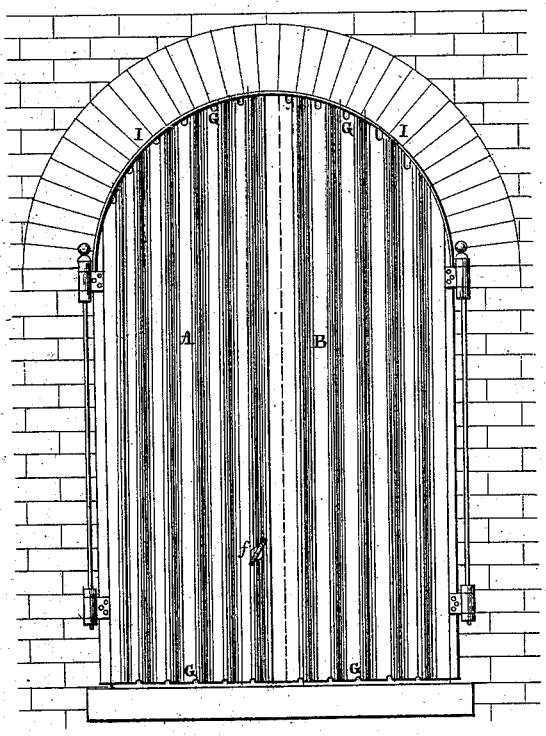
S. FALES.

Fire-Proof Shutter.

No. 162,811. Patented May 4, 1875.

Fig. 1.



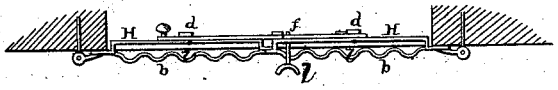


Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

SHEPHERD FALES, OF ST. JOSEPH, MISSOURI.

IMPROVEMENT IN FIRE-PROOF SHUTTERS.

Specification forming part of Letters Patent No. **162,811**, dated May 4, 1875; application filed November 25, 1874.

To all whom it may concern:

Be it known that I, SHEPHERD FALES, of the city of St. Joseph, in the county of Buchanan, in the State of Missouri, have originated and invented a Fire-Proof Shutter, suitable for any and all windows, doors, and other openings, with an outside cam thereon for the purpose of opening said shutter from the outside, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, to wit:

Figure 1 is a front view of my improved shutter. Fig. 2 is a horizontal section of the same.

This invention has relation to improvements in window-shutters.

The object of the invention is, first, to construct a window-shutter, such that the interior of the building will be effectually prevented from taking fire from a burning building adjoining. To this end the nature of the invention consists in combining with a corrugated sheet-metal window-shutter, fitting snugly over the exterior face of a window-frame, an interior double-walled box filled with a suitable non-conducting substance, adapted to be snugly received inside of the said frame, and provided with a ventilating air-chamber, formed between the corrugated shutter and the interior box filled with a non-conductor, and the latter is protected from the intense heat of a neighboring burning building.

In the annexed drawings, A B designate two wings of a window-shutter, hinged in the usual well-known manner to the wall of a building, and adapted to fold inward upon each other to close a window, as shown in Fig. 1. These blinds are of any corrugated sheet metal, though in practice I shall prefer to use iron, either galvanized or not, and they are each provided with a number of notches, G, at their tops and bottoms, for a purpose hereinafter explained. H designate preferably metallic boxes rigidly secured to shutters A B, which boxes are filled with asbestus, or any other suitable non-conducting filling, and are adapted to fill up the window-frame when the said shutters are closed. By this means an air-chamber, *i*, is formed between the shutters A B and fire-proof boxes H, through which air will have uninterrupted circulation, thus preventing dampness and oxidation.

In the event of a fire in close proximity thereto this chamber will prevent the boxes H from becoming unduly heated, the constant circulation from below upward through chambers *i* and notches G of fresh air serving as an effectual preventive therefrom. By this means, also, the interior of the building is prevented from catching fire or being scorched from the intense heat of the outer iron shutters—an event of no infrequent occurrence where flames are carried by the force of the wind across a narrow street or alley in direct contact therewith.

This arrangement of an outer door and an inner box filled with asbestus or other non-conducting filling may be used in connection with the entrances to a building with equally satisfactory results for the purpose of protecting them from incendiaries or accidentally catching fire.

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

A corrugated metal shutter or door provided with air-passages G, in combination with the air-ventilating chamber *i* and box H, filled with a non-conductor of heat, substantially as and for the purpose set forth.

SHEPHERD FALES.

Witnesses:

MURAT MASTERSON,

CHAS. L. SIMMONS.