G. W. EVERETT. WINDOW SASH.

(Application filed Oct. 11, 1898.)

(No Model.) 2 Sheets—Sheet 1. \mathscr{A} WITNESSES:

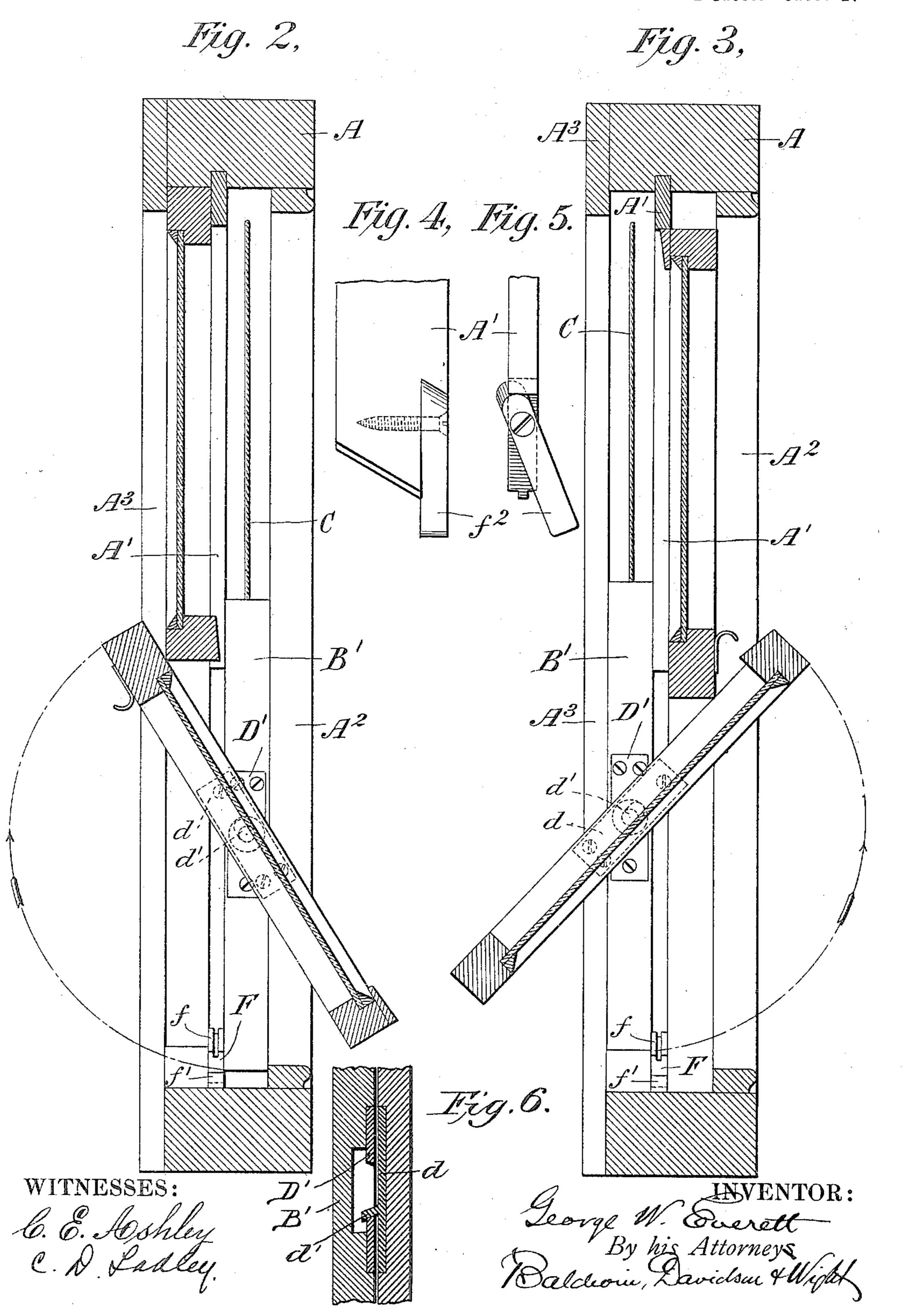
Patented Jan. 2, 1900.

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2 Sheets-Sheet 2.



UNITED STATES PATENT OFFICE.

GEORGE W. EVERETT, OF NEW YORK, N. Y.

WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 640,457, dated January 2, 1900.

Application filed October 11, 1898. Serial No. 693,207. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. EVERETT, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Swinging Window-Sashes, of which the

following is a specification.

My invention relates more particularly to window-sashes which swing and slide and 10 provides an organization in which the upper and lower sliding sashes of a window may readily be brought to such position that the outer faces of the glass may be conveniently reached for cleaning from the interior of the 15 room and which permits of the arrangement of the lower sash in such way as to afford the adjustment and ventilation that may be had with an ordinary non-sliding sash turning upon a horizontal axis, while at the same time 20 protecting the joints, so that there is even less liability of the entrance of cold air, rain, or snow than there is with an ordinary well-fitted sliding sash.

I am aware that heretofore sliding sashes have been made that have the same capacity for manipulation or adjustment as is afforded by my invention; but all such organizations, so far as I know, differ radically from that

herein described.

In the accompanying drawings, Figure 1 is a front elevation of a window-frame and sashes, partly broken away or in section, constructed and equipped in accordance with my invention. Fig. 2 is a vertical transverse section on the line 2 2 of Fig. 1; Fig. 3, a similar section showing the sashes in different position; Fig. 4, a detail side elevation of the lower end of a removable parting-strip, and Fig. 5 an elevation of the front or outer face or edge of the same strip. Fig. 6 is a detail sectional view, on an enlarged scale, showing the pivotal mounting of the sash.

The window frame or casing A may be of ordinary construction and is provided with parting-strips A', front stops A², and back stops A³, forming the channels in which the upper and lower sashes run. Each sash consists of three parts, a central rectangular part, carrying the glass, and side strips B' B', running in the channels in the frame and with which the sash-cords C are connected. The central section A, which for convenience will

be called the "sash," is carried by the side strips B' through the medium of pivotal connections D, upon which the sash may swing. 55 These pivots are of a special construction and will be described in detail later. If at each side of the window the stops A² A³ and parting-strip A' do not project from the jamb or frame into the path of the swing-sash, the 60 sash could be swung about its pivot in either direction, in or out. Such a general arrangement is old. It, however, has the disadvantage that the joints between the sash proper and side strips are not covered or protected 65 from wind, rain, &c. To effectually cover and protect these joints, so that the window shall be in all respects even better than an ordinary well-fitted sliding sash, I make the parting-strips A' of such width as to project 70

well over, cover, and protect them.

To provide for the swinging of the sash when desired, the parting-strips are made in whole or in part removable, and means are provided for locking them when in position in 75 the frame. Thus in the drawings the parting-strips are at about the point where the rails of the upper and lower sashes meet divided by a double inclined or dovetail cut. (Shown in Fig. 1 by the dotted lines a.) The 8c parts of the strips below this cut may readily be removed from their grooves or seats in the sash-frame. Upon the sill at each side, at the bottom of the groove, is a block F, having an inclined face f, upon which the in- 85 clined end of the strip seats, and a notch f'to engage a pivoted latch f^2 , mounted on the strip. Normally the removable parts of the strips are locked in position. When it is desired to swing the sashes, the latches are dis- 90 engaged from the blocks and the lower parts of the strips removed. As seen in Fig. 2, the lower sash may then be swung to bring the outer face of the glass toward the interior of the room. In Fig. 3 the lower sash is shown 95 pushed up and the upper sash drawn down and similarly swung upon its pivots. Of course any means of holding the removable parts of the strips in position may be adopted, and some means is of course desirable. It is 100 apparent that such a window is even tighter than one of ordinary construction. To each edge of the sash is attached a plate d, having a pivot pin or trunnion d', that when the sash

is in the normal vertical position inclines downwardly. On the side strip is a plate D', having an elongated opening in which the trunnion has its bearing. The inner edge of

5 this plate at the bottom of such opening or all around it is chamfered or inclined at the same angle as the inclination of the trunnion, and a cavity is formed in the strip opposite the opening in the plate. The purpose of

to this construction is that the weight of the sash by reason of the inclination of the trunnions and their bearings shall draw the strips against the sides of the sash and make a tight joint. The pivotal connections are shown ap-

plied at about the middle of the sash. They might be placed elsewhere, and in some cases it would be desirable to place them at or near the upper or lower edges of the sash—as, for instance, in the case of cellar or other windows, where there is no space or free way for

part of the sash to swing outwardly.

I claim as my invention—

1. The combination of a window frame or casing, a sash having a central swinging portion and side pieces upon which it is pivoted, and pivotal connections between the side pieces and sash, having downwardly-inclined bearing-faces when the sash is in the normal position.

2. The combination of a window frame or casing, a sash having a central swinging portion and side pieces upon which it is pivoted, pivotal connections between the side pieces

and sash, having downwardly-inclined bearing-faces when the sash is in the normal po- 35 sition and removable strips overlapping the joint between the sash and side pieces.

3. The combination of a window-frame, the front stop, sash side pieces running in the channel back of the stop and projecting be-40 yound the face of the stop, a sash, pivotal connections between the sash and side pieces having downwardly-inclined bearing-surfaces, and removable strips back of the sash overlapping the joint between the sash and its 45

side pieces.

4. The combination of a window-frame, its front and back stops, intermediate parting-strips divided at, or about at, the meeting-rails of the two sashes and having their lower 50 portions removable and replaceable at will, the upper and lower sashes having side pieces running in the channels in the frame and projecting beyond the faces of the stops but terminating inside the faces of the parting-55 strips, pivotal connections between the sashes and their side pieces having downwardly-inclined bearing-surfaces when the sashes are in the normal vertical position.

In testimony whereof I have hereunto sub- 60

scribed my name.

GEORGE W. EVERETT.

Witnesses:
EDWARD C. DAVIDSON,
CLINTON FURBISH.