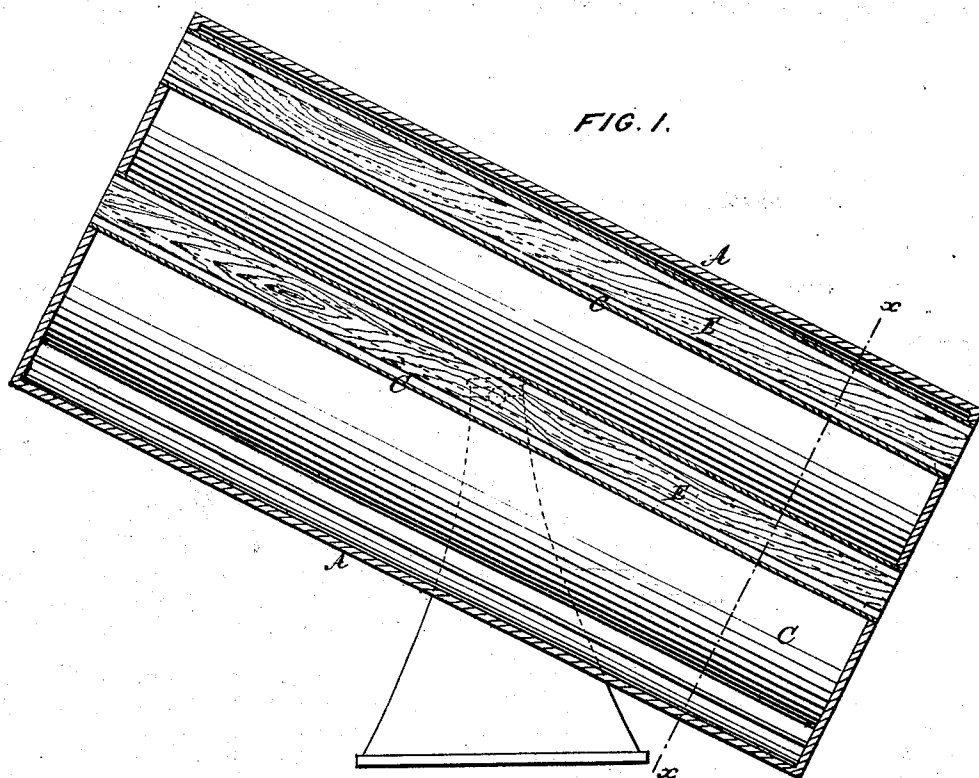


J. M. REID.
Preserving Wood.

No. 154,767.

Patented Sept. 8, 1874.



WITNESSES:

Wm. Hamilton

Wm. Dilworth & Co.

INVENTOR

John M. Reid.

UNITED STATES PATENT OFFICE.

JOHN M. REID, OF ALLEGHENY CITY, PENNSYLVANIA.

IMPROVEMENT IN PRESERVING WOOD.

Specification forming part of Letters Patent No. **154,767**, dated September 8, 1874; application filed March 10, 1873.

To all whom it may concern:

Be it known that I, JOHN M. REID, of the city of Allegheny and county of Allegheny, State of Pennsylvania, have invented certain Improvements for Preserving Wood and other fibrous matter from waste by rot or decomposition, of which the following is a specification:

It consists in the application of a hydrocarbon or other inflammable matter, and charring with or without the application of alum or other unflammable matter, as described.

First, I take the materials and, if need be, expel the natural sap or moisture, impart benzine, petroleum, or other oily inflammable matter, so that the surfaces may be easily scorched or charred in passing through or near fire, or other highly-heated matter. Second, when the materials are to be made unflammable, I impart to them a solution of alum, or other suitable salts, say, in proportion, one pound alum to one gallon water, more or less, as needs be, after passing through the charring-chambers, as shown in accompanying drawings. The wood, or other fibrous matter, may be laid in liquid or solution spread on the pieces, but by preference forced into and among the fibers. When the prevention of rot or decomposition is only wanted the solution of alum or other salts is not necessary. The charring-chamber C may be level, but for convenience I prefer to arrange it on trunnions, so as to be placed at any required angle.

Figure 1 represents longitudinal section. Fig. 2 represents end view with timber inside.

A represents outer wall; B, space between outer wall and chambers; C, chambers for receiving and charring wood; D, fire-space; E, pieces of wood in chamber. When the chamber C has become red hot, or nearly so by fire, below or otherwise, very little or no more fuel need be used, while unctuous timber is being supplied within, as such timber becomes ignited and charred in succession, whatever sizes, shapes, and numbers may be required.

All woods and such other fibrous bodies, for land as well as marine purposes, can be preserved as stated in the foregoing, while the invention is specially adapted to railway and mining purposes, viz., bridges, tressles, beams, fences, gates, posts, ties, and whatsoever may be excluded from or exposed to atmospheric influence, without detail or exception. The saving will not be local but national wherever adopted.

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

The method for the preservation of wood and other fibrous matter by the application of a hydrocarbon or other inflammable matter, and charring with or without the application of alum or other unflammable matter, as hereinbefore shown and described, for the purposes set forth.

JOHN M. REID.

Attest:

WM. H. STERRITT,
JOHN STERRITT.