(No Model.)

A. K. OLSEN.

WINDOW SASH.

No. 594,275. Patented Nov. 23, 1897.

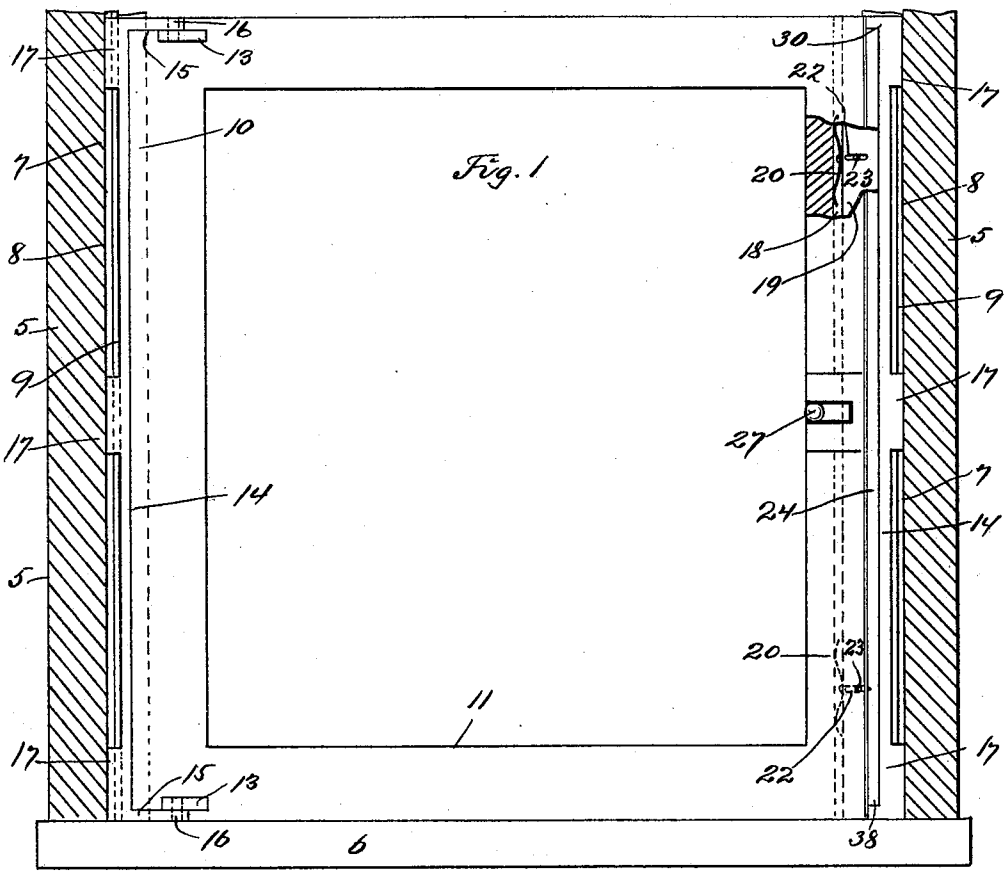


Fig. 1

Fig. 2

WITNESS

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WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 594,275, dated November 23, 1897.

Application filed July 21, 1897. Serial No. 645,357. (No model.)

To all whom it may concern

Be it known that I, ANDREW KRESTIAN OLSEN, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Window-Sashes, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to supports for window-sashes; and the object thereof is to provide improved means for holding the sashes of the window in the frame and also for enabling said sashes to be swung inwardly when both are in the lowermost position.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a sectional front view of the lower part of a window-frame and showing both of the sashes mounted therein, part of the construction being shown in section; and Fig. 2, a sectional plan view thereof.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in said drawings I have also shown both the upper and the lower sashes in the lower part of the frame.

The separate sides of the frame are designated by the reference-numeral 5 and the bottom by the reference-numeral 6, and formed in the sides of the frame are the usual vertical spaces 7, in which the upper and lower sashes are placed, and in the practice of my invention I secure to the said sides of the frame, centrally of said vertical spaces, ribs 8, which are provided with vertical side flanges or guides 9.

The vertical spaces 7 at each side of the window-frame are separated by the usual rib, bead, or strip 10, as shown in full lines in Fig. 2 and in dotted lines in Fig. 1, and I have also shown in the drawings the lower sash 11 and the upper sash 12, both sashes being, as hereinbefore stated, in the lower part of the frame, and in practice I countersink in both of the sashes, at the upper and lower ends thereof and adjacent to one side, preferably the left-hand side, as shown in the drawings, plates 13, and I also provide for each sash and at the same side a plate 14, which is provided at its upper and lower ends with inwardly-directed jaws 15, which are pivotally connected with the plates 13 at 16, and the jaws 15 are also countersunk in the upper and lower ends of the sashes, and the said plates 14 are provided at their upper and lower ends and at the middle thereof with supplemental jaws 17, which engage with the vertical flanges or guides 9 on the ribs 8 and securely lock the plates 14 in connection therewith, while said plates 14 and the sashes with which they are connected are free to slide up and down on said flanges or guides 9 of the ribs 8.

It will be observed that the jaws 15, by which the plate 14 is connected with the upper or rear sash, are longer than those connected with the lower or front sash, and by reason of this construction both of the sashes may be swung inwardly, as shown in dotted lines in Fig. 2.

The opposite sides of each of the sashes is provided with a vertical slot or groove 18, in which is placed a spring-operated strip 19, and mounted in said groove are springs 20, which serve to force said strip outwardly, and formed in said strip are transverse slots 22, and passing through each of said slots is a pin 23, which is set into the side of the sash, and these pins prevent the strip 19 from being thrown out of the groove 18. Each of the sashes is also provided at said side with a plate 14, similar to that at the opposite side, and this plate is provided with supplemental jaws 17, similar to those at the opposite side, and these jaws engage with the vertical flanges or guides 9 on the ribs 8, and the plates 14 are free to slide up and down on said flanges, and secured to the opposite inner sides of the plates 14 at this side of the frame are strips 24, between which is a vertical groove, into which the spring-operated strip 19 is forced by the springs 20.

Formed in the right-hand side of each of the sashes is a chamber 25, in which is pivoted a crank-lever 26, one end of which projects through the sash, as shown at 27, and is provided with a knob or handle, and the inner end thereof passes through a loop or staple 28, secured to the spring-operated strip 19, and by operating said crank-lever the spring-operated strip may be drawn inwardly

against the operation of the springs 20, and in this operation the said strip will be freed from the plate 14 and the window-sashes may be swung inwardly, as shown in dotted lines in Fig. 2, and whenever it is desired to swing the sashes back into the position shown in full lines in Fig. 2 the crank-lever 26 is again operated, the spring-operated strips 19 are drawn inwardly, and when the sashes are swung into position the springs 20 will force said strips back into the vertical groove between the strips 24, which are secured to the plates 14.

The plate 14 at the right-hand side of the drawings is provided at its upper and lower ends with an inwardly-directed shoulder or projection 30, and the spring-operated strips 19, when the sashes are in the closed position, fit between said shoulders or projections and thus cause the plates 14, to which the strips 24 are secured, to move up and down with the sashes, as will be readily understood. The jaws 15 of the plates 14 at the left side of the drawings are provided with slots 31, through which the suspending cords or cables for the sashes may be passed, and said suspending cords or cables are provided with counterbalance-weights in the usual manner, and they may be connected with the plates 14 in any desired manner, these features of construction forming no essential part of this invention and being therefore not shown and described.

My improvement is well adapted to accomplish the result for which it is intended, and it will be apparent that changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

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

1. The combination with a window hinged at one side, of a spring-controlled bead mounted in the opposite side and means for withdrawing the said bead into the sash-frame, and a supplemental piece provided with a groove in which said bead projects, substantially as and for the purpose described.

2. A window-frame provided at each side with the usual vertical spaces in which the window-sashes are mounted, said spaces being provided with beads or strips which are secured at the back thereof, and which are provided with vertical side flanges or guides, window-sashes mounted in said frame and provided at one side with plates which are pivotally connected therewith, at the upper and lower ends thereof, and on which said sashes are free to swing, said plates being provided with inwardly-directed jaws by which said pivotal connection with the sashes is made, and with outwardly-directed supplemental jaws which are adapted to engage with and slide on the side flanges formed on said vertical strips or beads, and said sashes being provided at their opposite sides with means for locking them in connection with plates which are vertically movable in the frame, substantially as shown and described.

3. A window-frame provided at each side with the usual vertical spaces in which the window-sashes are mounted, said spaces being provided with beads or strips which are secured at the back thereof, and which are provided with vertical side flanges or guides, window-sashes mounted in said frame and provided at one side with plates which are pivotally connected therewith, at the upper and lower ends thereof, and on which said sashes are free to swing, said plates being provided with inwardly-directed jaws by which said pivotal connection with the sashes is made, and with outwardly-directed supplemental jaws which are adapted to engage with and slide on the side flanges formed on said vertical strips or beads, and said sashes being provided at their opposite sides with means for locking them in connection with plates which are vertically movable in the frame, consisting of spring-operated strips mounted in slots or grooves formed in said sashes, and vertical sliding plates which are provided with grooves into which said spring-operated strips are adapted to be forced, said plates being adapted to slide on vertical guides secured to the frame, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 17th day of July, 1897.

ANDREW KRESTIAN OLSEN.

Witnesses:
MARQUIS L. WHALEY,
MADS OLSEN.