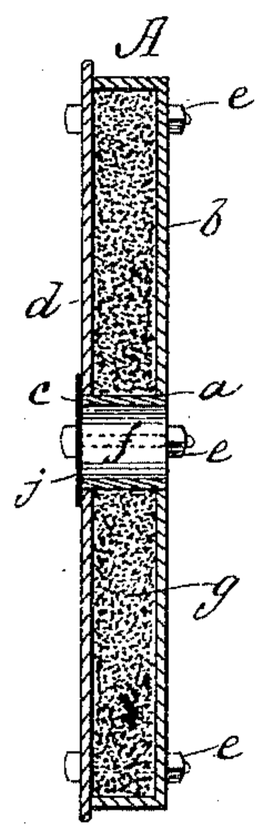
(No Model.)

W. H. DOLMAN.

FIRE PROOF SHUTTER.

No. 302,714. Patented July 29, 1884.



WITNESSES:

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WILLIAM H. DOLMAN, OF NEW YORK, N. Y.

FIRE-PROOF SHUTTER.

SPECIFICATION forming part of Letters Patent No. 302,714, dated July 29, 1884.

Application filed September 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DOLMAN, of the city, county, and State of New York, have invented a new and Improved Fire-Proof Window-Shutter, of which the following is a full, clear, and exact description.

This invention relates to iron shutters; and it consists in the construction and arrangement of parts, as will be hereinafter fully described, and specifically set forth in the claim.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure represents a sectional elevation, showing the passage through the shutter closed with a thin piece of metal.

The shutter A is composed of the inner box portion, *b*, which may be cast or made of sheet-iron, and the outer sheet-iron plate, *d*. These parts *b d* have the coincident openings *a c* formed in them, and are bolted together by the bolts *e e*, to form a hollow shutter, as shown.

In the openings *a c* is fitted the pipe *f*, and the space between the parts *b d* of the shutter is packed with ashes or other non-conducting material, as shown at *g*. The pipe *f* will be fitted in the opening *a*, and the non-conducting material *g* will be packed in the box part *b* before the plate *d* is bolted in place upon the edge of the part *b*. After the plate *d* has been bolted upon the box part *b*, inclosing the non-conducting material, with the outer end of the tube *f* reaching into the opening *c*, the outer end of the said tube will be closed by the thin metal plate *j*, soldered or otherwise secured over the tube, as shown, which plate can be easily broken away in case of fire. Constructed in this manner, it will be seen that the shutter, in case of fire in the building to which it is applied, will endure any amount of heat upon the inside, and yet the outer surface of the shutter will remain cool, so that firemen can approach and stand close to it, and that by means of the passage-tube *f*, the plate *j* being broken away, the nozzle of a hose may be inserted and the fire fought without the necessity of opening the shutter, which is always objectionable, as it produces a strong draft and increases the fire within.

My invention is also applicable to vertically-hinged and drop or hatchway doors.

I am aware that non-conducting material has been used between the plates of a shutter; also that observing-tubes have been inserted in doors; but

What I claim as new and of my invention is—

A fire-proof shutter consisting of the box *b*, having a central aperture, and a front plate bolted to said box and provided with a similar aperture, a tube connecting the plate and box through their central apertures, and a thin piece of metal, *j*, secured over the aperture and adapted to be broken away, as set forth, the space between the box front plate and tube being filled with non-conducting material, substantially as set forth.

WILLIAM H. DOLMAN.

Witnesses:
H. A. WEST,
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