No. 644,657. Patented Mar. 6, 1900.

M. ZUGERMAYER.

WINDOW SASH.

(Application filed Aug. 6, 1898.)

(No Model.)

Fig: 1.

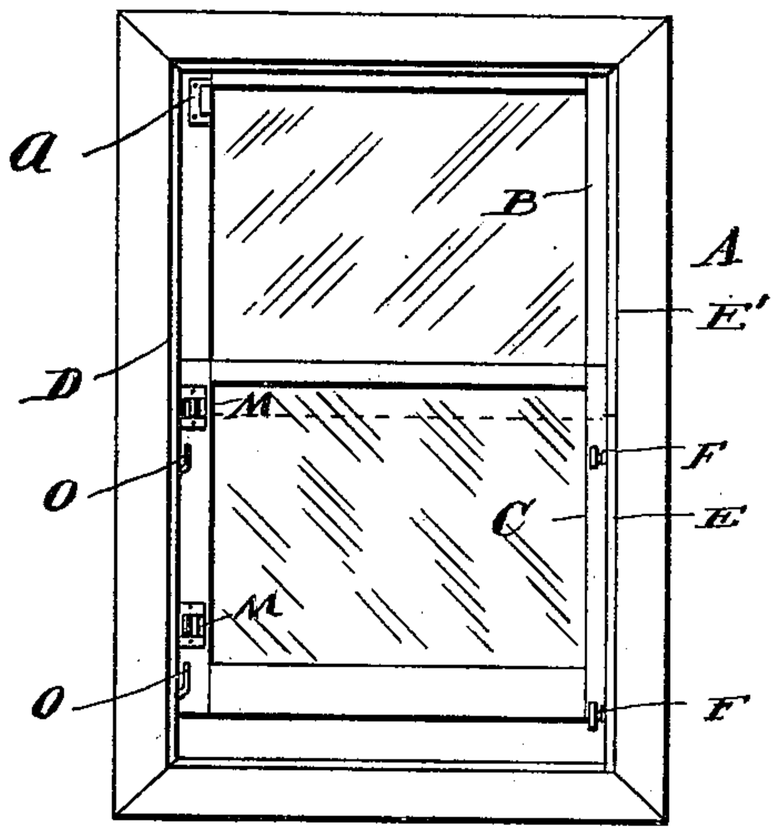
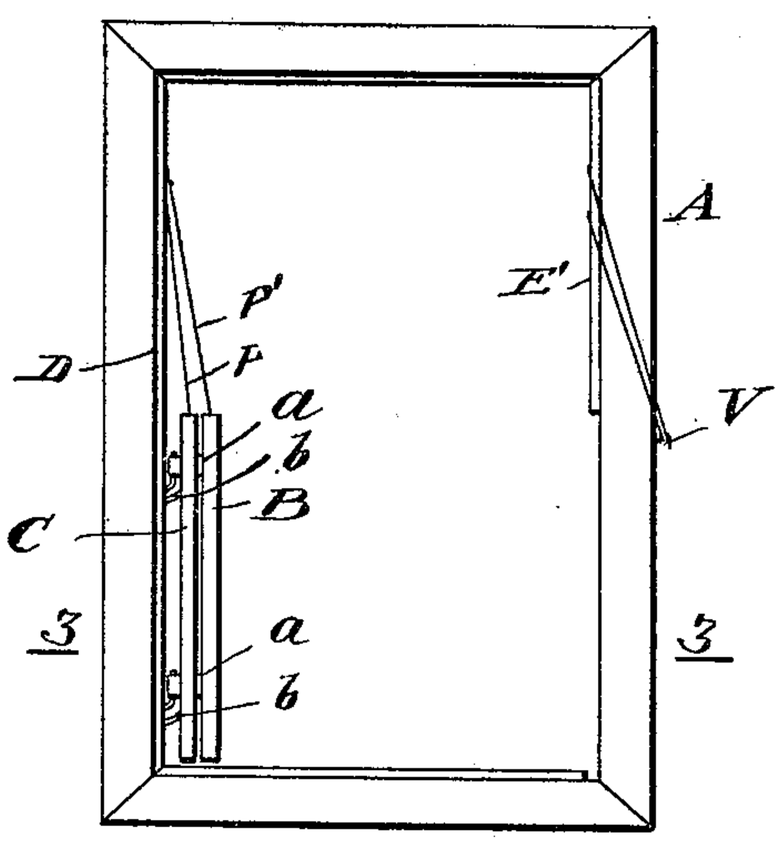


Fig: 2.



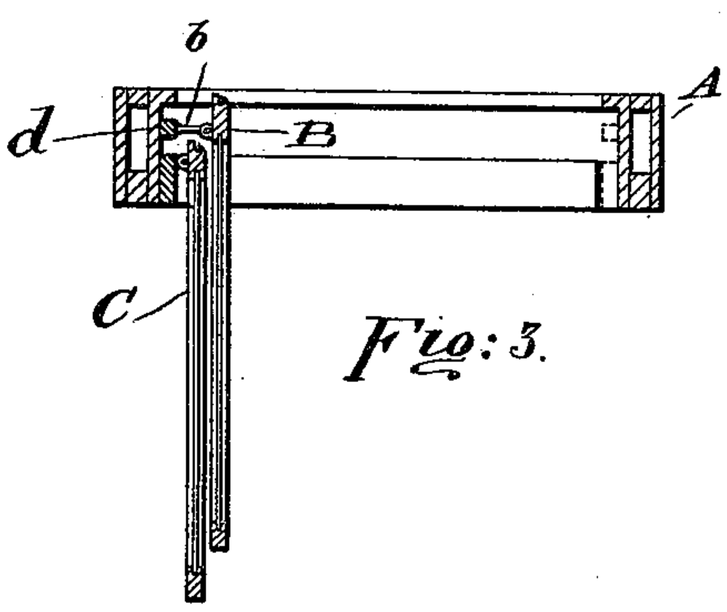


Fig: 3.

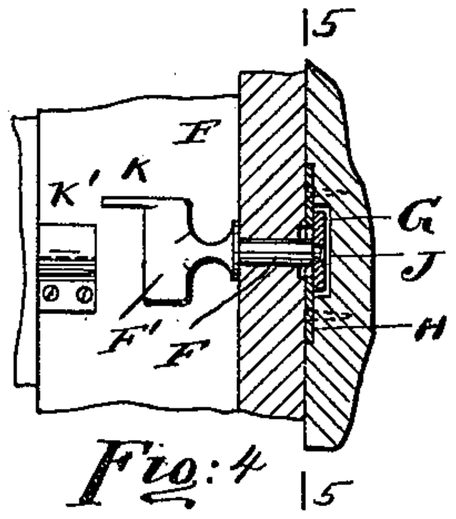


Fig: 4 15

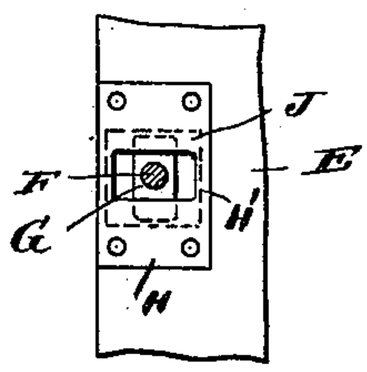


Fig: 5

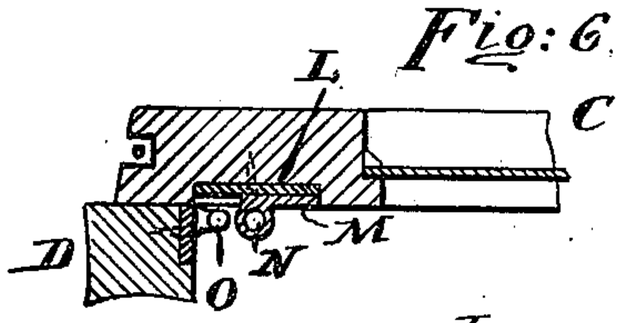


Fig: 6

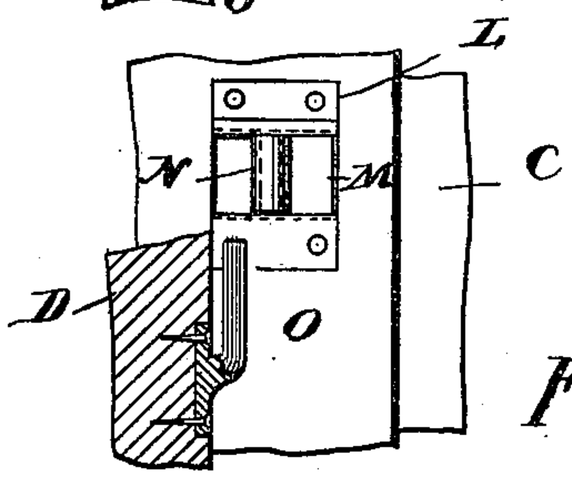


Fig: 7.

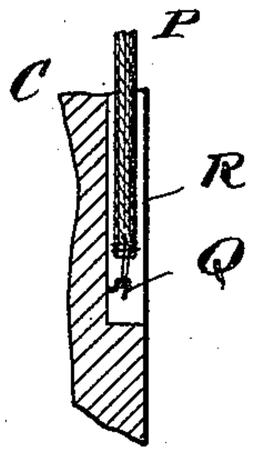


Fig: 8.

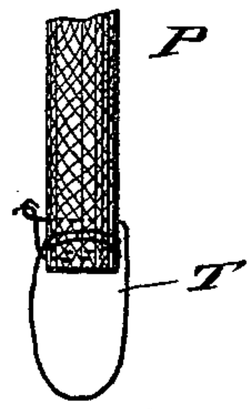


Fig: 9.

Witnesses
T. Albertineff.
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M. Zugermayer Inventor
By his Attorney
Scarl. Sons

UNITED STATES PATENT OFFICE.

MELCHIOR ZUGERMAYER, OF NEW YORK, N. Y.

WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 644,657, dated March 6, 1900.

Application filed August 6, 1898. Serial No. 687,888. (No model.)

To all whom it may concern:

Be it known that I, MELCHIOR ZUGERMAYER, a citizen of Germany, and a resident of the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Window-Sashes, of which the following is a specification.

The object of my invention is to provide certain new and useful improvements in hanging window-sashes in such a manner that both the upper and lower sash can readily be swung into the room for cleaning them, both on the outer and inner sides, and which improved construction is simple, strong, and permits of readily adjusting the sash so that it can be swung into the room, and which improvement can be applied on old windows as well as on new ones.

In the accompanying drawings, forming a part of this specification and in which like letters of reference indicate like parts in all the views, Figure 1 is an elevation of the inner face of a window provided with my improvement. Fig. 2 is a similar view showing both the upper and lower sash swung inward for cleaning. Fig. 3 is a horizontal sectional view on the line 3 3 of Fig. 2. Fig. 4 is an enlarged detail vertical sectional view through the sash guide-strip, showing the fastening device for the same. Fig. 5 is a vertical detail sectional view on the line 5 5 of Fig. 4. Fig. 6 is an enlarged detail horizontal sectional view showing the hinge-pintle and the sliding hinge-socket plate. Fig. 7 is a face view of these parts, partly in section. Fig. 8 is a detail vertical sectional view showing the manner of attaching the sash-cord to the sash. Fig. 9 is a detail view of the wire loop on the end of the sash-cord.

The window-casing A, of any approved construction, is arranged to receive and guide the upper sliding sash B and the lower sliding sash C, of any approved construction, and the lower sash C is guided by the fixed guide-strip D at one side and at the other side by the upper fixed strip E′ and the lower removable guide-strip E. In this removable strip E two pintles F are mounted to turn and are each provided at the outer end with a handle-piece or thumb-piece F′, and to the inner end a cross-piece G is secured, which can be passed through a corresponding aperture or slot H′ in a plate H, countersunk in the side piece I of the window-casing and into a recess J behind said plate. When the strip E is locked in place, the cross-piece G is transverse to the slot H, as shown in Fig. 5, and when the strip is to be removed the pintles F are each turned axially, so as to bring the cross-piece G to register with the slots H,′ and the strip can then be lifted off from the casing.

If desired, each thumb-piece F′ may be provided with an arm K, which when the thumb-piece is turned so as to bring the cross-pieces G to register with the slots H′ pass it into sockets K′ on the sash, so that the strip will remain suspended on the side of the sash. On the inner surface of the left-hand side bar of the lower sash C two plates L are countersunk, and on each a plate M is mounted to slide transversely to the height of the sash, said plates being flush with the inner surface of the side bar of the sash, as shown in Fig. 6, and each sliding plate M is provided with a hinge-socket N, projecting beyond the inner surface of the said side bar. Two bracket hinge-pintles O project from the guide-strip D in such a manner that they clear the hinge, sockets N on the sliding plates M when said plates are adjusted to the extreme right-hand position, as shown in Fig. 6, but can pass into said sockets when the sliding plates are pushed into the extreme left-hand positions.

To swing the lower sash into the room, the strip E is first removed, the sash is raised slightly, the plates M pushed to the extreme left-hand position, and the sash lowered so that the pintles O pass into the sockets N, and the sash is thus supported entirely by said pintles. The right-hand side of the sash C is swung into the room a short distance, and the end of the sash-cord P is disengaged from the hook Q in the recess R in the upper part of the outer edge of the right-hand side bar of the sash. A wire loop T is formed on the end of the sash-cord P, and this loop is engaged with a hook V on the side of the window-casing, as shown in Fig. 2, so as to prevent the corresponding sash-weight from dropping. The sash C is then swung inward, as shown in Fig. 3, and can be cleaned very conveniently.

The upper sash B is provided on the inner surface of its left-hand side bar with two ver-

tical hinge-sockets *a*, which when said sash is lowered after the lower sash has been swung inward engage bracket-pintles *b*, projecting from the parting-strip *d* in such a manner that the upper sash can be swung inward over the lower sash, as shown in Figs. 2 and 3. The sash-cord P′ at the swinging edge of the upper sash is also detached and secured on the hook V. After the sash has been cleaned, repaired, &c., the upper sash is swung back, its sash-cord P′ attached, and the sash raised. Then the lower sash is swung back, its sash-cord P attached, the guide-strip E is secured in place, the sash is raised slightly, the sliding plates M are moved to the right, so that the sockets N are out of the path of the pintles O, and the sash is lowered into place and then can be opened and lowered in the usual manner.

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

1. The combination with a window-casing and sliding lower sash, of hinge-pintles attached to and projecting from the lower half of one guide-strip and extending over one side bar of the sash, a countersunk sliding plate in said sash side bar, flush with the face of the side bar and having at one end a hinge-socket projecting beyond the face of the side bar such a distance that its central axis is the same distance from the front of the sash side bar as the vertical central axis of the hinge-pintle on the guide-strip is from the face of the sash side bar, substantially as herein shown and described.

2. The combination with a window-casing of upper and lower sliding sashes, a guide-strip, hinge-pintles projecting from the lower half of said guide-strip, the countersunk plates L in one side bar of the lower sash, a sliding plate M mounted in each countersunk plate L to slide transversely to the height of the sash, the plates M being flush with the face of the sash side bar, and each having a socket N at the end toward the guide-strip provided with the hinge-pintles, hinge-sockets on one side bar of the upper sash, and hinge-pintles on the lower half of the parting-strip for engagement with said upper-sash hinge-sockets, substantially as herein shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 18th day of June, 1898.

MELCHIOR ZUGERMAYER.

Witnesses:
OSCAR F. GUNZ,
H. M. FLANNERY.