

J. W. ADAMS.
 WINDOW SASH.
 APPLICATION FILED JUNE 29, 1911.

1,014,737.

Patented Jan. 16, 1912.

Fig. 1.

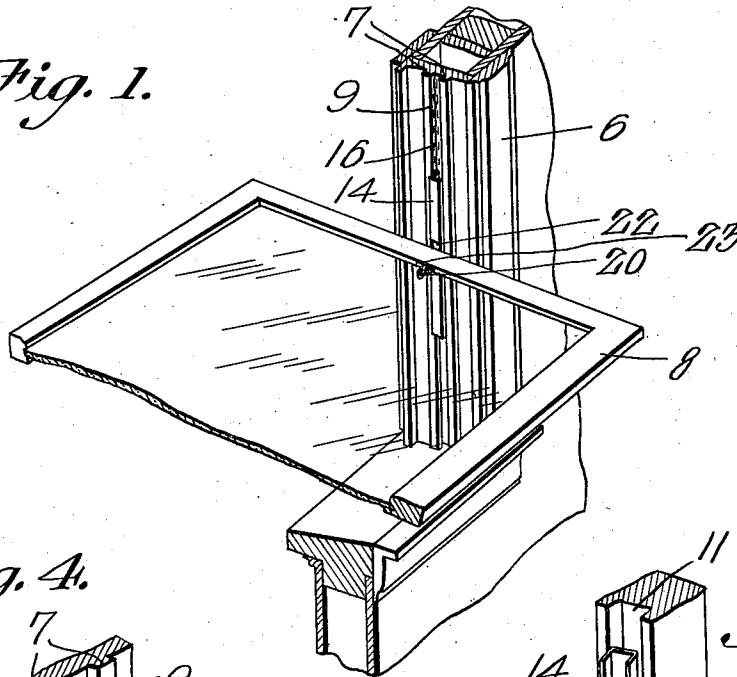


Fig. 4.

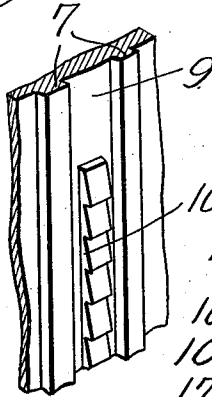


Fig. 3.

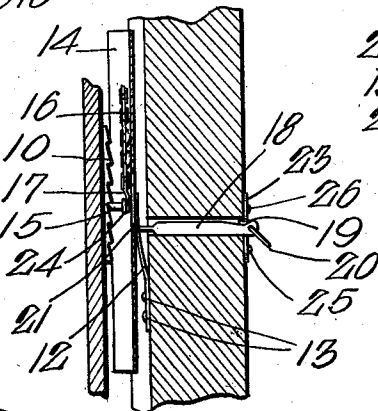


Fig. 5.

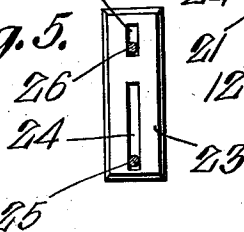
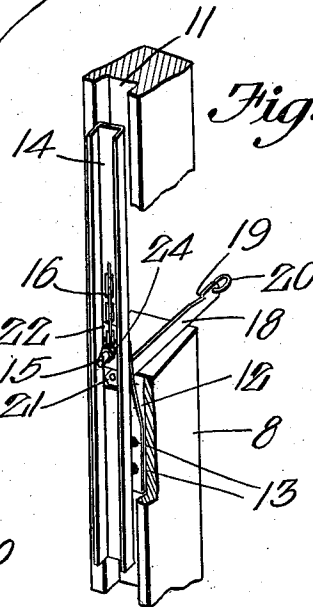


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH W. ADAMS, OF PASADENA, CALIFORNIA.

WINDOW-SASH.

1,014,737.

Specification of Letters Patent.

Patented Jan. 16, 1912.

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To all whom it may concern:

Be it known that I, JOSEPH W. ADAMS, a citizen of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented a new and useful Window-Sash, of which the following is a specification.

This invention relates to window sashes, and particularly to locking and horizontally pivoted sashes.

The objects of this invention are to provide an improved and simple means for mounting a vertically sliding sash to be revolved vertically in the window casing when brought to certain positions therein for the purpose of cleaning the window and for ventilation, and for locking the said sash at certain positions to prevent the opening or swinging thereof when brought to said positions.

This invention is embodied in the novel arrangement, construction and combination of parts as is hereinafter described, and as is shown in the accompanying drawings, in which similar reference characters indicate similar parts, and in which—

Figure 1 is a perspective view of the invention, parts of the window-sash and window-casing being broken away; Fig. 2 is a similar view of the sash member and the window-sash, parts of the window-sash being broken away for the purpose of clearness; Fig. 3 is a vertical section in detail through the window-sash, sash member and window casing; Fig. 4 is a perspective of a fragmentary portion of the window-casing and rack therein; and Fig. 5 is a plan view of a latch-locking plate.

Referring specifically to the drawings, there is shown at 6 the usual window casing having at each side thereof a pair of vertical guide strips 7 forming therebetween a slot or groove 9 which is adapted to receive the members 14 at the contiguous side of the sash 8, as will be hereinafter described. Within one of the slots 9 is arranged a suitable rack 10 which is set out from the rear or inner side of the said slot.

The window-sash 8 has at each side thereof a vertical slot 11, and in each slot is arranged a flat spring 12 which is secured rigidly to the sash at one end by screws 13, or by other means, and has the other or free end bent outwardly or having an outward tension toward the window-casing. At the free end these springs 12 have an outstand-

ing finger 15. The respective fingers 15 on the sides of the window-casing are in horizontal alinement and are preferably arranged about the center of the sash. On these fingers are pivoted the sash members 14, which are preferably bent from sheet metal in the form of a channel. The back of the channels face the sash and the fingers 15 pass through the backs thereof to form a pivotal connection therewith. The sash-cords or sash-chains 16 are attached to the ring 17 on the fingers 15, and a nut or head 24 on the pins secure the said sash members snugly between the springs 12 and rings 17. The said sash members are therefore given an outward tension by the springs 12.

A latch 18 is secured to each spring 12 and passes through the window-sash to the inner side thereof. At the inner end this latch 18 has an upstanding shoulder or lug 19, and a finger-ring 20. The outer end of the said latch 18 is secured to the spring 12 by passing therethrough a bearing and nut or head 21 on the back of the spring. The backs of the channel members 14 are cut away at 22 to permit of the nuts or heads 21 passing therethrough, upon the said members being pulled inwardly by means of the said latch 18 against the tension of the spring 12. On the inner faces of the window-sash are vertically-slidable locking-plates 23 which have a vertical slot 24 through which the latches 18 pass. Through the lower ends of these slots 24 pass screws 25 and upper screws 26 pass through upper slots 27 in the said locking plates. Thus when the latches 18 are pulled inwardly the locking plates 23 drop behind the shoulders 19 to retain the said latches in retracted position.

In use, the sash members 14 are arranged vertically in the slots 9, and when the latches are drawn inward and engaged by the locking plates, the springs 12 are drawn inward and the sash members are therefore partially drawn into the slots 11 on the window-sash, the finger 15 also being drawn free from the rack 10. This allows the window-sash to be raised or lowered in the window-casing, the sash members having a slidable movement in the slots or grooves 9 of the window-casing. When the fingers 15 are raised above the rack 10 and the latches disengaged from the locking plates 23 by pushing the same upwardly, the sash members are forced outwardly entirely with-

in the slots 9 of the window-casing and the window-sash is therefore free to be swung vertically on the fingers 15 as trunnions, for the purpose of ventilation or for cleaning the windows. Upon the window-sash being brought to a vertical position and being lowered, the pin 15 is engaged with the rack 10 to lock the sash against reverse movement. As this rack is set out from the rear face of the slot 9, the pin 15 on the respective side of the window-sash is pushed inward slightly against the tension of the spring 12 thus projecting the sash member partially into the slot 11 on the window-sash to prevent the swinging thereof while in locked position. To release the window sash the latches are drawn inward as above described and the same are then free to be slid vertically in the window-casing.

The construction as shown and described is applied to the lower sash, but it is similarly applicable to the upper sash, as is apparent to any person skilled in the art.

The objects being in this manner attained, I claim as my invention:

1. In a device of the character described the combination of a window-casing having a vertical slot therein, a rack within the said slot, a window-sash having a slot therein, a spring-pressed rack-engaging finger carried

thereby, a sash member carried by the said finger and lying in the slot of the said window-casing and forced partially into the slot of the said sash upon the said finger being engaged with the said rack to lock the said sash, and means for releasing the said finger from the said rack.

2. In a device of the character described, the combination of a window casing having a vertical slot therein, a rack within the said slot, a window sash having a vertical slot therein, a flat spring secured in the slot of the sash having an outward tension, an outwardly projecting rack engaging finger on the free end of the said spring, a channel shaped sash member pivotally mounted on the said finger and lying in the slot of the window casing and forced partially into the slot in the said sash upon the said finger being engaged with the said rack to lock the sash, means for releasing the said finger from the said rack and a sash cord secured to the said finger.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOSEPH W. ADAMS.

Witnesses:

WALLACE I. WOODWORTH,
EARL C. LINDLEY.