E. A. LEWIS.

WINDOW.

APPLICATION FILED MAY 10, 1907.

908,471.

Patented Jan. 5, 1909.

Fig. 1.

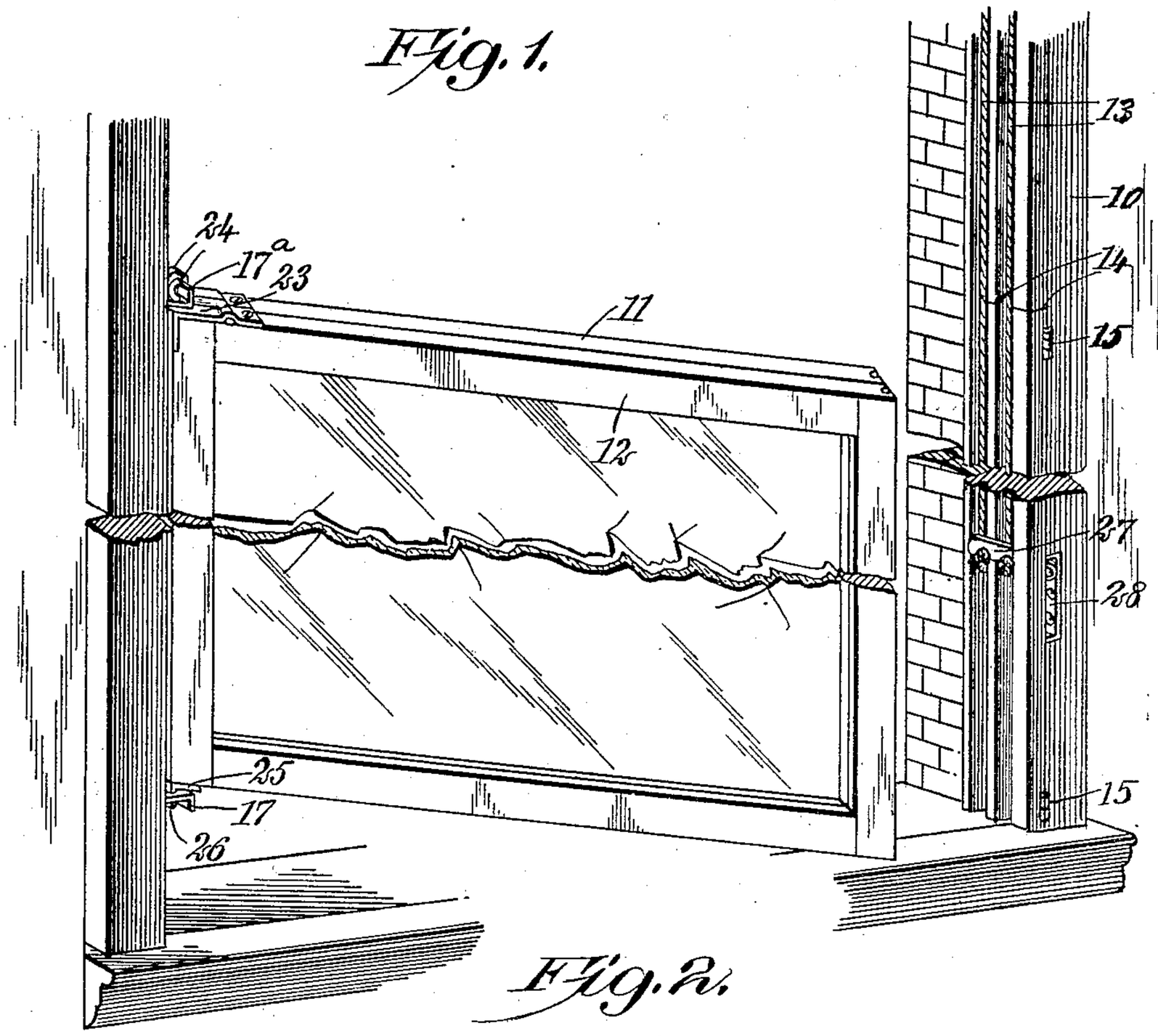


Fig. 2.

Fig. 3.

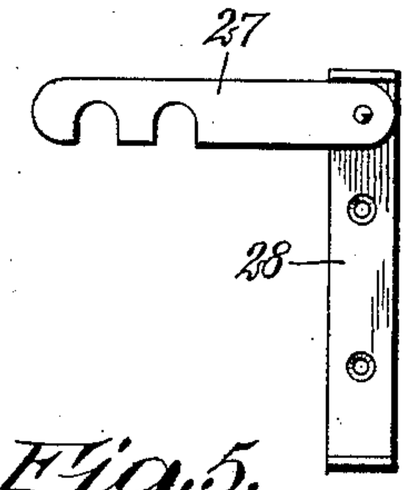


Fig. 5.

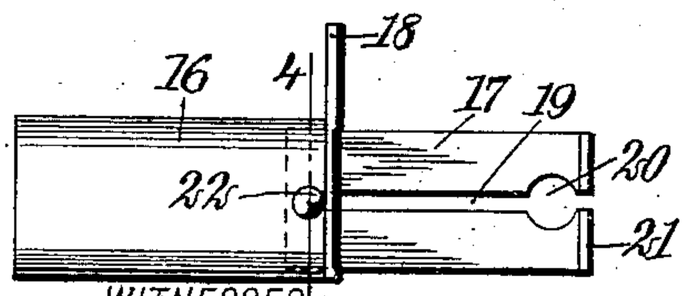


Fig. 4.

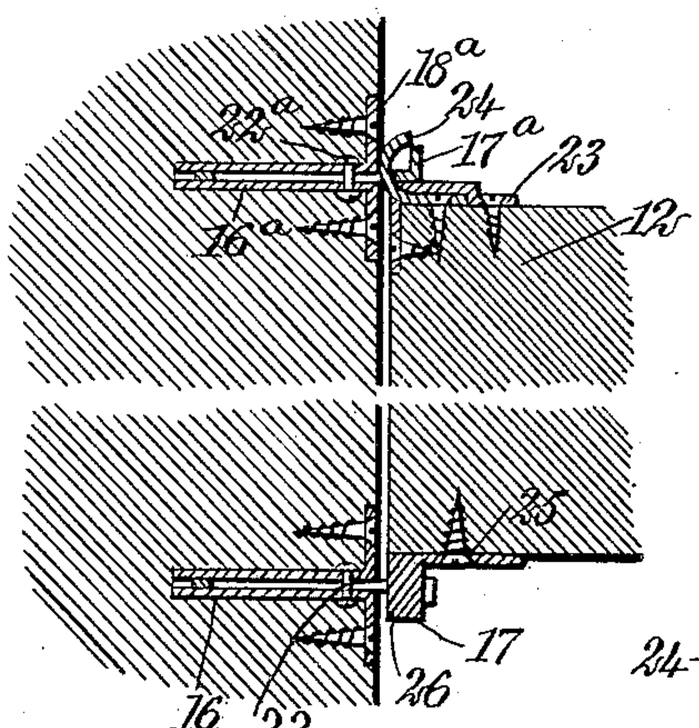


Fig. 7.

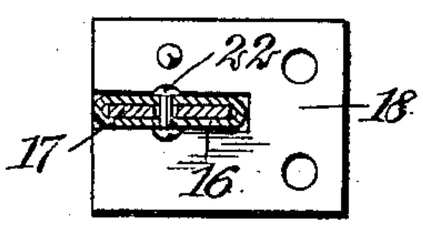


Fig. 6.

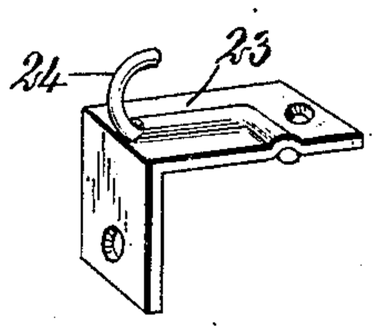
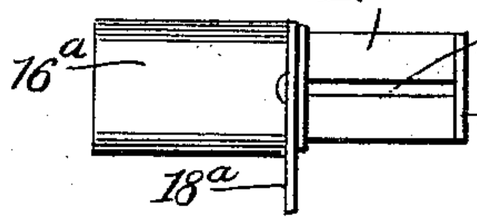


Fig. 8.



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WINDOW.

No. 908,471. Specification of Letters Patent. Patented Jan. 5, 1909.

Application filed May 10, 1907. Serial No. 372,888.

To all whom it may concern:

Be it known that I, ERVIN A. LEWIS, a citizen of the United States, and a resident of Mount Vernon, in the county of Westchester and State of New York, have invented a new and Improved Window, of which the following is a full, clear, and exact description.

This invention relates to improvements in windows, the purpose of which is to provide a construction involving the usual sliding sash, the latter being adapted to be also swung from the window opening preferably to the inside of the room, whereby the passage of the air through the window opening is altogether unobstructed.

The invention further resides in certain special features of construction and arrangement of parts which will be fully set forth hereinafter and particularly pointed out in the claims.

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

Figure 1 is a perspective view of a window embodying my invention showing the sash thereof swung slightly from the window frame; Fig. 2 is a vertical section through one of said sashes at the point of connection with the window jamb; Fig. 3 is a view of a sash cord holding device forming an element of the construction; Fig. 4 is a cross section on the line 4—4 of Fig. 5; Fig. 5 is an inverted plan view of one member of one of the bottom hinges; Fig. 6 is a perspective view of one member of one of the top hinges; Fig. 7 is a perspective view of a member of the bottom hinges, and Fig. 8 is a plan of one member of one of the top hinges.

A window frame 10 of the usual or other preferred construction carries the usual sliding sashes 11 and 12 which are counterbalanced at both sides by counterweights attached to cords 13. Near the center of the frame 10 the parting bead, as also the inside bead, are cut through as indicated at 14, the lower portion of the former being bodily displaceable and the latter being hinged at 15 to the window-jamb to swing to the inside of the frame. At the opposite side of the window frame, preferably a slight distance above the window sill, a hinge member as shown in Fig. 5, comprising a casing 16 slidably receiving a slide 17, is let into the jamb as illustrated in Fig. 2, one hinge member being provided for each sash. The outer end of the casing 16 is constructed with a flange 18 which is provided with suitable screw-holes for securing the casing in place. The slide 17 is constructed with a central slot 19 having an enlarged portion 20 adjacent to a flange 21 formed at its extremity. This slot 19 receives a pin 22 passing through the casing 16, which limits the extent to which the slide may be withdrawn.

Hinge members of approximately the same construction are let into the window-jamb a distance above those just described slightly greater than the length of the sash as shown in Fig. 8, each comprising a casing 16^a having a flange 18^a, the casing being essentially the same as the casing 16 and slidably receiving a slide 17^a constructed with a central slot 19^a. This slot, however, differs from the slot 19 of the slide 17 in that it is extended to the flange 21^a only and is of uniform width throughout.

The hinge members which coöperate with the upper hinge members carried by the jambs as shown in Fig. 8, and provide a swinging connection for the sash, each consists of a corner plate 23 shown in Fig. 6, having screw openings for attaching it to the corner of the sash and shaped to receive and confine on its under face when applied in position, the angular end of a hook 24, the latter projecting slightly above the plate 23 and curved in the direction of the opposite side of the sash as clearly shown.

The hinge members which are carried at the bottom of the sash, each coacting with a hinge member as shown in Fig. 5, comprise a plate 25 having a tongue 26 cut from one corner and downwardly-turned as shown in Fig. 7, the plate 25 being provided with a screw hole or other attaching means for fastening it to the under edge of the sash, as shown in Figs. 1 and 2. By this construction when it is desired to swing either or both sashes from the window opening, they are lowered until they pass below the slides 17^a which are thereafter drawn from their respective casings 16^a. By now raising the sash, the hooks 24 will pass through the slots 19^a until the plates 23 contact with the bottom of the slides. The slides 17 should then be drawn outwardly at the bottom of the sash until the tongues 26 register with the enlargements 20. By now swinging the

lower portion of the inside bead to one side on the hinges 15, the inner sash may be swung horizontally on the hinges from the window frame; also by removing the lower portion of the parting bead, the outer sash may be likewise swung. The sash cords should, however, be disconnected from the window and secured at some convenient point until again ready to place the sash in sliding operation. For this purpose I have shown a device in Figs. 1 and 3, consisting of a notched arm 27 pivotally connected to a plate 28, the latter being flanged at opposite ends and secured to the frame in the manner shown in Fig. 1. By this construction after the sash cords are disconnected from the sash and engaged with the notches on the arm 27, the knots in the ends of the cords will prevent them from slipping through, and the arm will be retained in a substantially horizontal position by the upper flange on the plate 28.

It will be apparent to those skilled in the art to which this invention appertains, that numerous changes in the construction from that hereinbefore described and shown in the accompanying drawings may be resorted to within the scope of the annexed claims.

Having thus described my invention I claim as new and desire to secure by Letters Patent:

1. In a window, the combination of a frame, a sash slidable in the frame, casings fixed within the frame, slotted slides in the casings movable into and out of the path of the sash, with the slot in the bottom slide extended through its outer end, and means projecting from the top and bottom edges of the sash adapted to respectively pass through the slot of the top slide and engage thereover, and enter the slot of the bottom slide when the latter is drawn outwardly.

2. In a window, the combination of a frame, a sash slidable in the frame, slides carried by the frame movable into the path of the sash, and devices carried by the top and bottom of the sash, one of which is adapted to engage with one of the slides when the sash is moved vertically, and the other device engaging with the other slide by drawing the slide outwardly.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ERVIN A. LEWIS.

Witnesses:
W. W. Holt,
John P. Davis.