

**No. 626,057.**

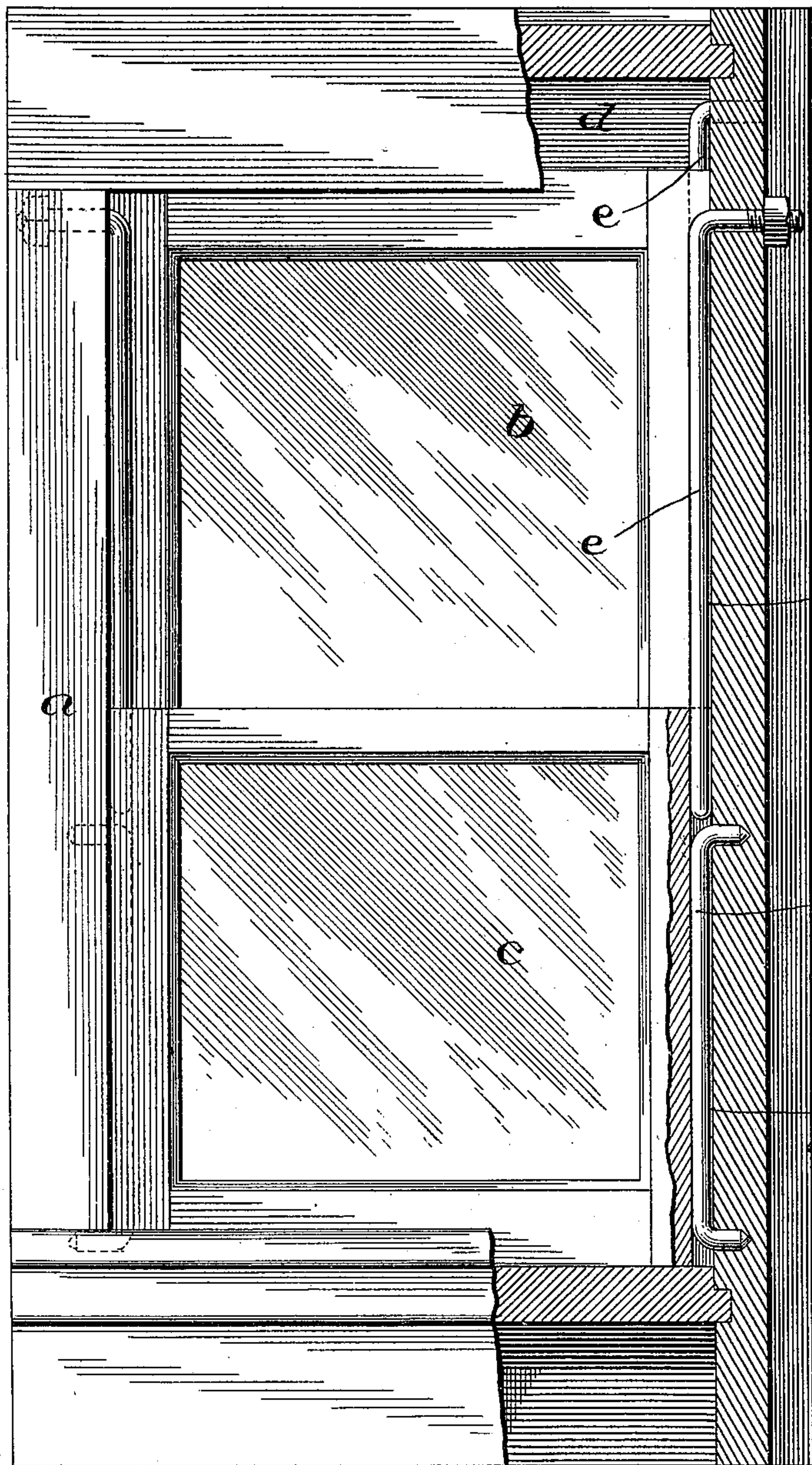
**Patented May 30, 1899.**

H. K. DOOLITTLE.  
WINDOW.

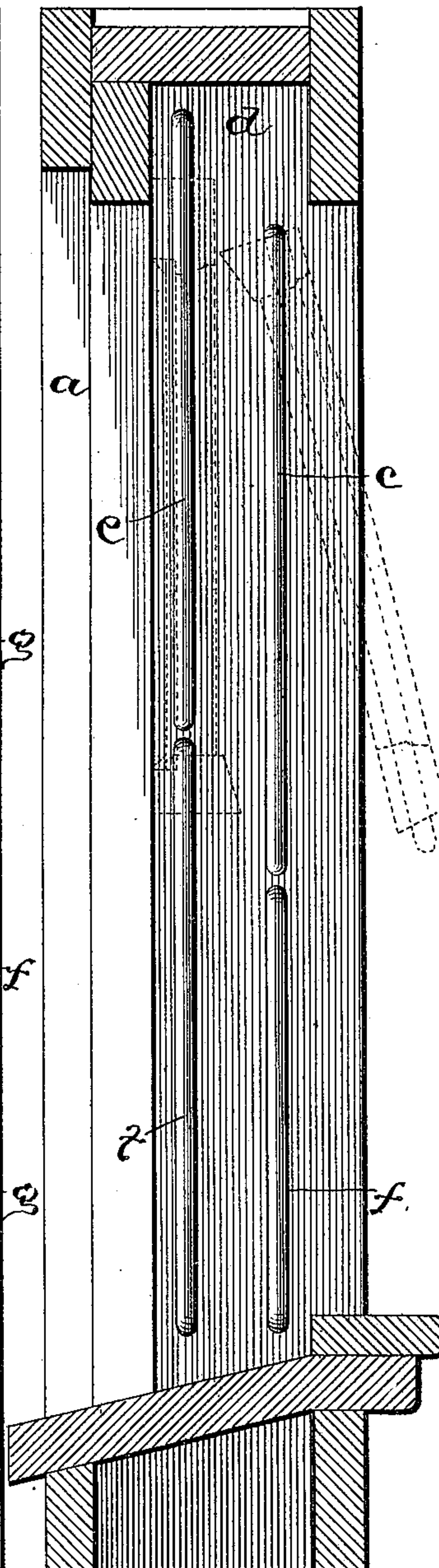
(Application filed Nov. 4, 1898.)

(No Model.)

*Fig. 1.*



*Fig. 2.*



*Witnesses.*

Francis N. Fitch,  
Anna L. Fitch.

*Inventor.*

Harvey V. Doolittle



# UNITED STATES PATENT OFFICE.

HARVEY K. DOOLITTLE, OF WATERTOWN, NEW YORK.

## WINDOW.

SPECIFICATION forming part of Letters Patent No. 626,057, dated May 30, 1899.

Application filed November 4, 1898. Serial No. 695,521. (No model.)

*To all whom it may concern:*

Be it known that I, HARVEY K. DOOLITTLE, a citizen of the United States, residing at Watertown, in the county of Jefferson and State of New York, have invented a new and useful Window-Stop, of which the following is a specification.

My invention relates to windows in general; and it consists, essentially, in providing a window-frame with suitable stop and sash guides pivoted at one end, on which the sash is adapted to slide up and down, and with a recess or pocket at the top thereof whereby the sash may be forced upward beyond its normal position, so as to provide for its ready and easy removal; and it further consists in combining with said pivoted guides suitable stationary guides.

The invention further consists of the general combination and arrangement of the several parts, as will be hereinafter more fully described, and particularly pointed out in the claims.

The principal object of the invention is to so improve the construction of window-frames that the usual parting-bead and inside and outside beads may be dispensed with, and also to provide a simple and effective means for the quick and easy removal of the sash without the use of tools. These objects are attained by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of a window-frame fitted with my improvement, partly in section to show the manner of attaching the guides and the location of the pocket; and Fig. 2, a vertical transverse section of the window-frame with the guides in position and showing the sash in dotted lines, the lower sash in position for removal.

In both views the letter *a* indicates the window-frame, and *b* the upper and *c* the lower sash. The window-frame is constructed with a recess or pocket *d* at the top thereof, the purpose of which will be hereinafter explained.

The letter *e* indicates the upper stop and sash guides, and *f* the lower stop and sash guides. These guides may be constructed of any suitable material, preferably of wire rods of any desired diameter, the upper guides being pivoted at their upper ends in the stiles

of the frame, while the lower guides have both their upper and lower ends bent and embedded in the stiles of said frame, as shown in Fig. 1. The upper guides are secured from accidental displacement by any suitable means, preferably by means of a nut, which is screwed onto the bent end of the guide, said end being screw-threaded for the purpose.

The side edges of the sash are provided with grooves *g*, in which the guides are adapted to fit. In providing the frame with the guides it is essential to have them of such a length that the lower part of the upper sash will be down upon the upper portion of the lower guides, so that the adjacent ends of both guides will be hid from view and the removal of the sash from the outside rendered impossible under ordinary circumstances. In the same way the upper portion of the lower sash fits over the lower end of its upper guide, thereby maintaining both the upper and lower guides in perfect alignment, rendering the raising and lowering of the sash easy and without any danger of the upper guides becoming displaced.

Any suitable device may be employed to lock the sashes together, and the usual cords, pulleys, and weights may be used in connection with my invention.

When it is desired to remove the sashes, the lower one is first removed. This is accomplished by raising the sash until the bottom is entirely clear of the lower guide and then pulling it toward the person of the operator, when the sash can be readily slipped from the guides. After the lower sash has been removed the upper sash can be also removed by forcing it up into the pocket until its bottom is clear of the lower guide. Then by swinging the bottom slightly inward the sash can be readily removed from the guides.

By the use of my invention all outer and inside beads are dispensed with, and as the guides are fitted closely to the stiles of the frame the side edges of the sashes fit correspondingly close to said stiles. Thus a plain surface is practically presented by the sides of the stiles. In replacing the sashes the upper one is first placed into position, which is accomplished by inserting the guides into the grooves, then pushing it slightly up into the



pocket, and then pulling it down into its proper place. The lower sash can then be replaced.

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

1. In combination with a window-frame, the combined stop and sash guide consisting of a suitable rod adapted to fit a groove in the sash and having one end pivoted to the window-stile, so that the stop-guide may be placed either parallel with the frame to serve as a guide for the sash or swung out to enable the sash to be removed.

2. The combination with the window-frame and sliding sashes, of independent stop-guides for each sash, having a lower portion fixed to the frame and an upper portion pivoted, so as to enable the sash when moved onto such upper portion to be swung out of the frame, and whereby either sash may be so swung independently of the other, or both may be swung.

3. The combination with a window-frame and a sliding sash, of stop-guides engaging grooves in the outer edges of the sash-stiles and extending the full length of the window-opening exposing the sash, a portion of said

stop-guides being fixed at each end to the window-stile, and the other portion having the upper end bent and swiveled to said stile, and the window-frame constructed to form a pocket beyond the exposed opening, into which pocket the sash may be moved a sufficient distance to be disengaged from the fixed portion of the stop-guide, so that the pivoted portion, with the sash, may be swung out.

4. The combination with a window-frame and a sliding sash, of combined fixed and pivotal stop-guides engaging grooves in the outer edges of the sash-stiles, the fixed portion having their ends bent and entering the window-stiles and the pivotal portion having their upper ends bent and entering said stiles, the window-frame stiles having plain surfaces and the window-frame constructed to form a pocket into which the sash may be moved to allow for its disengagement from the fixed stop-guide, so that it may be swung out on the pivotal guide-stops and removed therefrom.

HARVEY K. DOOLITTLE.

Witnesses:

M. TERESA COUGHLIN,  
ANNA L. FITCH.