

(No Model.)

W. HEAPS.
WINDOW SASH.

No. 267,201.

Patented Nov. 7, 1882.

Fig. 1.

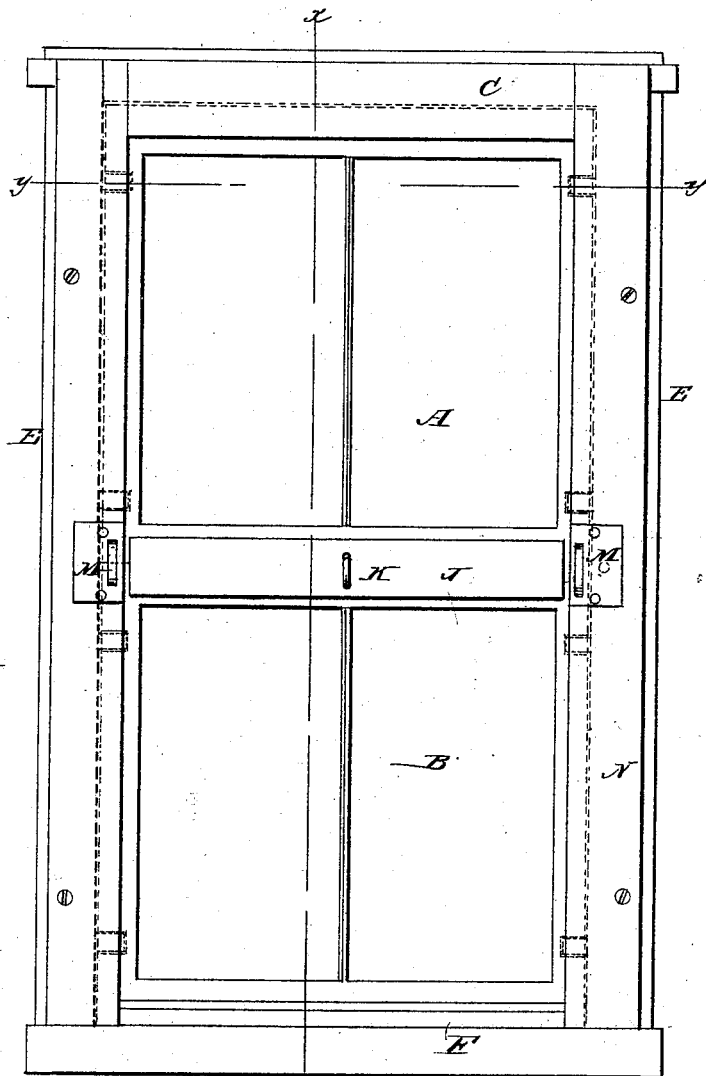


Fig. 2.

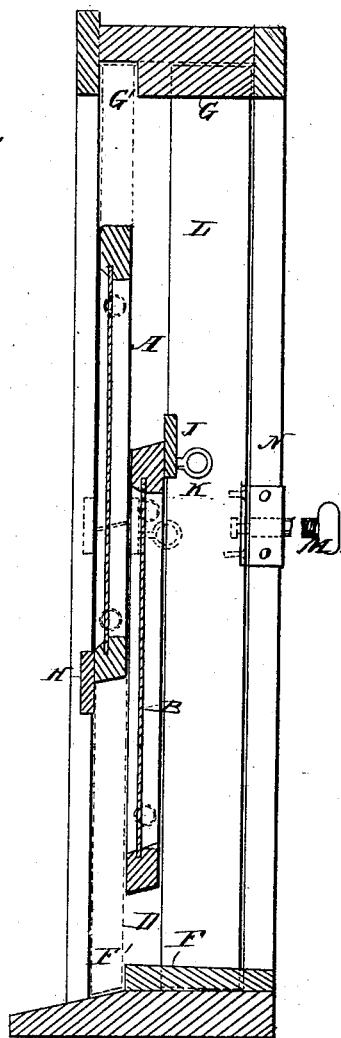


Fig. 4.

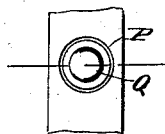


Fig. 3.

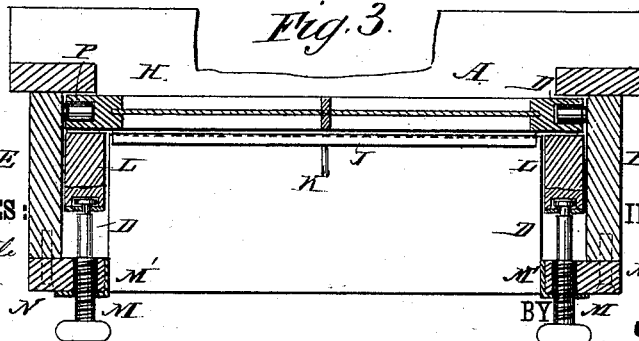
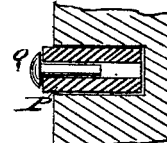


Fig. 5.



WITNESSES:

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WILLIAM HEAPS, OF WALDEN, NEW YORK.

WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 267,201, dated November 7, 1882.

Application filed May 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HEAPS, of Walden, in the county of Orange and State of New York, have invented a new and Improved Sash, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved window-sash which can be easily raised or lowered and locked securely in any desired position without the use of weights, cords, locks, or latches.

The nature of the invention consists in the combination and arrangement of parts, substantially as hereinafter more fully set forth and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an inside elevation of a window provided with my improved sashes. Fig. 2 is a longitudinal sectional elevation of the same on the line *xx*, Fig. 1. Fig. 3 is a sectional plan view of the same on the line *yy* of Fig. 1. Fig. 4 is an end elevation of one of the guide-blocks in the side rails of the sash. Fig. 5 is a longitudinal sectional elevation of the same.

The upper and lower sashes, A and B, fit into the window-frame C, which is provided with a wide vertical recess or groove, D, in each jamb E. The sill F is provided with a longitudinal groove, F', in its upper surface, at the front, into which groove the bottom rail of the lower sash, B, fits, and the upper cross-piece, G, of the window-frame is provided with a longitudinal groove, G', in its under side, along the front edge, which groove G' is adapted to receive the upper cross-rail of the upper sash, A. A board or strip, H, attached to the outer surface of the lower rail of the upper sash, A, projects beyond the lower edge of this bottom rail, and a strip or board, J, is attached to the inner side of the upper rail of the lower sash, B, this strip J projecting above the upper edge of this upper rail of the lower sash, B. A handle, knob, ring, or loop, K, or equivalent device for raising the lower sash, is attached to the strip J. The lower edge of the lower rail of the upper sash and the upper edge of the upper rail of the lower sash are beveled

to fit against each other. A rail or strip, L, is placed edgewise in each groove D in the jambs, these strips extending throughout the entire lengths of the grooves, and being guided at the top and bottom in transverse grooves in the sill and top cross-piece, G. Winged screws M pass through the casings N and have their ends swiveled in the longitudinal edges of the strips or rails L. The casings N are provided with nuts M', through which these screws pass. Tubular blocks or pieces P, of rubber or other elastic material, are held in the side rails of the sashes and project from the longitudinal outer edges of the same, which tubular blocks contain pintles Q, provided at the outer ends with heads resting against the outer ends of the blocks P. These blocks P prevent rattling and shaking of the sashes and hold them quite firmly in the casing.

The operation is as follows: When the sashes are closed they rest on each other, the upper rail of the upper sash passing into the groove G' and the lower rail of the lower sash passing into the groove F'. The strips H and J overlap the inner and outer joints of the meeting-rails of the sashes. The sashes are held in place by the rails or strips L, the front longitudinal edges of which are pressed against the sashes by means of the screws M. The sashes are thus held absolutely tight, and no air, snow, or rain can be driven through the joints. If the sashes are to be raised or lowered, the rails or strips L are partly withdrawn by turning the screws M, and the lower sash, B, is drawn from below the upper sash in the direction toward the interior of the room. The sashes can then be raised or lowered more or less, the sashes passing over each other, with the lower sash to the inside, as shown in Fig. 2. They can be locked in every desired position by pressing the front longitudinal edges of the rails L against them by means of the screws M, as shown. The sashes can thus be raised and lowered and locked in position without the use of cords, pulleys, weights, or catches. When closed and locked they are absolutely burglar-proof, as burglars cannot reach the fastenings. The sashes can be very conveniently opened at the top and bottom a short distance for ventilation.

I am aware that it is old to provide window-sashes with tongues at their vertical edges fitting in grooves in the window-frame, and that it is old to provide sashes with readily-removable strips or beads.

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

1. In a window, the combination, with the sashes A B, of the strips or rails L in grooves or recesses D in the jambs of the window, and the screws M, swiveled in the inner edges of the rails L and passing through nuts in the casing N, substantially as herein shown and described, and for the purpose set forth.

2. In a window, the combination, with the sash A, provided with a projecting strip, H, on the lower rail, and the sash B, provided with a projecting strip, J, on the upper rail, of the rails or strips L in the recesses D of the window-jambs and the screws M, substantially as herein shown and described, and for the purpose set forth.

WILLIAM HEAPS.

Witnesses:

JOHN R. HAYS,
CALEB BIRCH.