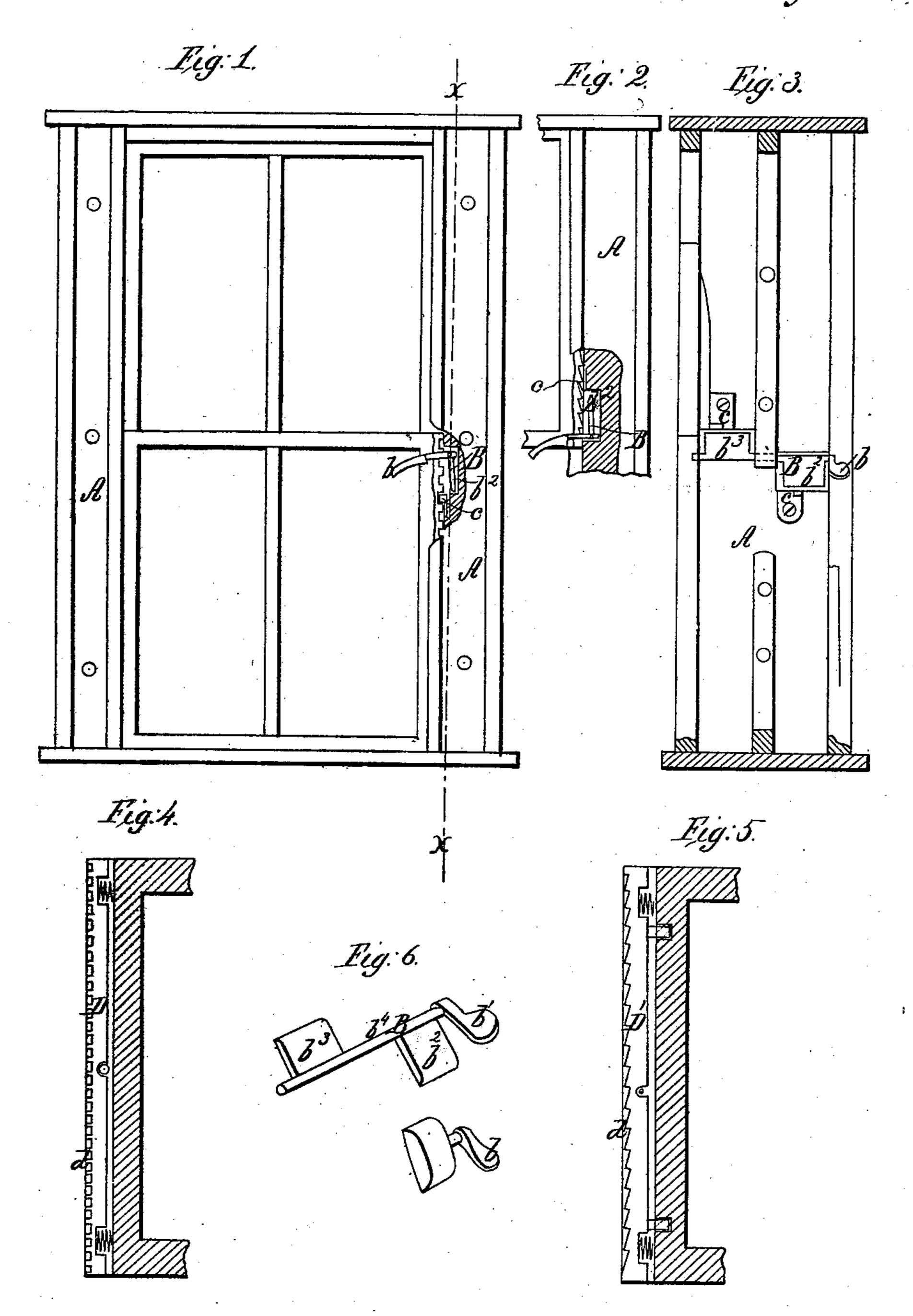
## M. I. Mile o

Sast Stop.

10. 94.05%.

Fatented Aug. 24, 1869.



Witnesses; Fred Thomas S, a. Watthews Inventor; M.V. B. White By H. W. Beadle Attorney

## United States Patent Office.

M. V. B. WHITE, OF BALLSTON, NEW YORK.

## IMPROVED SASH-STOP.

Specification forming part of Letters Patent No. 94,051, dated August 21, 1869.

To all whom it may concern:

Be it known that I, M. V. B. WHITE, of Ballston, in the county of Saratoga and State of New York, have invented a new and useful Improvement in Sash Stops and Locks; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to an improved device for regulating the position of window-sashes; and it consists, mainly, of a key of peculiar construction, which is used in connection with rack-bars attached to the sides of the sashes. The details of construction and manner of operation will be full described hereinafter.

In the drawings, Figure 1 represents a front elevation of a window to which my improvement has been applied, a portion of the casing being broken away to show the internal arrangement of the lower sash. Fig. 2 represents a partial elevation to show the arrangement of the upper sash; Fig. 3, a view of the frame through the line x x, Fig. 1. Figs. 4, 5, and 6 are views of parts detached.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and operation.

A represents a window-frame of the ordinary construction, excepting that it is cut away at about its center upon one side to receive the key B. This key is provided with the handle b, lips  $b^2$   $b^3$ , and bearing-surface  $b^4$ . Upon this frame, above and below each lip, is placed a stop or catch, cc, as shown in the drawings. The sides of the sashes next to the key are grooved, as shown in Fig. 4. In these grooves are located the rack-bars D D', as shown. These rack-bars are of peculiar construction, being provided upon one side with a projecting flange, d, as shown in Fig. 6. Within the sashes, behind the bars, are located spiral or other suitable springs. To prevent the bars from moving vertically, I either provide them with a notch or slot through which passes a pin, or I cast a pin upon the inner side of the rack-bar, which projects into the sash. The rack-bar may be serrated, as shown in Fig. 5, or provided with notches, as shown in Fig. 4. I preferably employ the former in the upper sash, which permits it to be raised without operating the key, and the latter in the lower, by which means the sash is securely

locked in all positions. The bars may be made of cast, wrought iron, or other metal. In the latter case the flange is formed by riveting on a string of the latter.

eting on a strip of metal.

The operation of my invention is as follows: When it is desired to operate the lower sash, the handle b is lifted up. By this means the lip  $b^2$  is thrown out and the rack-bar D necessarily pushed back into the groove. The bar is thus disengaged from the catch c, which was resting in one of its notches, and the sash is free to move in either direction. As soon as the handle is released the rack-bar is again thrust forward by the force of the springs, and one of its notches being caught by the catch c the sash is securely locked. The operation with the upper sash is the same, excepting that the handle is pressed down to force back the rack-bar. The flange upon the bars presses closely against the inside of the frame when the sashes are at rest, and effectuually excludes all dust and air.

For car and other windows where but one sash is used the lips should be placed opposite each other upon the key, so that it may be operated by either depressing or raising the handle. A simple lever might be inserted instead of the key, it being so arranged as to swing on its center and press in the rackbars by movement in either direction. This lever could be made removable, if desired, so that the window could not be opened without the key. By this construction herein described a complete and effective device is pro-

duced.

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

1. The rack-bars D D', when provided with flange d, as and for the purpose described.

2. The rack-bars D D', constructed as described, when used in connection with the catches c c and operated by any suitable lever device to work both sashes, as and for the purpose described.

3. The device described, consisting of the rack-bars D D', stops c, and key B, the whole being constructed and arranged as and for the

purpose described.

This specification signed and witnessed this 12th day of June, 1869.

M. V. B. WHITE.

Witnesses:

S. L. FONDA, GEO. C. BUCHER.