

(No Model.)

G. ANDREEN.
SHUTTER WORKER.

No. 449,656.

Patented Apr. 7, 1891.

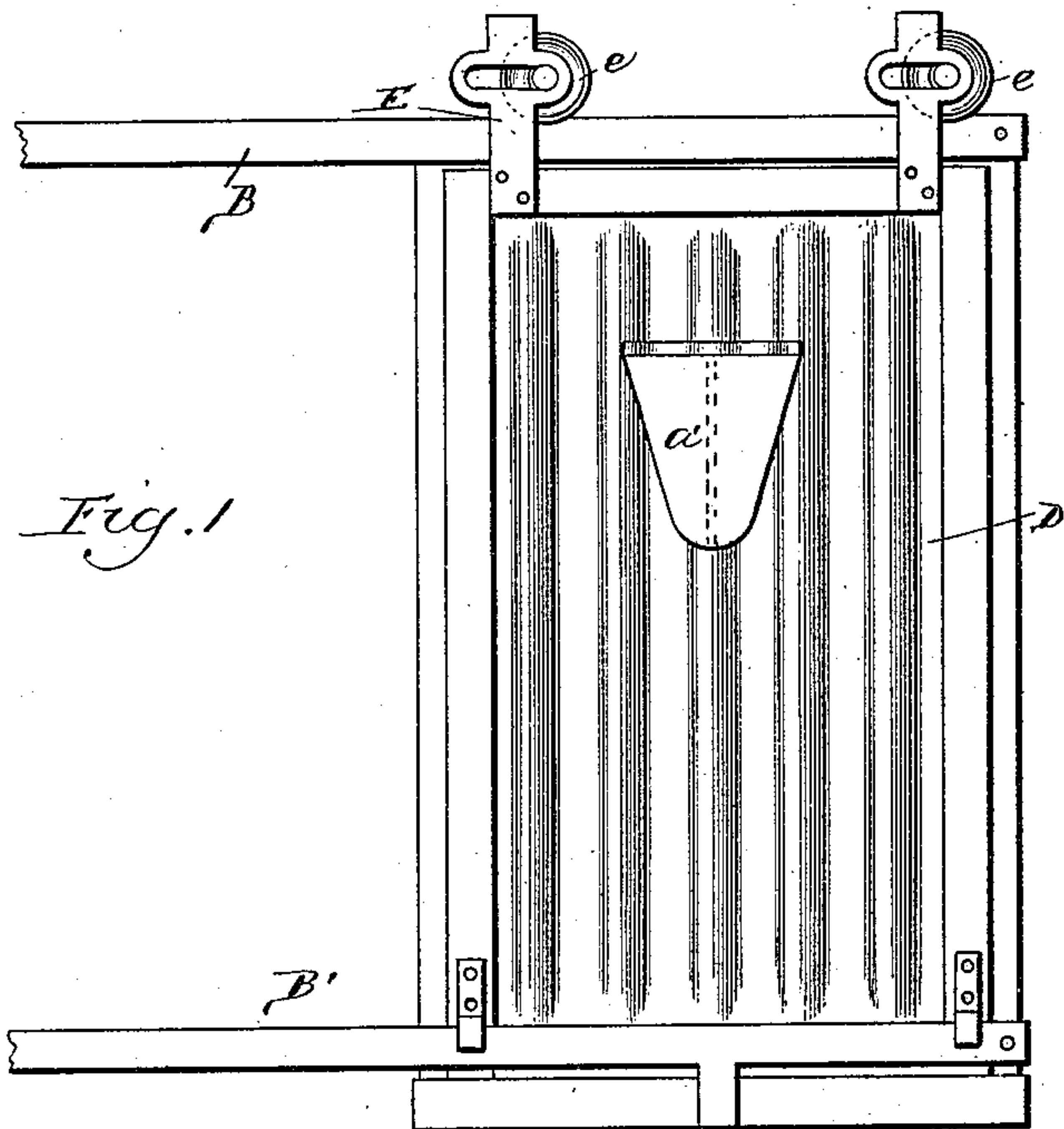


Fig. 1

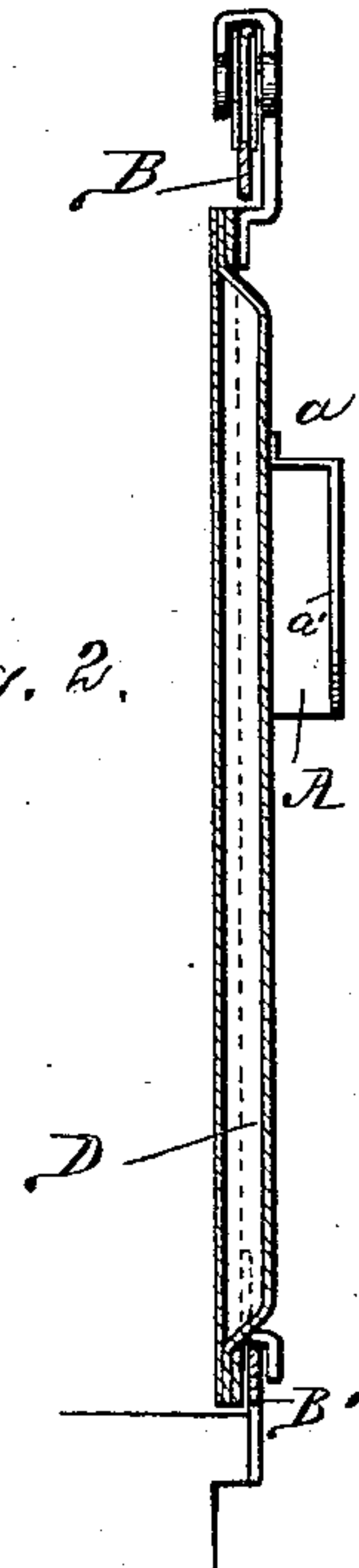


Fig. 2.

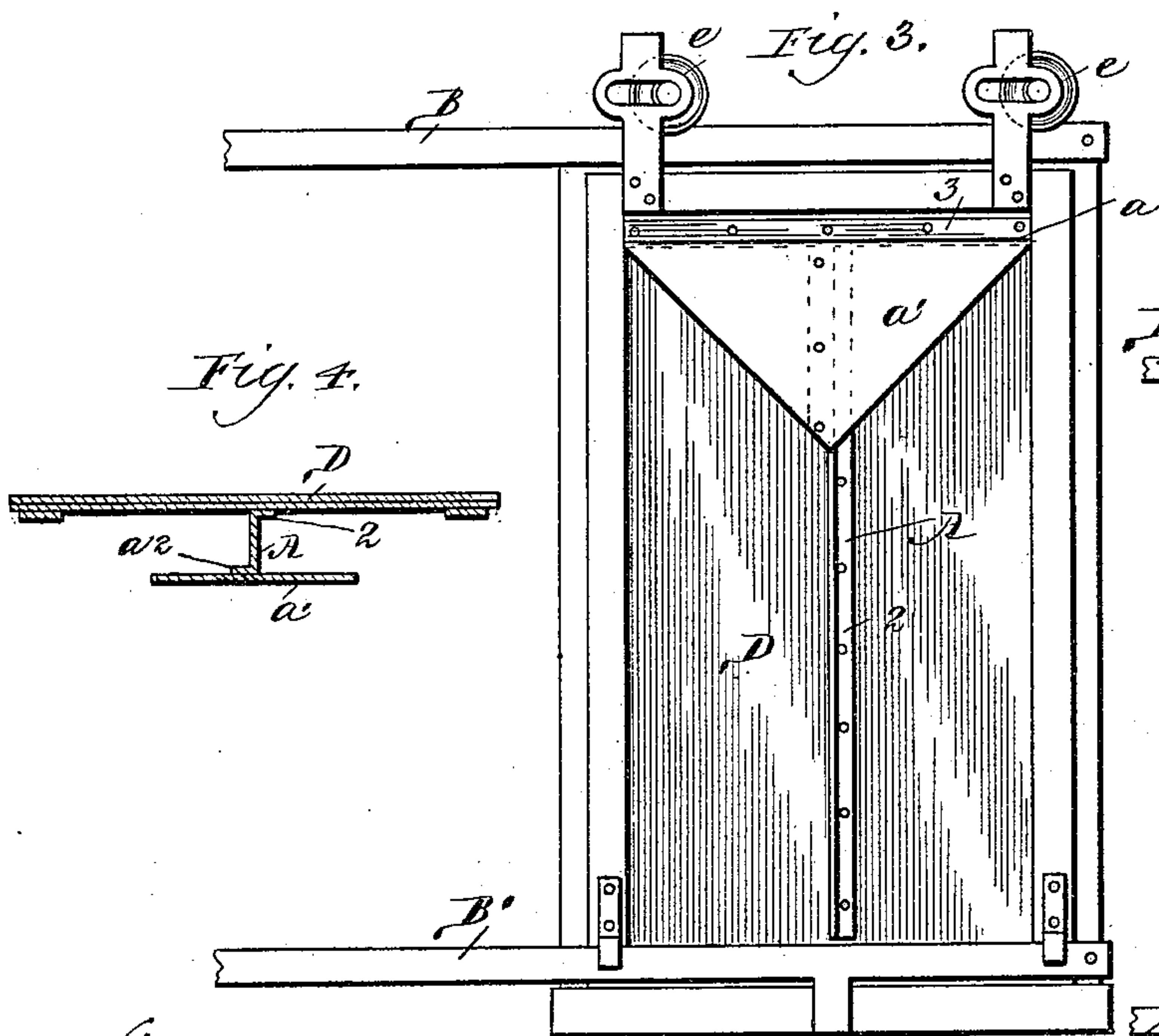


Fig. 3.

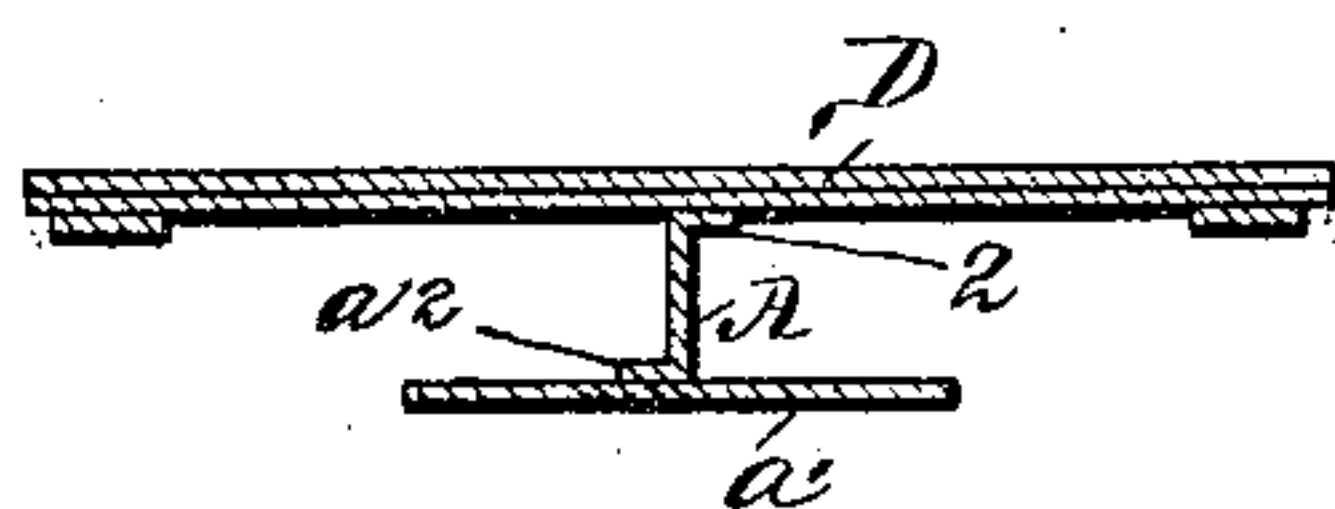


Fig. 4.

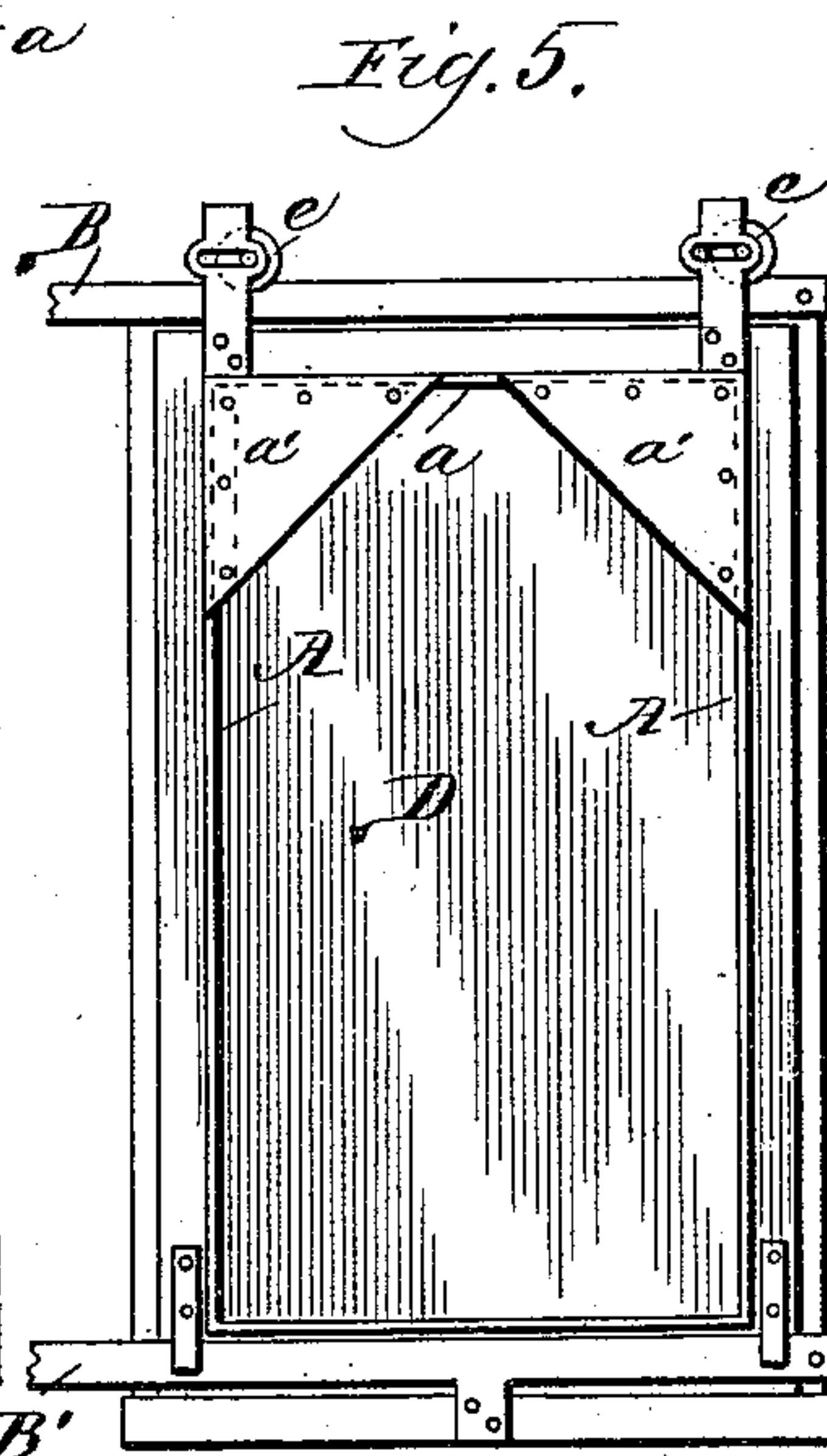


Fig. 5.

Witnesses
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GUSTAVE ANDREEN, OF OMAHA, NEBRASKA.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 449,656, dated April 7, 1891.

Application filed May 12, 1890. Serial No. 351,372. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVE ANDREEN, a citizen of the United States, residing at Omaha, county of Douglas, in the State of Nebraska, have invented certain new and useful Improvements in Means for Operating Fire-Proof Shutters and Doors, of which I do declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My present invention has for its object to provide a novel means whereby fire-proof shutters or doors may be readily operated by the impact of the hose-stream directed against the same, so that such shutters or doors can be quickly opened and closed by the firemen.

In Letters Patent No. 413,219, granted to me October 22, 1889, is shown and broadly claimed a fire-proof shutter or door having combined therewith a striker-plate projecting from the shutter in position to receive the impact of the hose-stream.

In the constructions hereinafter described I likewise employ a striker-plate, and the striker-plate is furnished with an overhanging top, as in my former patent. In addition to this striker-plate, I provide by my present invention a downward extension of the overhanging top plate, so as to form a pocket or cavity better adapted to catch the water, and thus more effectively apply the force of the stream in the operation of the shutter.

In the accompanying drawings, Figure 1 shows an outside view of a shutter or door having my invention applied thereto. Fig. 2 is a vertical sectional view thereof. Fig. 3 is an outside view of a shutter, showing a modified embodiment of my invention. Fig. 4 is a horizontal sectional view of the construction shown in Fig. 3. Fig. 5 is an outside view showing a further modified embodiment of my invention.

The door or shutter D is furnished with suitable hangers E, carrying rollers e, which travel upon the horizontal top rail B, secured above the opening of the door or window, and beneath such opening is provided a bottom rail B', whereby the lower portion of the door or shutter will be guided in well-known manner. Upon the outer face of each section of the shutter or door D is fixed at any conven-

ient point a striker-plate A, the inner edge of this striker-plate being suitably attached to the door or shutter, and above this striker-plate A extends a top plate a, as in the construction set out in my prior patent. From the outer edge of the top plate a depends a front plate a', which, with the striker-plate A and the top plate a, serves to form the pockets upon each side of the striker-plate A to receive the stream of water from the hose. The front plate a', serving, as it does, to make a more perfect pocket or cavity for the water, enables the force of the water to be more effectually applied to the operation of the shutter. From this construction it will be seen that the stream of water may be directed by the pipe-men against either face of the striker-plate A and into the pocket formed by the striker-plate A, the top plate a, and front plate a'.

In the form of my invention illustrated in Figs. 2 and 3 of the drawings the striker-plate A is shown as extending from top to bottom of the door or shutter D, this door or shutter being sustained by hangers E, as in the construction hereinbefore described. The striker-plate A is suitably bolted—as, for example, by a base-flange 2—to the face of the shutter and serves to give increased strength to the shutter to resist warping under intense heat. In this form of my invention the top plate a and front plate a' are shown as extending from side to side of the shutter at its upper portion, these parts being formed from a single piece of metal conveniently attached to the upper portion of the shutter by means of a base-flange 3. By preference, also, that part of the striker-plate A beneath the front plate a' is provided with a flange a², to which the front plate may be conveniently attached. From this construction it will be seen that the striker-plate A and the top and front plates a and a' form suitable pockets adapted to receive the impact of the stream of water from the hose and enable the shifting of the shutter or door to be readily effected.

In the construction illustrated in Figs. 5 and 6 of the drawings the striker-plate A is shown as a continuous plate extending around the shutter adjacent its top corners, and over the corners or points where the striker-plate A joins the top plate a are placed the front

plates a' . In this construction the striker-plate A serves not only to receive the impact of the water stream, but the front plate a' co-operates with the striker-plate A and with the top plate a in forming pockets, which enable the force of the water to be effectually applied to move the shutter in either direction.

It will be readily understood that when the shutter is to be moved in either direction the hose-stream will be directed into the pocket at the corner farthest from the pipe-men.

It is obvious that a striker-plate can be applied in other positions upon the shutter, and its details of construction and location may be varied within wide limits by the skill of the mechanic. So, also, the front plate may be modified as to its precise shape and inclination, so long as it serves to co-operate in forming a pocket for the effective application of the hose-stream.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a sliding door or shutter, of a pocket projecting from the door or shutter in position to receive the impact of the hose-stream, said pocket having a front plate to better confine the water, substantially as described.

2. The combination, with a sliding door or shutter, of a striker-plate, a top plate, and a

front plate adapted to form a pocket to receive the impact of the hose-stream, substantially as described.

3. The combination, with a sliding door or shutter, of a striker-plate extending approximately from top to bottom of the door or shutter and serving to stiffen the door or shutter against warping, said striker-plate projecting in position to receive the impact of the hose-stream, substantially as described.

4. The combination, with a door or shutter, of a striker-plate, and a top plate extending approximately from side to side of the door or shutter and serving to stiffen the door or shutter against warping, said top plate and said striker-plate serving to form a cavity against which a hose-stream may be directed to shift the door or shutter, substantially as described.

5. The combination, with a sliding door or shutter, of a striker-plate connected to the door or shutter and projecting outwardly from the sides thereof, a top plate, and a front plate or plates extending over across the top of the door at the upper corners or points of union with the striker-plate, substantially as described.

GUSTAVE ANDREEN.

Witnesses:

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