(No Model.)

A. SWAB.

WINDOW CASING.

No. 412,430. Patented Oct. 8, 1889.

Fig. 1

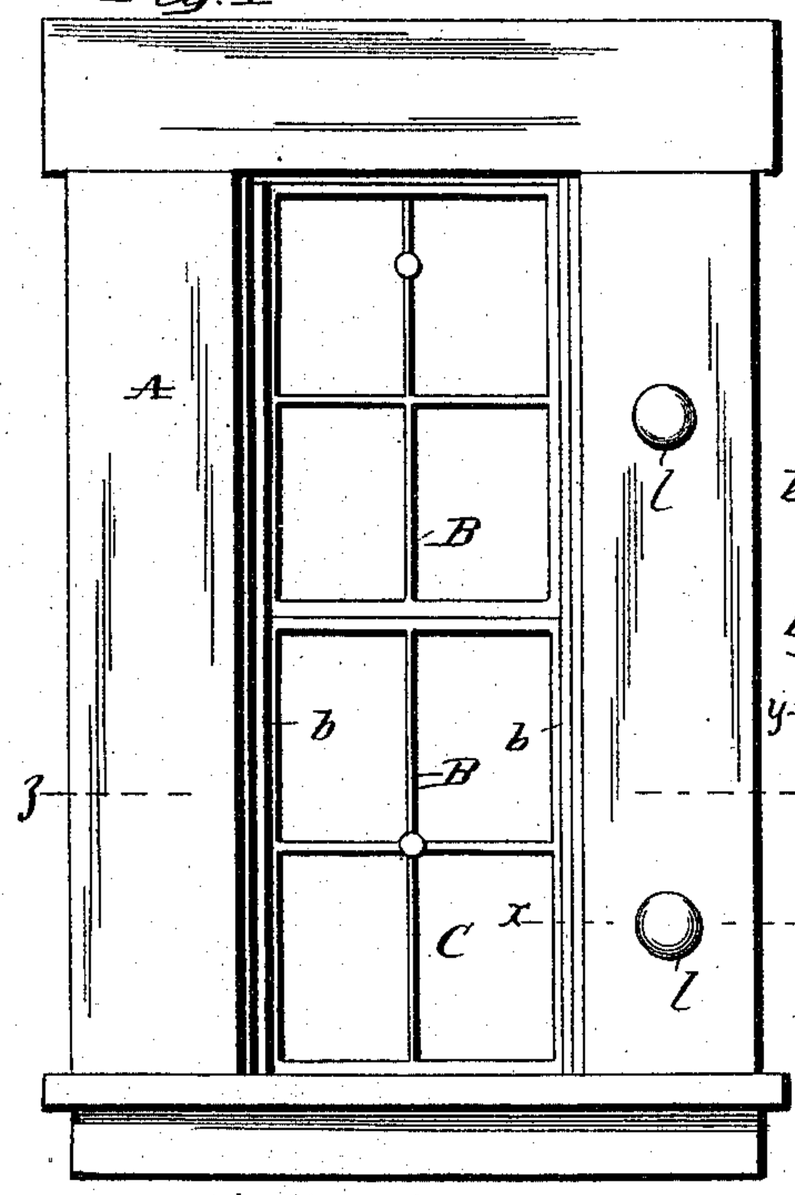


Fig. 2

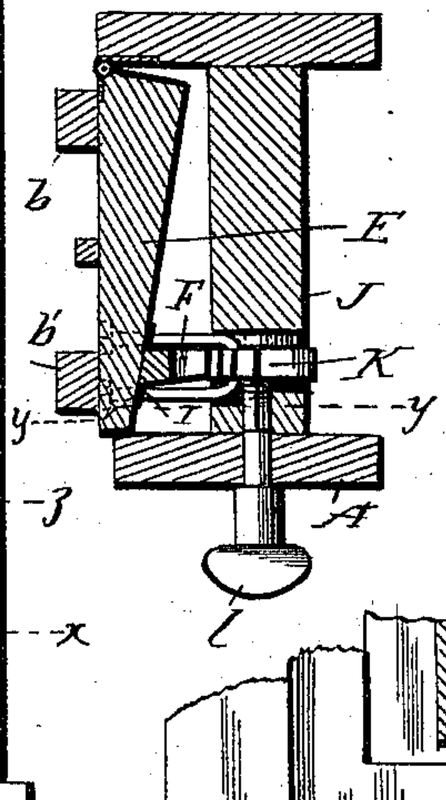


Fig. 3.

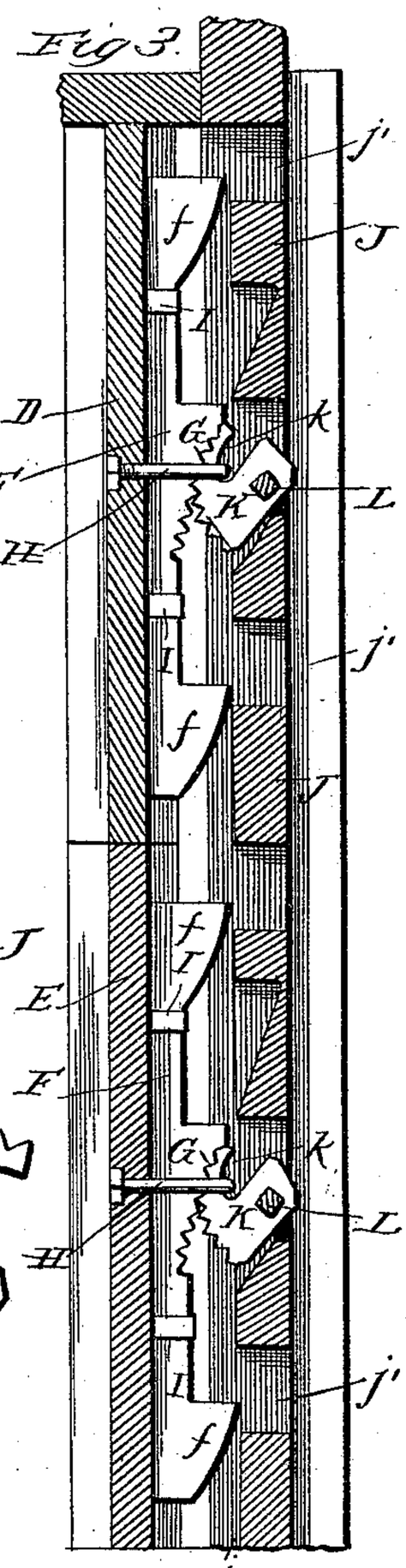


Fig. 4

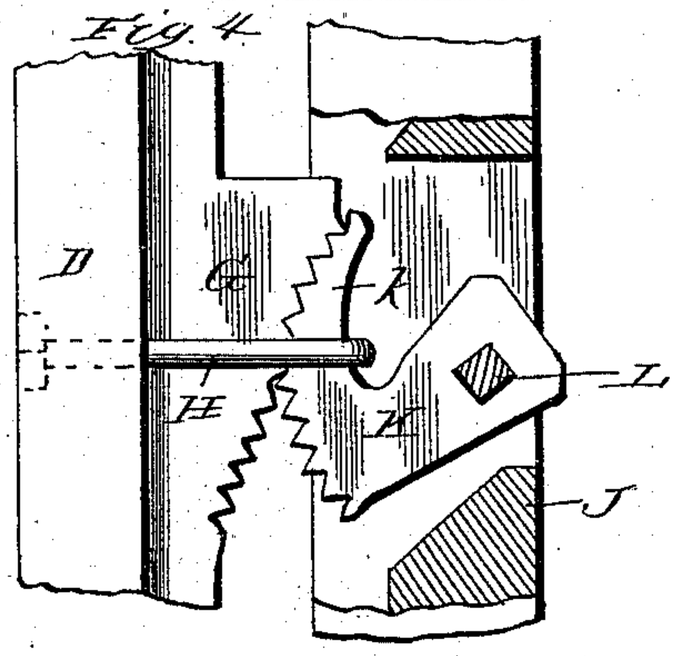


Fig. 5.

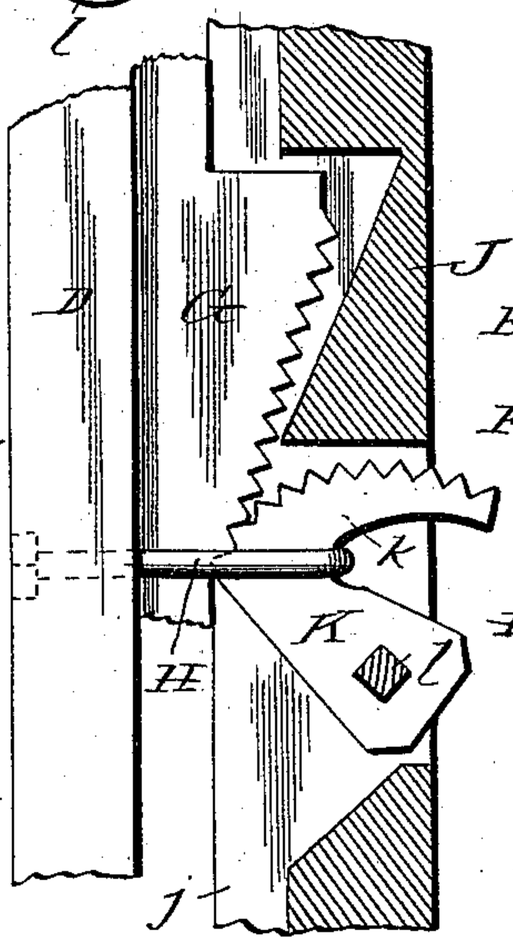
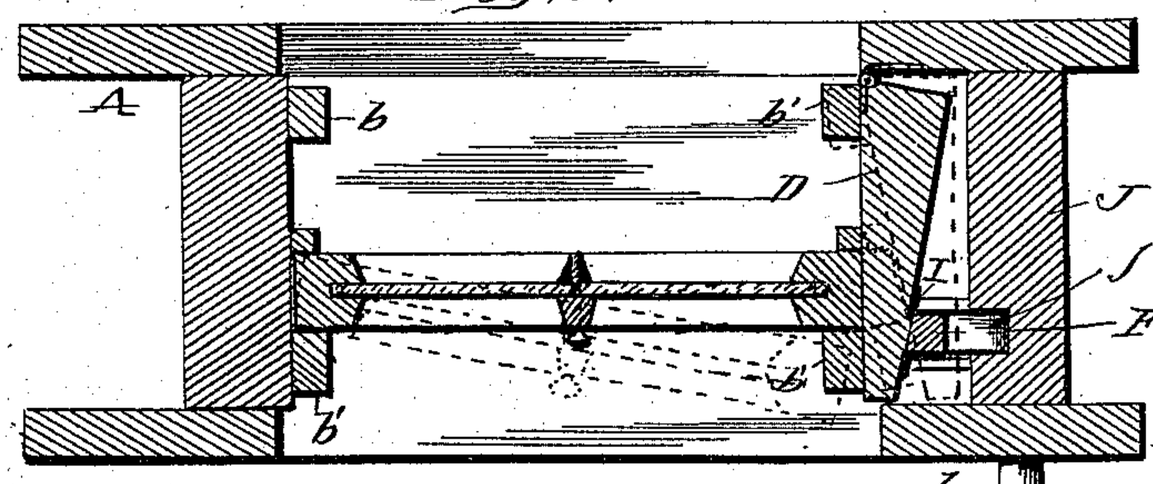


Fig. 6.



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UNITED STATES PATENT OFFICE.

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WINDOW-CASING.

SPECIFICATION forming part of Letters Patent No. 412,430, dated October 8, 1889.

Application filed June 14, 1889. Serial No. 314,262. (No model.)

To all whom it may concern:

Be it known that I, ALLEN SWAB, a citizen of the United States, residing at Elizabethville, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Window-Casings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to windows, and has for its object to provide a simple, compact, and efficient construction, whereby the sash can be removed at will for any purpose, as repairing, cleaning, painting, &c., or be held at any desired point, either open or closed, or any intermediate position.

The improvement consists in a movable section at the side of the window-casing and peculiar and novel devices for operating the same. The said movable section can be hinged at either edge, or may be constructed to move bodily, always remaining parallel to its normal position. However, no claim is made, broadly, to the movable section, but to the means and devices for operating the same.

The improvement further consists in the novel construction and combination of the parts, which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a front view of a window embodying my invention. Fig. 2 is a cross-section of one side of the window on the line X X of Fig. 1. Fig. 3 is a vertical section of one side of the window on the line Y Y of Fig. 2. Fig. 4 is an enlarged detail view of the sliding bar and the toothed cam-segment for operating the same. Fig. 5 is a view similar to Fig. 4, showing a different position of the parts. Fig. 6 is a cross-section of the window on the line Z Z of Fig. 1, showing the operation of the same by dotted lines.

The window-casing A and the sliding sashes B and C are of well-known construction and relative arrangement. The jambs have the usual rabbets or vertical ways *b* and *b'* for the sashes to slide in. Either jamb may be movable, and for convenience the right-hand jamb is shown as being movable and composed of two independent sections D and E, each being operated by precisely the same means. The sliding bar F, held to the section by the keepers I, is provided with a series of cam-heads *f*, which act in opposition to a fixed board J to move the said section out against the sash, and with a toothed incline G, which comes opposite the toothed segment K, that is mounted on the shaft L. This segment is cut away to form the rear curved edge *k*, which is eccentric to the shaft L and which is adapted to engage with the keeper H, fastened to the section to draw the said section in and away from the sash when the said segment is turned up. The cams *f* and the segment G are sheared off on one side to prevent binding when operating the section.

The shaft L is journaled in the board J and is provided at its outer end with a suitable handle *l* for rotating it. To move the section out to hold the sash the shaft L is rotated, so that the segment K will move the bar F down, thus forcing the cams *f* between the board J and the said section, and to draw the section away from the sash the shaft L is turned in the opposite direction, so that the cam-edge *k* of the segment K will draw in on the keeper H and carry the said section in.

The board J is a fixed part of the frame and is grooved at *j* to receive the bar F, and mortised at *j'* to give clearance for the cams *f*. When the section is drawn close to the board or jamb J, the bar F enters the groove *j*, thereby economizing space.

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

1. The combination, with a window-casing having a movable section and the sliding sash, of the sliding bar having cams *f* placed between the said section and a fixed part of the casing, the keeper H, the shaft, and the segment on the shaft, substantially as described.

2. The combination, with the window-casing having a movable section for the purpose described and having a board J, of the bar F, having cams *f*, and the toothed incline G of

the shaft and the correspondingly-toothed segment K on the said shaft, substantially as set forth.

3. The combination, with the window-casing having a movable section D and a board J, of the keeper H, secured to section D, the shaft L, and the cam K on shaft L, adapted to move section D out and having the cam-edge *k*, which acts on the keeper H and draws the said section D back, substantially as set forth.

4. In a window-casing, the combination, with the movable section and the board J, of the bar F, having cams *f*, and a toothed incline G, the keeper H, and the shaft having a toothed segment, which segment is provided with a rear cam-edge *k*, substantially as described.

5. In a window-casing having a board J, the combination of the movable section, the bar F, held to the section by keepers, and having cams *f* and a toothed incline, the keeper H, the shaft, and the toothed segment on the shaft, having a cam-edge *k*, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ALLEN SWAB.

Witnesses:
V. B. HILLYARD,
MINNIE HAUGHTON.