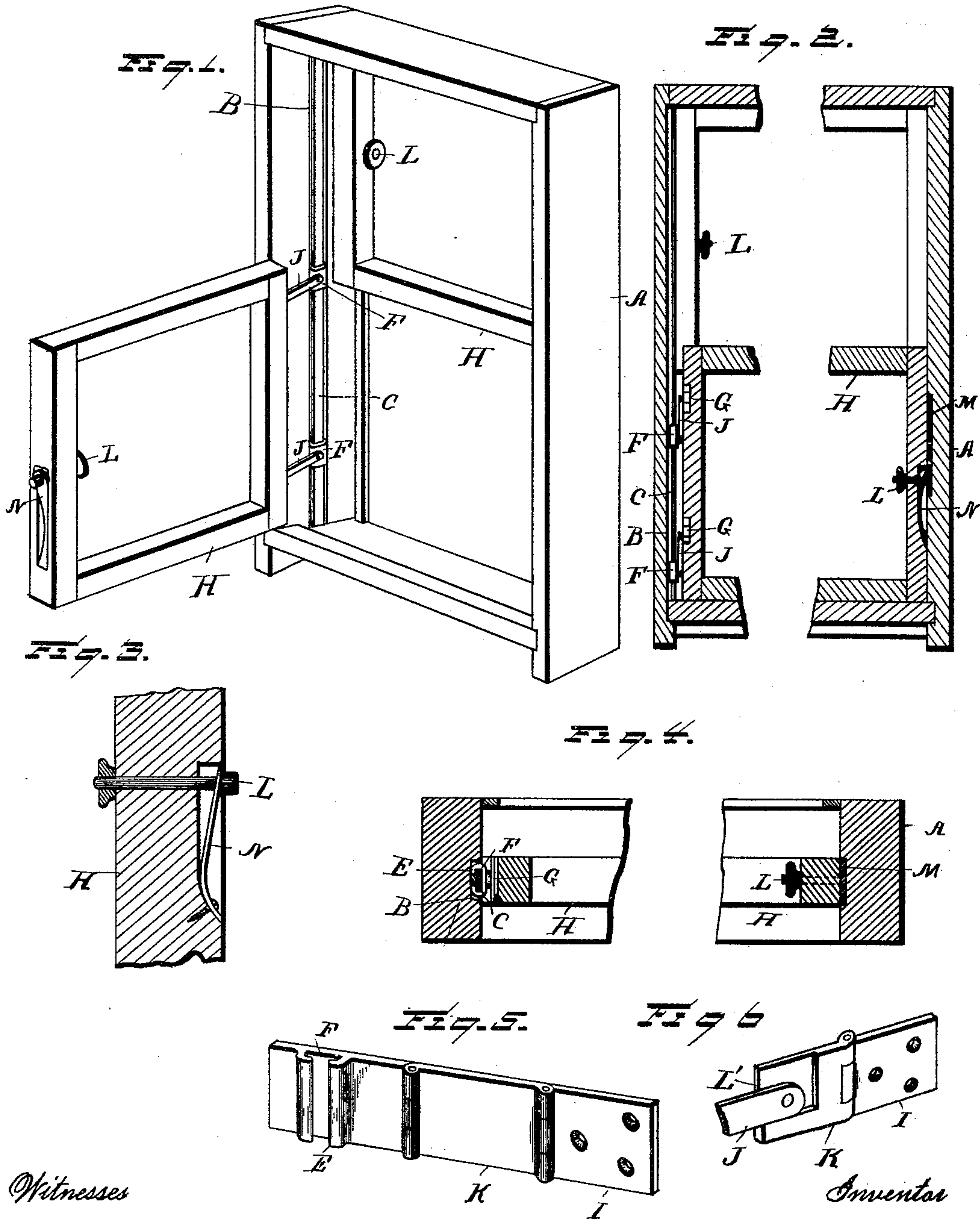


(No Model.)

P. D. CORRIGAN.
WINDOW.

No. 410,535.

Patented Sept. 3, 1889.



Witnesses

E. C. Mordeman

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UNITED STATES PATENT OFFICE.

PATRICK D. CORRIGAN, OF WELLSVILLE, NEW YORK, ASSIGNOR OF ONE-HALF TO JOHN W. GALLMAN, OF SAME PLACE.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 410,535, dated September 3, 1889.

Application filed April 27, 1889. Serial No. 308,810. (No model.)

To all whom it may concern:

Be it known that I, PATRICK D. CORRIGAN, a citizen of the United States, residing at Wellsville, in the county of Allegany and State of New York, have invented new and useful Improvements in Windows, of which the following is a specification.

My invention relates to improvements in windows, and has for its object to produce a window which can be easily and conveniently cleaned without the necessity of the person cleaning the window getting into the window-frame, and thereby endangering life, and without entailing a great amount of labor to remove the window from the frame.

The invention consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view showing the upper sash closed and showing the lower sash swung inward, so as to be cleaned. Fig. 2 is a vertical longitudinal section showing both sashes in the window-frame. Fig. 3 is a detail view of the locking devices. Fig. 4 is a horizontal section. Fig. 5 is a detail perspective view of a slightly-modified form of hinge. Fig. 6 is an enlarged view of the hinge.

The window-frame A may be of any desired size, and is provided in its opposite sides with the longitudinal grooves B, in which I secure the guide bars or rails C, the width of which is slightly less than the width of the groove, so as to leave slight spaces D between the edges of the said bars and the sides of the grooves, and the said guide-bars are arranged above the bases or inner walls of the grooves, so that their edges can be engaged by flanges E of the slides F. The hinges G, which support the sashes H, are secured to these slides, so that the sashes can be raised or lowered in the window-frame, as may be desired. The hinges G comprise the leaf I, secured to the edge of the sash, and the link J, having one end pivoted to the slide F and its other end pivoted to the leaf K, secured to the leaf I. The leaves I K are adapted to fold together in a horizontal plane, and thereby allow the sash to swing into or out of the window-frame, while the links J will swing vertically on their pivots, so as to

bring the sash into a true vertical position within the frame, so that it can be moved up and down therein without binding. Instead of using the swinging links J, the leaf I may be extended over to the slide and hinged thereto, as shown in Fig. 5. Such a construction will involve no departure from my invention. The leaf K is provided with a horizontal shoulder or rib L, on its side, against which the link contacts when the sash is swung out of the frame below a horizontal position, and consequently failing to properly support the sash. The sashes are provided at the sides opposite the hinges with the spring-latches M, which are adapted to engage recesses or sockets N in the side bars of the frame, as will be readily understood. The latch-pins are carried by the springs O, secured in the edges of the sashes, and project inwardly through the side bars of the sashes, their inner ends being threaded and provided with thumb-nuts, which serve as handles, and which can be turned up against the side bars of the sashes to vary the tension of the springs.

From the foregoing description it is thought that the manner of operating my improved window and the advantages to be derived from its use will be readily understood. The sashes can be easily raised and lowered by simply disengaging the latches from the sockets in the window-frame and then sliding the sash up or down, as will be readily understood. When it is desired to clean the windows or to repair the same, the latches are disengaged from the recesses or sockets, and the sashes are then swung inward, as will be readily understood on reference to Fig. 1, so as to give access to both sides of the glass. The links or double formation of the hinges permit the sashes to be easily swung around the window-frame, so that one sash will not be in the way while cleaning the other.

From the foregoing description it will be seen that I have provided a very simple window which can be easily operated and which, when in the frame, can be securely held, and which can be easily cleaned or repaired without necessitating the removal of any part of the window-frame or requiring the operator to sit in the window, and thereby endanger

life. In the event of the building being on fire the sashes can be both swung inward, so that furniture can be passed through the window without the danger of any injury
5 from broken glass.

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

1. The combination, with the window-frame
10 provided with vertical longitudinal grooves in its sides and the sash, of the guide-bars secured within the grooves and arranged out of contact with the walls of the grooves, the hinges secured to the sashes, and the slides
15 secured to the hinges and having flanges engaging the edges of the guide-bars, as set forth.

2. The combination, with the frame and the guide-bar secured therein, of the slide engaging the guide-bar, the sash, and the hinge connecting the sash and the slide, and consisting of the leaves I K, the leaf K having a shoulder L', and the link adapted to contact with said shoulder, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in
25 presence of two witnesses.

PATRICK D. CORRIGAN.

Witnesses:

JAMES H. FERGUSON,
G. W. PARSONS.