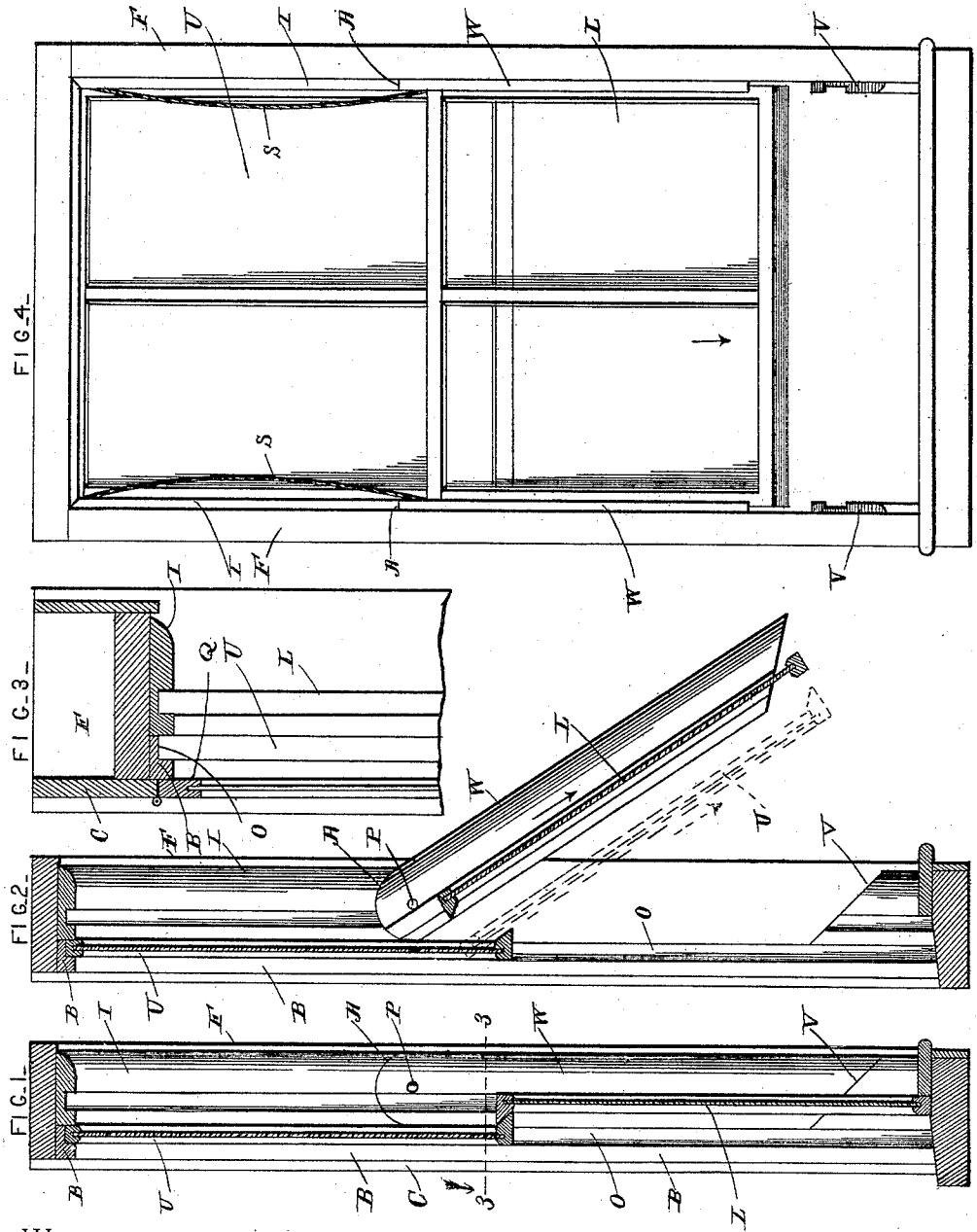
(No Model.)

M. E. REILLY.

WINDOW SASH.

No. 457,010. Patented Aug. 4, 1891.



Witnesses,
Geo. E. Fuch.
N. L. Collamer.

Inventor
Michael E. Reilly

By his Attorneys,
C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MICHAEL E. REILLY, OF MONTESANO, WASHINGTON.

WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 457,010, dated August 4, 1891.

Application filed December 16, 1890. Serial No. 374,890. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL E. REILLY, a citizen of the United States, residing at Montesano, in the county of Chehalis and State of Washington, have invented a new and useful Window-Sash, of which the following is a specification.

This invention relates to windows; and the object of the same is to provide an improved sash-guide whereby the sashes may be removed from the frame without opening the blinds.

To this end the invention consists of the construction hereinafter more fully described and claimed, and as illustrated in the accompanying sheet of drawings, wherein—

Figure 1 is a vertical section of a window embodying my improvements, the sashes being closed. Fig. 2 is a similar view showing the lower and inner sash in full lines in the act of being withdrawn, and the upper and outer sash in full lines in its normal position and in dotted lines in the act of being withdrawn. Fig. 3 is an enlarged cross-section through one side of a window-frame on the line 3 3 of Fig. 1, both sashes being lowered. Fig. 4 is an inside elevation of my improved device, showing the lower sash as partially withdrawn from the guides and not yet disconnected from the sash-cords, and the latter being shown loose.

Referring to the said drawings, the letter F designates the ordinary window-frame, in which are the upper and lower sashes U and L, which may be supported by spring-pins or by weights and sash-cords S, as usual. In constructing this frame, when the outer casing C is put on its inner edge is caused to slightly overlap the inner face of the side bar of the frame, and into the corner thus formed is secured the outer sash-guide O, which is of L-shaped cross-section and of one piece of material, the outer member B forming the blind-stop. The upper sash U is then fitted to this outer guide O, and it will be obvious that there is no crack between this guide and the blind-stop B through which water from the exterior may enter, because the two parts are integral. The inner guide I is then put in place. This guide is formed of a plain strip, having a single groove in which the lower sash L moves, and the web at the outer side of the groove forms the bead which separates the two grooves and closes the inner open edge of the outer groove. The lower sash is fitted to the inner guide and the window is complete.

At each side of the window-frame, and at a proper point near the top thereof, the inner guide I is sawed through on the arc of a circle A, and a pivot-pin P is inserted through the guide into the frame concentric with this arc. Near the bottom of the frame this guide is sawed off, preferably on a bevel, as at V, the distance in the groove of the guide between the two cuts being a trifle larger than the height of either sash. This portion of the guide I will call the "swinging piece" W, and it is of the same cross-section as the balance of the inner strip, which is secured to the inner face of the frame.

When it is desired to remove the lower sash, it is moved vertically in the guide I until it stands within the swinging piece W thereof. This piece may be held in place by any suitable devices, (not shown,) which being withdrawn the sash is swung inwardly, as shown in Fig. 2, and withdrawn from the lower ends of the grooves in the pieces W. If this sash is supported by sash-cords S, they are loosened by hand, as shown in Fig. 4, in order that the sash may be easily removed. When it is desired to withdraw the upper sash, the lower sash is first moved to the position shown in Fig. 2, and the upper sash is then withdrawn beneath it, as shown in dotted lines in that figure, or if the lower sash has already been removed the upper sash can be withdrawn still more easily in the same manner. When the sashes are replaced and the swinging piece is locked, the guides are complete and the sashes can move therein with ease.

By lapping the inner edge of the outer casing over the inner edge of the frame and seating the blind-stop B and outer guide O, which are integral, in the corner thus formed, water is prevented from passing by the edges of the upper sash, so as to run down behind the swinging pieces W, off the bevels V, and into the room. By pivoting the swinging pieces W at their upper ends instead of at their centers, as heretofore, it is possible to remove one or both of the sashes without opening the

blinds Q, and as their removal may occur in inclement weather this is sometimes highly desirable.

What is claimed as new is—

1. In a window-frame, the combination, with the frame proper, the outer casing secured thereto and overlapping the inner faces of the frame, and on each jamb the blind-stop seated in the corner thus formed between the inner faces of the frame and casing, of the inner sash-guide having a groove, a section of this guide being movable, the upper sash moving between the blind-stop and the bead outside said groove, and the inner sash moving in the groove, substantially as described.

2. In a window, the combination, with the frame and on each jamb an L-shaped outer guide therein, an inner guide adjacent said outer guide, said inner guide being cut on the arc of a circle and on a bevel at points distant by the height of a sash, and a pin through said guide concentric with said arc, the severed portion swinging, and the balance of the guide being secured to the frame, of sashes moving in the grooves of said guide, substantially as described.

3. In a window, the combination, with the frame and on each jamb F an outer L-shaped guide O, secured therein, with its outer member B forming the blind-stop and standing flush with the outer edge of the frame, the outer casing C, lapping the crack between these parts, an inner guide I, secured within the frame adjacent the outer guide, the outer web of said inner guide forming the bead between the two sash-grooves, a swinging piece W within said inner guide, with a curved upper end, and a pin through said upper end into the frame, of the upper and lower sashes U and L, moving vertically in the grooves of said guides, substantially as hereinbefore described.

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

MICHAEL E. REILLY.

Witnesses:

J. H. SIGGERS,

N. L. COLLAMER.