W. C. Marshall,

Shutter Fastener.

No. 68,636. Patented Sep. 10, 1867.

Fig. 3.

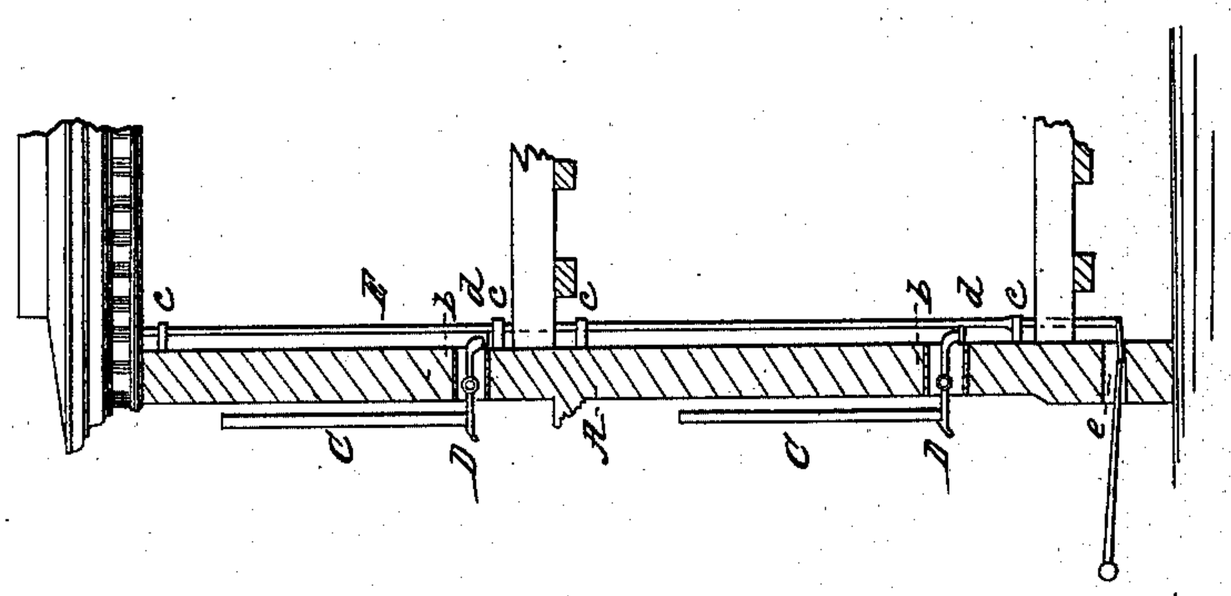


Fig. 2.

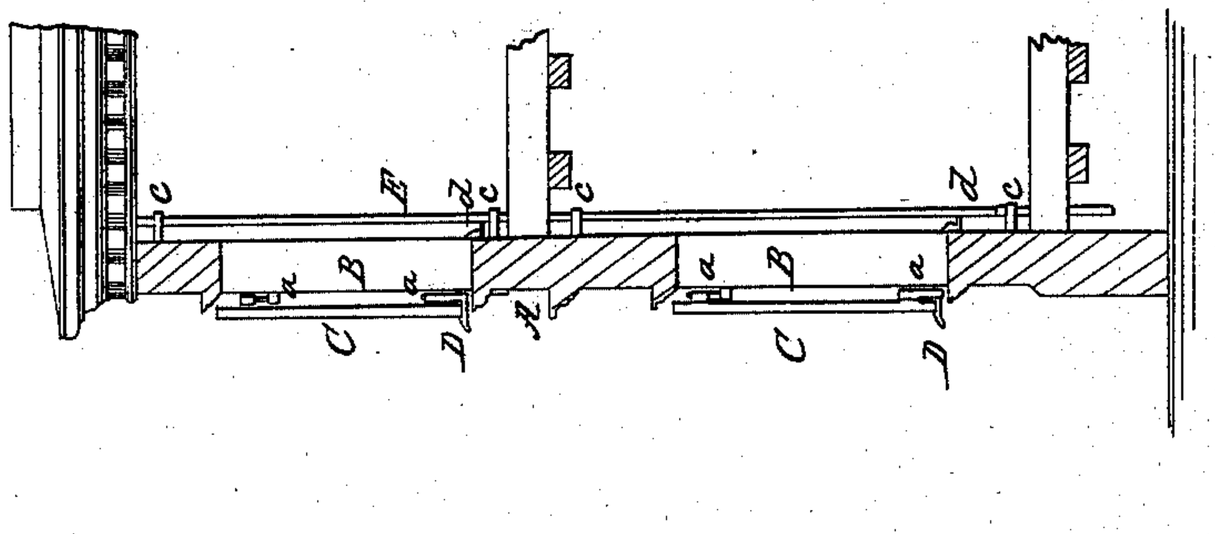
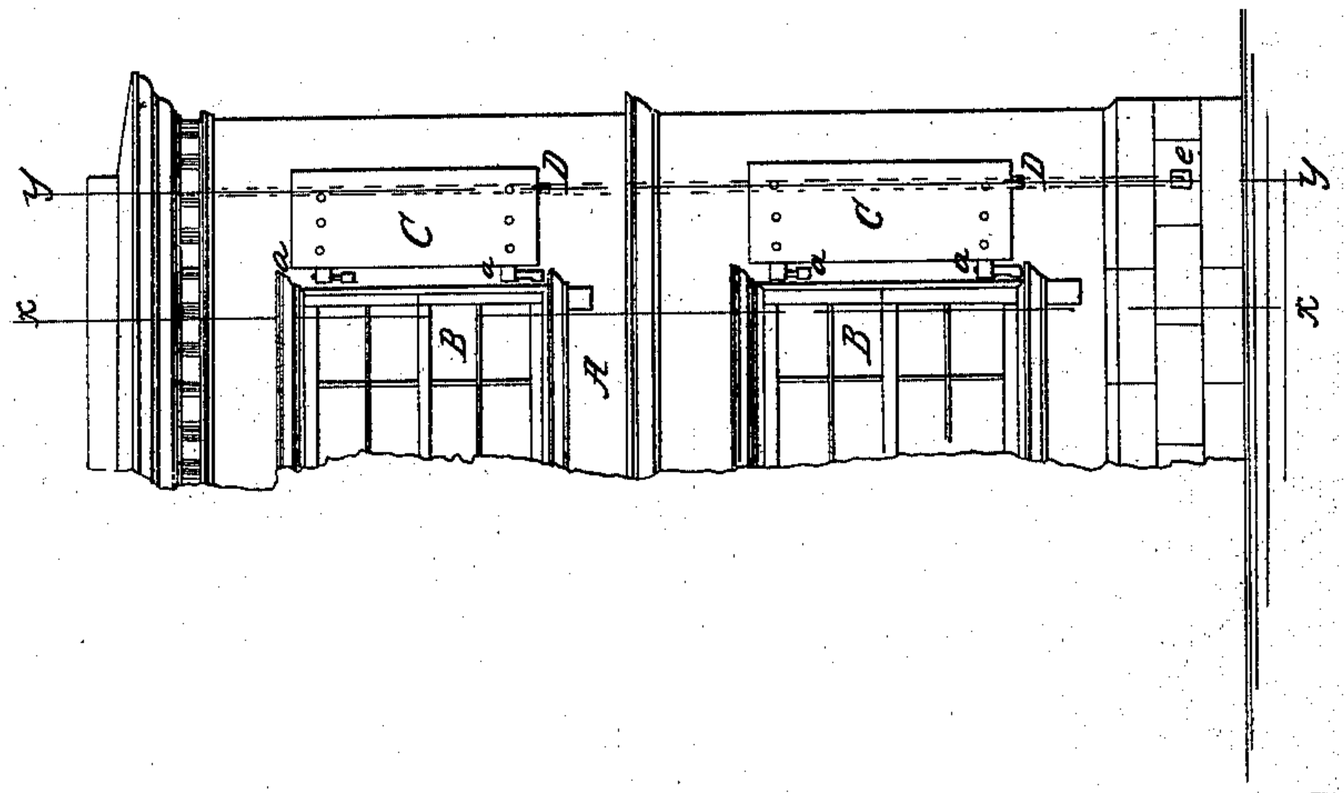


Fig. 1.



Witnesses:

Geo. H. Southern

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WILLIAM C. MARSHALL, OF NEW YORK, N. Y.

Letters Patent No. 68,636, *dated September* 10, 1867.

IMPROVED MODE OF OPERATING WINDOW-SHUTTERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM C. MARSHALL, of No. 14 Second avenue, New York, in the county and State of New York, have invented a new and useful Improvement in Operating Shutters of Windows; and I hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a front elevation of this invention.

Figure 2 is a transverse vertical section of the same, the line *x x*, fig. 1, indicating the plane of section.

Figure 3 is a similar section taken in the plane indicated by the line *y y*, fig. 1.

Similar letters of reference indicate corresponding parts.

This invention consists in the arrangement of a vertical tappet-rod, in combination with latches and self-closing shutters in such a manner that by the action of each tappet-rod two or more shutters can be released and made to close simultaneously.

The shutters are hung on hinges, with inclined planes, or they are otherwise arranged so that they will close spontaneously, and when said shutters are opened, they are retained by latches which pass through the wall, and the inner ends of which are in such a position that they are exposed to the action of the tappets on the vertical rod, and that by raising said rod two or more shutters, situated one above the other, are closed simultaneously. The tappet-rod extends down on the inside of the wall which is provided with an aperture, through which a lever or crowbar can be introduced, so that the tappet-rod can be operated from the outside of the building, and that the fire department is enabled to control the shutters and to close the same instantaneously whenever it may be desirable.

A represents a portion of a building, with two or more stories. The windows B in this building are provided with shutters C, which are hung on hinges *a*, provided with inclined planes, so that the same will close spontaneously, or instead of the hinges with inclined planes, any other suitable mechanism may be applied, whereby said shutters are rendered self-closing. When the shutters are opened, they are retained by latches D, which are hung on pivots *b*, and extend through the wall, as clearly shown in fig. 3 of the drawing. The inner ends of these latches are loaded, so that their outer ends or noses will always be brought in the proper position to catch over the edges of the shutters and to retain the same, whenever said shutters are opened and turned clear back to the position which they occupy in fig. 1 of the drawing. Instead of loading the inner ends of the latches, however, suitable springs might be applied to throw the noses of said latches in the proper working position, or said latches might be otherwise arranged to produce the desired object. On the inside of the wall I have arranged a rod, E, which slides up and down in suitable loops or eyes *c*, and which is provided with tappets *d*, extending under the inner ends of the latches, as seen in figs. 2 and 3 of the drawing. This tappet-rod extends down through the several floors of the building, and its lower end is opposite to an aperture, *e*, in the wall. By introducing a lever or crow-bar through this aperture, the tappet-rod can be raised, and the several latches, situated in a vertical row or tier, can be disengaged from their shutters, so as to cause said shutters to close simultaneously. If desired, however, each shutter can be made to close independent of the others, simply by lifting the inner end of the appropriate latch.

By means of the aperture *e* in the wall, and of the tappet-rod E, extending up to the top story, all the shutters situated in a vertical tier can be closed simultaneously from the exterior of the building, and the fire department or police have perfect control over the shutters, which is of immense advantage in case a fire takes place in a large storehouse, since a fire can be quenched or prevented from making headway by closing all the apertures, thus cutting off the supply of oxygen.

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

The pivoted latches D, extending through the wall, one end operated by the tappet-rod E, the other end holding the self-closing shutter C, substantially as shown and described.

W. C. MARSHALL.

Witnesses:

D. B. CHILDS,

J. VAN SANTVOORD.