

(No Model.)

F. W. WILSON.
CAR WINDOW.

No. 555,750.

Patented Mar. 3, 1896.

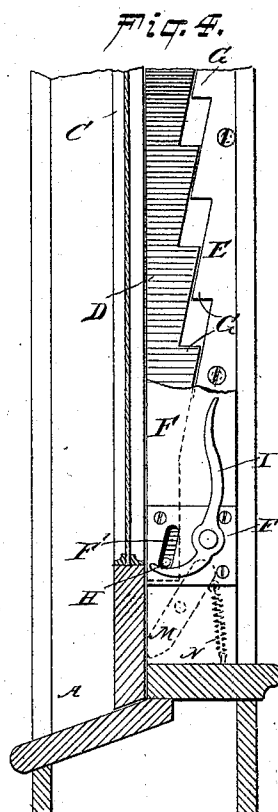
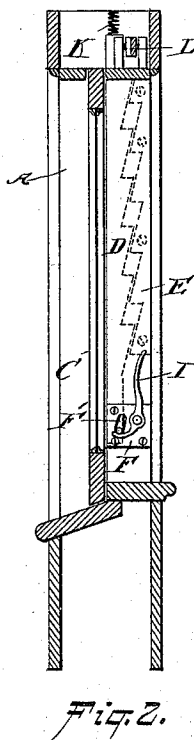
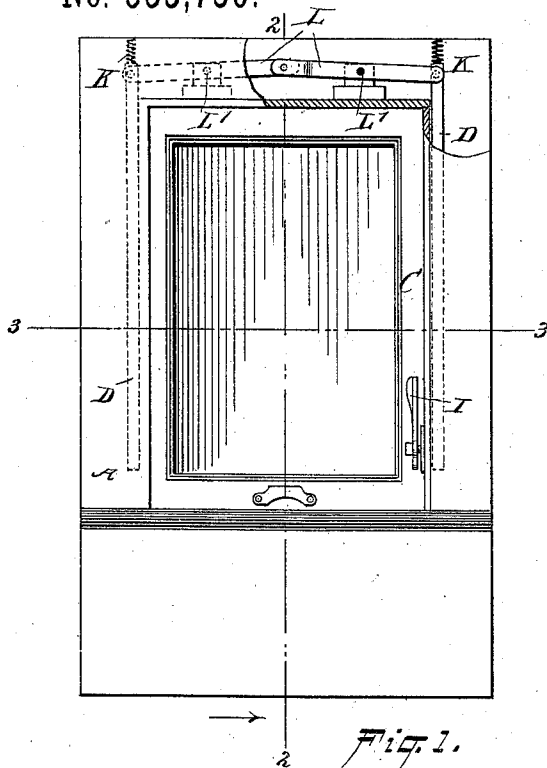


Fig. 3.

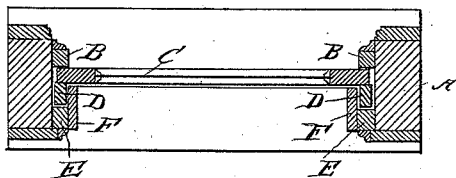
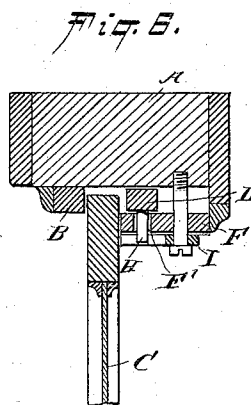
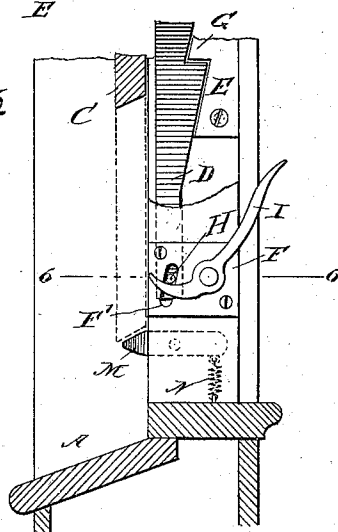


Fig. 4.



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CAR-WINDOW.

SPECIFICATION forming part of Letters Patent No. 555,750, dated March 3, 1896.

Application filed February 27, 1895. Serial No. 539,884. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS W. WILSON, of New York city, in the county and State of New York, have invented a new and Improved Car-Window, of which the following is a full, clear, and exact description.

My invention relates to car-windows, and has for its object to provide means whereby such windows may be normally kept tightly closed and whereby, when it is desired to open the windows, they will be released from contact with parts normally engaging them, so that the windows will open very easily.

A further object of the invention is to securely hold the windows in any position to which they may have been raised or lowered.

The invention will be fully described hereinafter and the features of novelty pointed out in the claims.

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

Figure 1 is a front elevation of a car-window provided with my improvements. Fig. 2 is a vertical section on the line 2 2 of Fig. 1. Fig. 3 is a sectional plan on the line 3 3 of Fig. 1. Fig. 4 is a detail sectional elevation. Fig. 5 is a similar view showing the window-sash released, and Fig. 6 is a broken sectional plan on line 6 6 of Fig. 5.

In the drawings, A indicates the window-frame provided with a stationary guide B, which forms the guideway for the sash C, it being understood that a guide-strip B is provided on each side of the window. One face of the sash C engages the guide-strips B, while the other face is adapted to engage the movable guides D, which, as presently described, have movement toward and from the sash and also upward and downward.

E are fixed guides for the movable guides D, and F are cover-strips extending over the movable guides D and the fixed guides E.

The construction of the movable guides D and their fixed guides E will be seen best in Figs. 2, 4, and 5. As shown in said figures, the said guides D and E are provided in their opposing faces with one or more inclined or wedge-shaped projections G, which form slideways determining the movement of the

guides D. The guides D at their lower ends are provided with pins H engaging slots F' in the covering-strips F or other adjacent parts, the said slots being parallel with the inclined faces of the wedges G. Suitable keepers are also provided in the upper part of the window-frame for the upper ends of the guides D. The guides D are thrown downward by means of springs K, while the raising of said guides is effected through the medium of a lever I, which is fulcrumed upon the covering-strip F and engages the pin H. In order to cause the two guides D to move in unison, they are connected at their upper ends through the medium of levers L fulcrumed upon the window-casing at L' and pivotally connected with each other, as well as with the guides D.

It will be understood that in the normal position of parts the springs K will throw the guides D downward, and as the wedges of the said guides engage the corresponding wedges on the stationary guides E the downward movement of the guides D will force them toward the window-sash C to a binding engagement therewith. A tight joint therefore will be produced between the window-sash and its guides.

When it is desired to open the window, the lever I is operated to raise the guides D, and it will be observed that this movement will cause said guides to move away from the window-sash, so that the latter is released from binding contact with the guides D, Fig. 5, and therefore can easily be raised. As soon as the operator releases the lever I the springs K will throw the guides D downward and toward the sash to again engage with the latter and hold it in any desired position.

It will be seen that when the sash is raised and the guides D are moved away from it to release the sash the latter will fall to the bottom of the window-frame and be liable to injure the operator's hands. In order to obviate this I provide a yielding stop in the path of travel of the sash, and this yielding stop, as shown, consists of a pivoted arm M, which is actuated by a spring N, and when the window is closed the arm swings out of the path of travel of the sash, as will be readily understood by reference to Fig. 4.

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

1. The combination of a window frame or casing, having two guides at each side forming between them aligned guideways to receive a sash, the said sash arranged to slide in said guideways, two of said guides correspondingly arranged at opposite sides of the frame being movable into and out of engagement with one face of said sash, levers pivoted on the frame and having their inner ends pivoted together and their outer ends connected to said guides, and means for moving one of the guides, substantially as set forth.

2. The combination of a window frame or casing, having guideways to receive a sash, the said sash arranged to slide in said guideways, a stop pivoted at the base of the frame with one end adapted to swing in position to

engage the lower part of the sash, and a spring connected to said stop and adapted to hold the same normally in an operative position, substantially as set forth.

3. The combination of a window frame or casing having a fixed guide and a movable guide at each side forming between them aligned guideways for the sash, the said sash arranged to play in said guideways, a connection between said movable guides, a plate having a slot arranged oblique to the plane in which the sash plays, a pin on one of the movable guides engaging said slot, and a lever pivoted on the frame, and engaging said pin, substantially as set forth.

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Witnesses:

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