(No Model.)

A. HITT.

WINDOW.

No. 373,020. Patented Nov. 8, 1887.

Fig. 1.

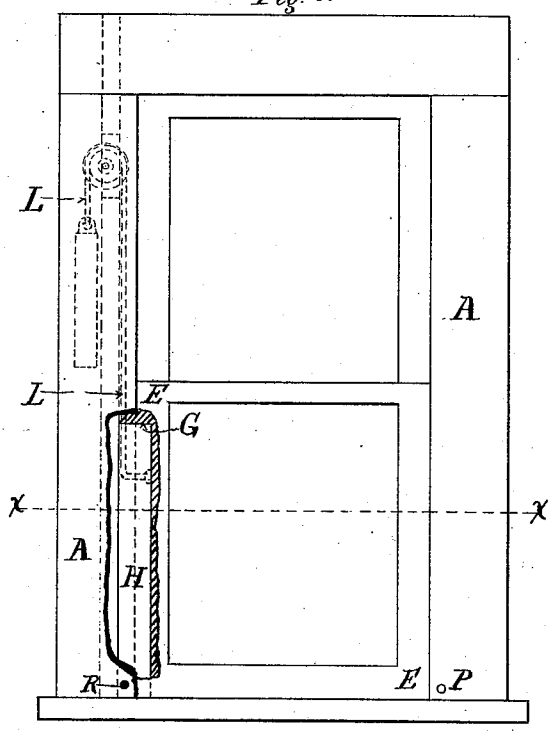


Fig. 3.

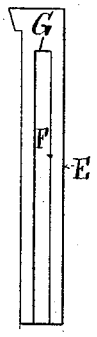


Fig. 4.

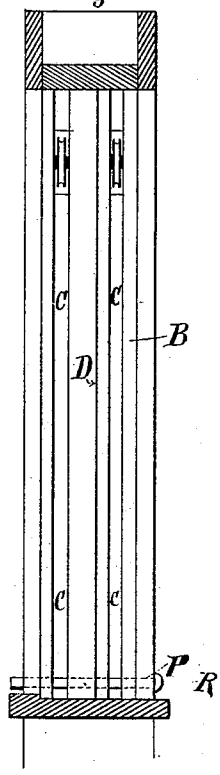
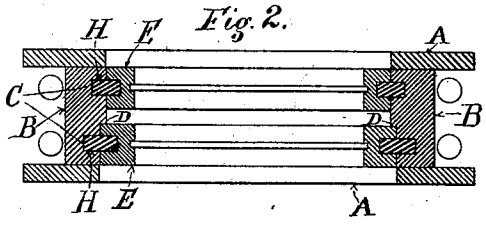


Fig. 2.



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UNITED STATES PATENT OFFICE.

ADRIAN HITT, OF JERSEY CITY, NEW JERSEY, ASSIGNOR OF ONE-HALF TO AUGUSTA A. THOMPSON, OF SAME PLACE.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 373,020, dated November 8, 1887.

Application filed January 26, 1887. Serial No. 225,612. (No model.)

To all whom it may concern:

Be it known that I, ADRIAN HITT, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Windows, of which the following is a specification.

My invention relates especially to means and mechanism employed to support window-sash in any desired position within the frame, and has for its object the provision of devices whereby the sash or sashes may be quickly and easily removed from the frame without disturbing the sash cords and weights and as easily replaced.

To attain the desired end my invention consists, essentially, in providing the window-frame at each side of the sash with a groove or its equivalent, and also providing each sash with corresponding grooves for a portion of the length of each stile. Within the grooves at each side of the sash is placed a fillet or tongue, to which the sash-cord is secured; and my invention also involves certain other novel and useful combinations or arrangements of parts and peculiarities of construction and operation, all of which will be hereinafter first fully described and then pointed out in the claims.

In the drawings, Figure 1 is a front elevation of a window-frame with a portion broken away, showing the location and arrangement of one of the fillets or tongues. Fig. 2 is a horizontal cross sectional view at line *x x*, of Fig. 1, both sashes being drawn down to the sill. Fig. 3 is a side view of one of the sash-stiles, and Fig. 4 is an interior face view of one of the sides of the frame.

Like letters of reference, wherever they occur, indicate corresponding parts in all the figures.

A is the casing, made in the usual manner.

B are the sides of the frame, each preferably made of a single piece of material and grooved its entire length at C. A rabbet, D, formed in each piece, accommodates an inner sash wider than the outer sash. By this construction the inner sash is provided with an additional bearing and guide, and there is also additional protection against the passage of air between the sash and the frame.

E are the sashes, the stiles thereof being grooved for a greater portion of their length, as at F, a stop, G, being left at the upper rail of the sash.

H are fillets or tongues fitting nicely into the grooves in the sash and frame, the sash-cords L being secured to said fillets and passing upward in the grooves C over a pulley to weights in the usual manner.

Fig. 1 shows only the arrangement of the fillet, groove, &c., in one side of the frame and lower sash; but both sides of each sash are constructed in a like manner, as illustrated in Fig. 2, this view showing both sashes drawn down to the window-sill. I employ one independent fillet for each sash-stile, in the present instance four in number, as illustrated in Fig. 2.

At P the window-frame casing and fillets are perforated for the reception of a pin, R, when it is desired to remove the sash from the frame.

When constructed and arranged in accordance with the foregoing description, my device will be found admirably adapted to the uses and purposes for which it is intended. The sash slides easily and noiselessly, the sash-cord is hidden from view, and may be easily replaced in case it becomes worn or broken. The sash may be removed from the frame without disturbing the fastenings of the weight-cord by simply drawing the sash down to the sill, then inserting the pins R and lifting the sash from the fillets, leaving them securely held at the bottom of the frame.

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

1. The combination, with the casing of a window and the grooved sashes, said grooves extending from the bottom of the side stiles to the meeting or top rail, as set forth, of the fillets or tongues provided with perforations P, and the pins R, substantially as shown and described.

2. Window-casing A, frame B, grooved at C and having rabbets D in the sides thereof, sashes E, provided with grooves F and stops G, formed by the top or meeting-rail, fillets H, to which the sash-cords are attached, the whole combined and relatively arranged substantially as shown and described.

Signed at New York, in the county of New York and State of New York, this 24th day of January, A. D. 1887.

ADRIAN HITT.

Witnesses:
W. J. MORGAN,
A. M. PIERCE.