

Z. CURTIS.  
Sash-Holders.

No. 196,140.

Patented Oct. 16, 1877.

Fig. 1.

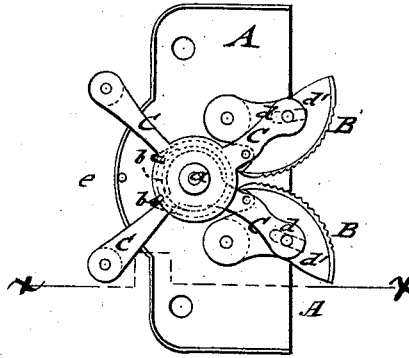


Fig. 2.

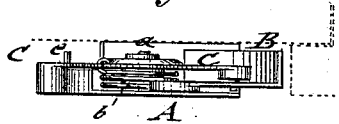
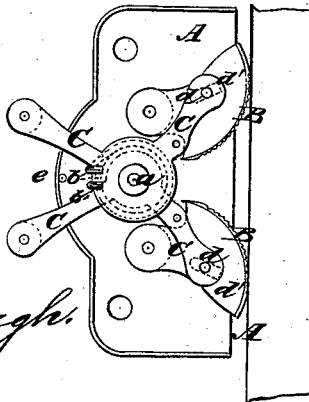


Fig. 3.



WITNESSES:

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ZELOTES CURTIS, OF JANESVILLE, WISCONSIN.

## IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. **196,140**, dated October 16, 1877; application filed August 3, 1877.

*To all whom it may concern:*

Be it known that I, ZELOTES CURTIS, of Janesville, in the county of Rock and State of Wisconsin, have invented a new and Improved Sash-Fastener, of which the following is a specification:

In the accompanying drawing, Figures 1 and 3 represent rear elevations of my improved sash-fastener respectively in closed and opened position; and Fig. 2, a vertical transverse section on line *x x*, Fig. 1, of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved sash-fastener that retains the sash at any position in a reliable manner, and is easily operated by taking instantly hold of the window-casing and taking up the slack of the window as soon as released, for supporting the sash; and the invention consists of toothed eccentric-cams that are pivoted to the casing of the fastener and operated by bell-crank levers, which turn on a common post or pin, and are acted upon by a common spiral spring, the levers being connected by outer pins to slots of the cams, or in equivalent manner.

By referring to the drawing, A represents the casing of my improved sash-fastener, which is either secured into a mortise of the sash or screwed to the face of the same.

To the inside of the casing are pivoted, symmetrically to the transverse axis of the casing, two eccentric-cams, B, that are ribbed or toothed at their outer circumferences, and engaged by two bell-crank levers, C, which swing on a common post or center-pin, *a*, and are acted upon by a common spiral spring, *b*. The inner ends of the bell-crank levers C connect, by pins *d*, with slots *d'* of the cams,

while the outer arms are guided along a recess of the casing until brought in contact with a common center stop-pin, *e*. The outer arms of the levers C are provided with buttons or rests, for being more conveniently taken hold of with the fingers.

When the outer arms are taken hold of by the fingers and pressed together, the cams are drawn back and released from contact with the window-casing, so that the sash may be raised or lowered, the cams being instantly thrown out by the spring as soon as the outer arms are released, so that the toothed faces of the same take immediate effect upon the window-casing, and support thereby the sash in position, preventing it from being moved up or down till properly relieved.

The pin-and-slot connection of the levers and cams, or its equivalent, and the common pivot and spring, facilitate the swinging motion of the cams, and simplify the construction of the fastener, so that the same is reliable and effective in use, and yet cheaply manufactured.

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

A sash-fastener constructed of symmetrically-pivoted eccentric-cams having toothed circumferences, and of two spring-acted bell-crank levers that turn on a common pivot, the inner ends of the bell-crank levers engaging the cams, substantially in the manner set forth.

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Witnesses:

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