

B. HOSKINS.
Fire-Proof Shutters.

No. 146,533.

Patented Jan. 20, 1874.

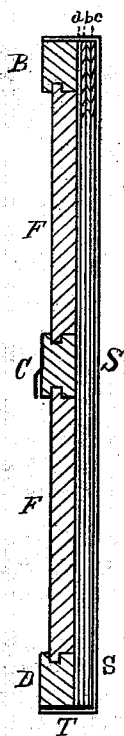


FIG. III.

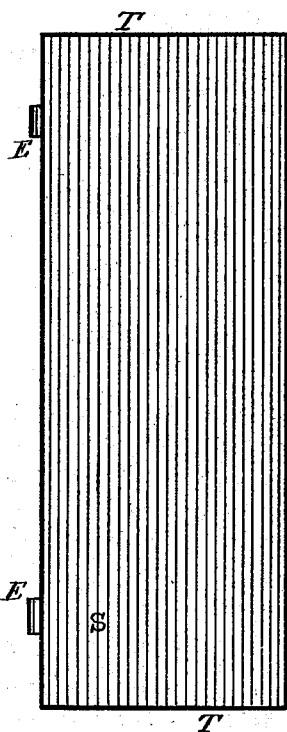


FIG. II.

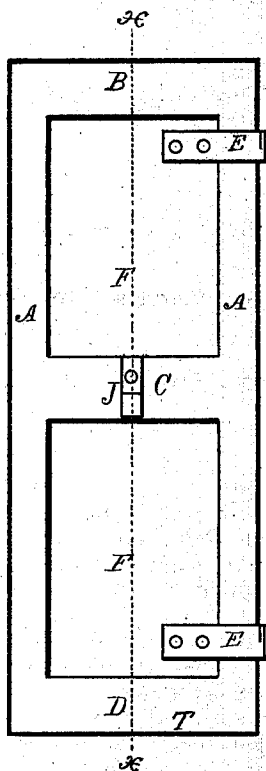


FIG. I.

WITNESSES:

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G. S. Chapin.

INVENTOR:

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UNITED STATES PATENT OFFICE.

BENJAMIN HOSKINS, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN FIRE-PROOF SHUTTERS.

Specification forming part of Letters Patent No. **146,533**, dated January 20, 1874; application filed December 18, 1873.

To all whom it may concern:

Be it known that I, BENJAMIN HOSKINS, of Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Fire-Proof Shutters, of which the following is a specification:

The present invention relates to a fire-proof shutter, which is made of wood, fire-proof paper, and sheet-iron, with a layer of substances containing water in a crystallized state—such as alum and sulphate of iron—mixed with coarse flour to form a paste. The heat, dissolving the crystals, is thereby kept from burning the wood.

In the drawing, Figure 1 is an inside elevation of my improvement in fire-proof shutters; Fig. 2, an outside elevation thereof; Fig. 3, a vertical central section taken on line X X, Fig. 1.

A A are the stiles, B C D the rails, and F F the panels, of an ordinary shutter. E E are the hinges, and J the bar-lock. Alum, suitably pulverized, in about two parts, is mixed with about one part of coarse flour. Sufficient water is then added to form a paste of a consistency to be spread on the outside of the wooden shutter, as shown at *a*, Fig. 3. One or more sheets, *b c*, of fire-proof paper is then laid over the paste *a*, and then the outside S and edges T are covered with sheet-iron, suitably fastened with nails in the usual manner.

The paste and fire-proof paper may extend over the edges T of the shutter, if desired, to render those parts more secure.

The fire-proof paper is of the same kind as patented by Richard U. Piper, No. 135,153, January 21, 1873; and is an article well known in the market.

A shutter thus made is found, by a practical test, to withstand a great heat brought against the outside, and affords about the same protection as the corrugated shutter, and is intended to be substituted for it. Further than this, the cost of manufacture is much less, and they are more easily fitted to a building, inasmuch as the wood-work can be fitted before the fire-proof material is put on.

I claim, and desire to secure by Letters Patent of the United States—

A shutter, consisting of a suitable wooden frame, B C D F, a paste made of alum or other crystallized substances, containing water and coarse flour, the fire-proof paper *b c*, and the sheet-iron S, substantially as and for the purpose set forth.

BENJAMIN HOSKINS.

Witnesses:

J. H. ELLIOTT,
G. L. CHAPIN.