

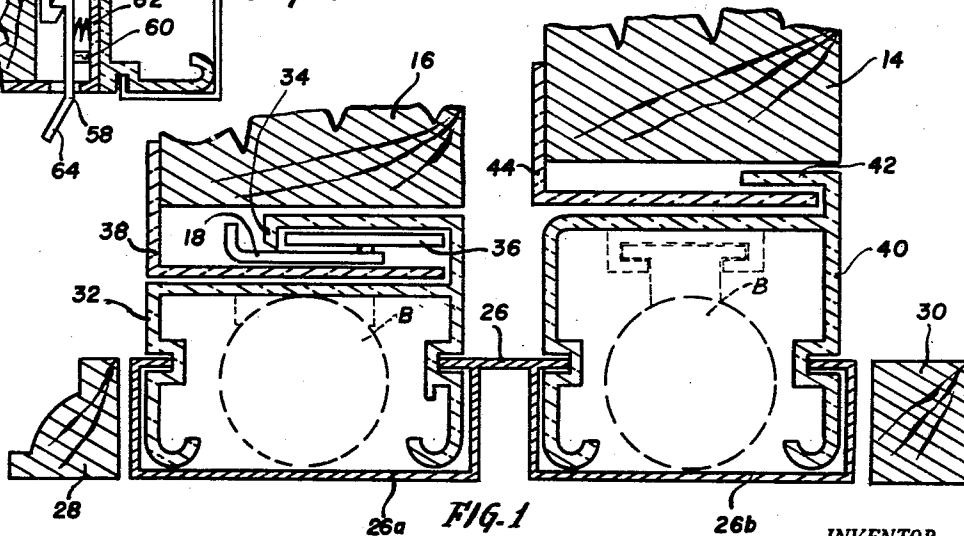
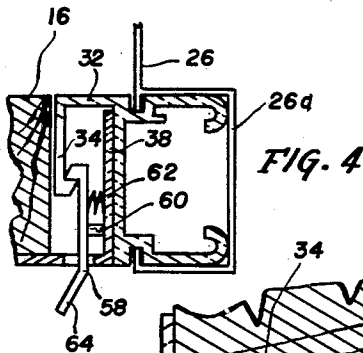
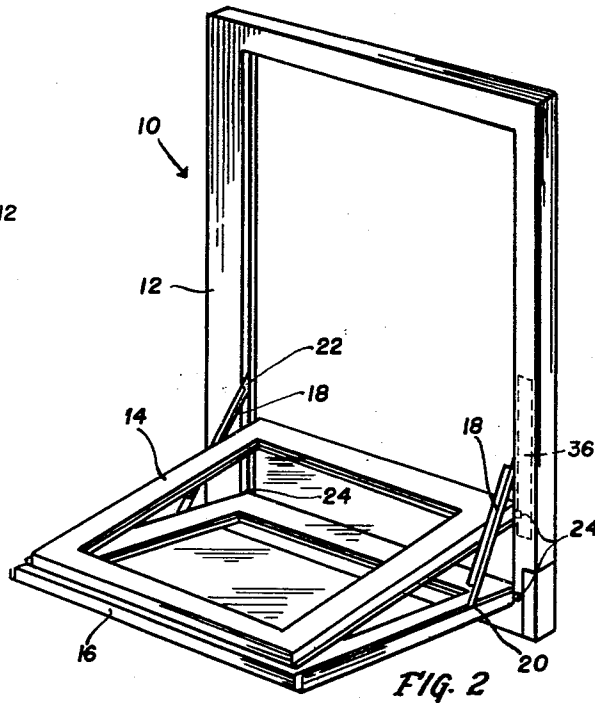
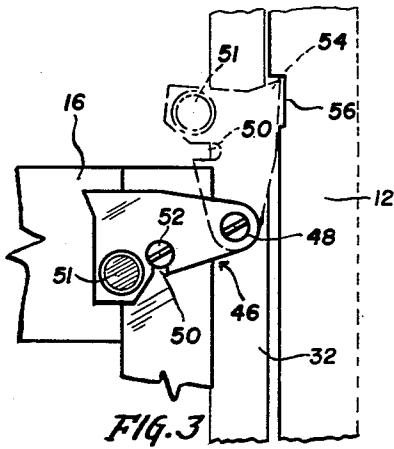
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SLIDABLE AND SWINGABLE WINDOW SASH CONSTRUCTION

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3,149,380

**SLIDABLE AND SWINGABLE WINDOW SASH CONSTRUCTION**

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The present invention relates to a window assembly in which both the upper and lower window sashes may be swung or pivoted out of the window frame into the room for cleaning purposes.

An object of the present invention is to provide a window assembly for new constructions or for replacement of existing window units whereby the cleaning of outside portions of the windows is facilitated.

Another object of the present invention is the provision of a simplified swingable window sash that is simple to operate and is relatively inexpensive to manufacture.

A further object of the present invention is to provide slidable elements in a groove insert in the window frame, the slidable elements being releasably attached to the window sashes by a latching arrangement.

A further object of the present invention is to provide a unique latching arrangement for easily and rapidly releasing the window sashes for swingable or pivotal movement.

Another object of the present invention is the provision of a window assembly construction which is reliably effective for the purposes intended.

The above and other features, objects and advantages of the present invention will be fully understood from the following description considered in connection with the accompanying illustrative drawings.

FIG. 1 is a partial sectional view of the slidable and swingable window sash construction embodying the principles of the present invention.

FIG. 2 is a perspective view of the overall window assembly in which the window sashes have been swung to their inward positions, and the upper sash rests on the lower sash.

FIG. 3 is a front elevational view of a latching device for the window sash and

FIG. 4 is a sectional view of an alternative latching device for the window sash.

Referring more particularly to the drawing and especially to FIGS. 1 and 2, in which the window unit is indicated generally by the numeral 10 and is constituted of a frame 12 having upper sash 14 and lower sash 16 slidable therein as well as swingable into the interior of the room as illustrated in FIG. 2. A pair of slides or arms are each secured at one end 20 to the lower sash 16 while the other end 22 is provided with a slider 36 which is slidable in one of the slidable elements in the grooves or recesses in the window frame 12 hereinafter more fully described. The bottoms of lower sash 16 and upper sash 14 are provided with lateral swivel pins 24 which are also slidable in the aforementioned grooves.

In FIG. 1 a groove insert 26 is installed in the frame 12 between wood stop 28 and blind stop 30. It should be noted that the identical elements shown in FIG. 1 on one side of frame 12 also appear on the other side of the frame 12, but are omitted in the illustrations for purposes of clarity. Slidable in section 26a of the groove insert 26 is an element 32 having a hook-shaped end portion 34 enclosing a portion of the slide 18 with slider 36 secured thereto. The balances for both the upper and lower sashes are illustrated in dashed lines in FIG. 1 and bear the reference numerals B. These sash balances are of the well-known, conventional type. Lower sash 16 is provided with an L-shaped cover member 38 enclosing the slide 18 and slider 36. Slidable in section 26b of the

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groove insert 26 is another element 40 for the upper sash 14. Element 40 also has a hook-shaped end portion 42 enclosed by L-shaped cover member 44 secured to upper sash 14. As shown in FIG. 1, there are means shown for connecting the balances B to slidable elements 32 and 40.

FIG. 3 illustrates one of the latching devices which may be utilized for both the upper sash 14 and the lower sash 16. This latching device may be located on both the top corners of the sashes although only one is shown for illustration purposes. The latching device referred to generally by the numeral 46 is a relative flat plate pivoted at 48 to one of the slidable elements 32 and 40 and is movable from a latched condition shown in full lines to the unlatched condition shown in dashed lines. In the unlatched condition of latching device, the slot 50 is removed from engagement with screw 52 by means of a finger piece 51 and point 54 is seated in groove 56 of the window frame 12. The latching device 46, in the dashed lines position, prevents the lower sash 16 from sliding upwards in the frame 12 due to force exerted by the balances B because the point 54 engages the window frame 12 and at the same time permits the sash to be swung into the interior of the room for cleaning purposes. In the latched condition of the device, as illustrated in full lines in FIG. 3, the adjacent slidable element 32 is operatively connected to the lower sash 16 thereby permitting the freely slidable movement of the sash in window frame 12.

An alternative latching device is shown in FIG. 4 coacting with the hook-shaped end portion 34 of element 32. This latching device comprises a detent 58 having a pivot pin 60 and a spring 62 urging the detent into engagement with the hook-shaped end portion 34 of element 32. Thus, by moving the other end 64 of detent 58 laterally to the left against the force of spring 62 the lower sash 16 becomes unlatched from the frame 12 and the sash may be freely swung out of its frame and pivoted inwardly on swivel pins 24. The latching device disclosed in FIG. 4 is particularly adaptable for use with the lower sash 16.

While I have shown and described the preferred embodiment of my invention, it will be understood that the latter may be embodied otherwise than as herein specifically illustrated or described and that in the illustrated embodiment certain changes in the details of construction and in the arrangement of parts may be made without departing from the underlying idea or principle of the invention within the scope of the appended claims.

What I claim is:

1. A window construction comprising a frame provided with a groove insert in opposite inside sides thereof, a balance in each groove insert, upper and lower sashes slidable in said frame and having said balances operatively connected thereto, means on each of said upper and lower sashes for permitting the latter to be swung into the interior of the room including releasable latching means, a pair of arms each fixedly attached at one end to opposite sides of said lower sash and having a slider at the other end thereof, a slidable element in each of said groove inserts operatively connected to said upper and lower sashes respectively, and one of said slidable elements comprising a dividing wall separating the same into two portions, one of said portions enclosing said balance and the other portion enclosing said slider slidably movable therein, and said latching means in the latched condition connecting said sashes to the adjacent slidable elements.

2. A window construction as set forth in claim 1 wherein said latching means is a flat plate pivoted on one of said slidable elements, said plate having a slot therein,

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a headed element on an adjacent sash for insertion in said slot to releasably secure said slidable element and adjacent sash together whereby the sash may be freely slid in said window frame while when said latching member is in an unlatched condition said sash may be swung into the interior of the room.

3. A window construction as set forth in claim 1 wherein said flat plate is provided with a point on its upper end for engagement with said window frame in the unlatched condition of the lower sash.

4. A window construction as set forth in claim 1 fur-

ther comprising an L-shaped cover member secured to one of said sashes and enclosing said arm and slider when said sash is located in said frame.

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