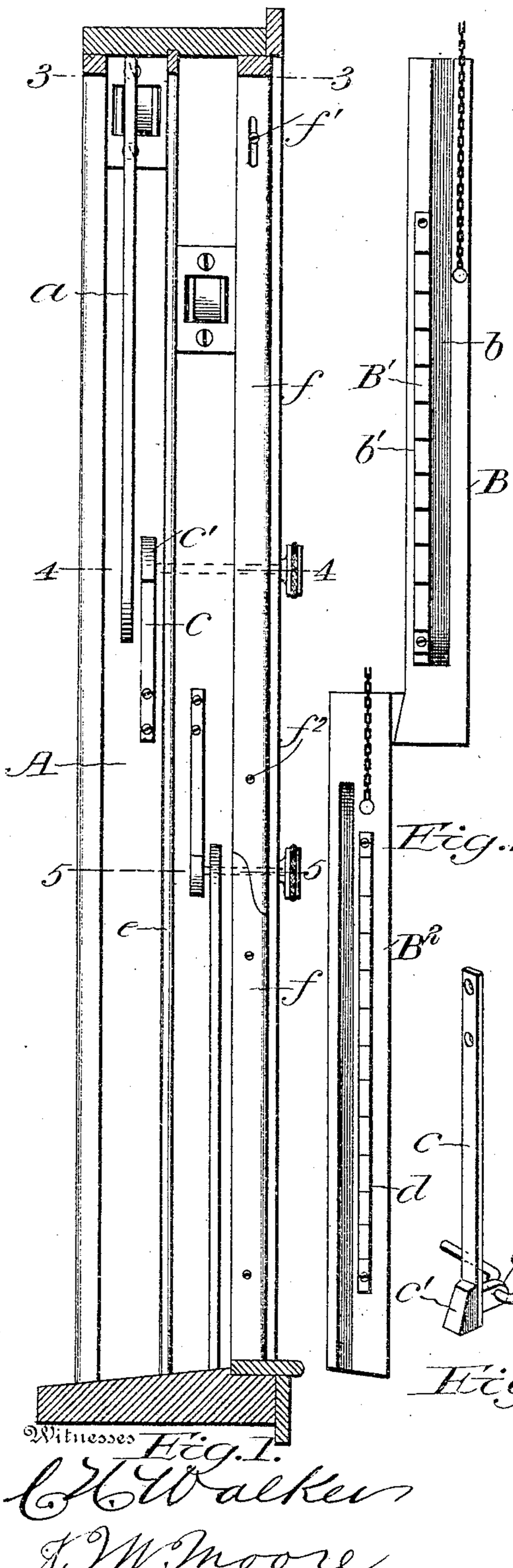
No. 765,828. PATENTED JULY 26, 1904.

C. E. GALE.

WINDOW.

APPLICATION FILED APR. 25, 1903.

NO MODEL.



Witnesses
C. H. Walker
J. W. Moore.

Fig. 1.

Fig. 2.

Fig. 3.

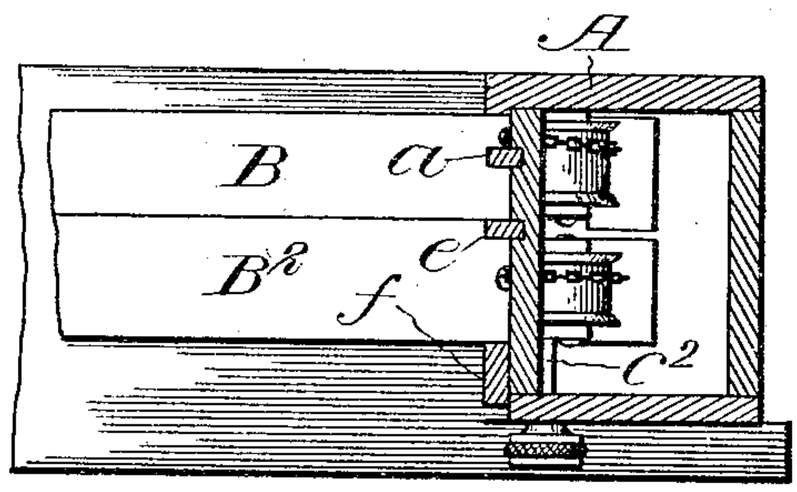


Fig. 4.

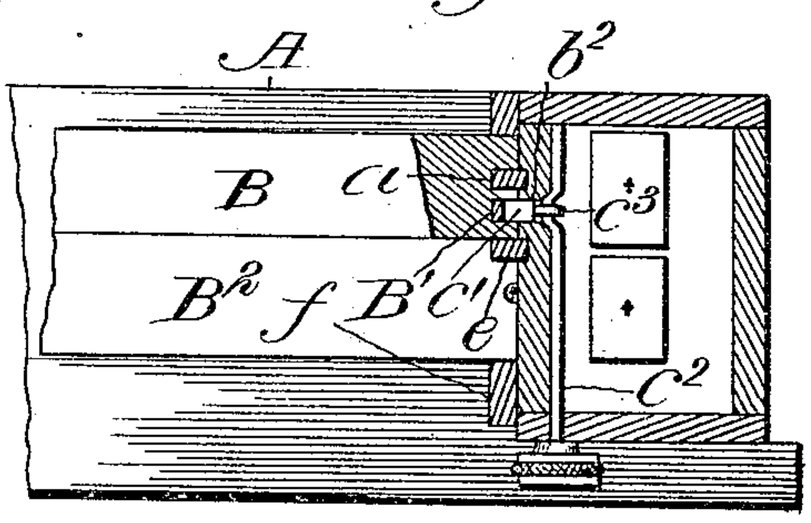


Fig. 5.

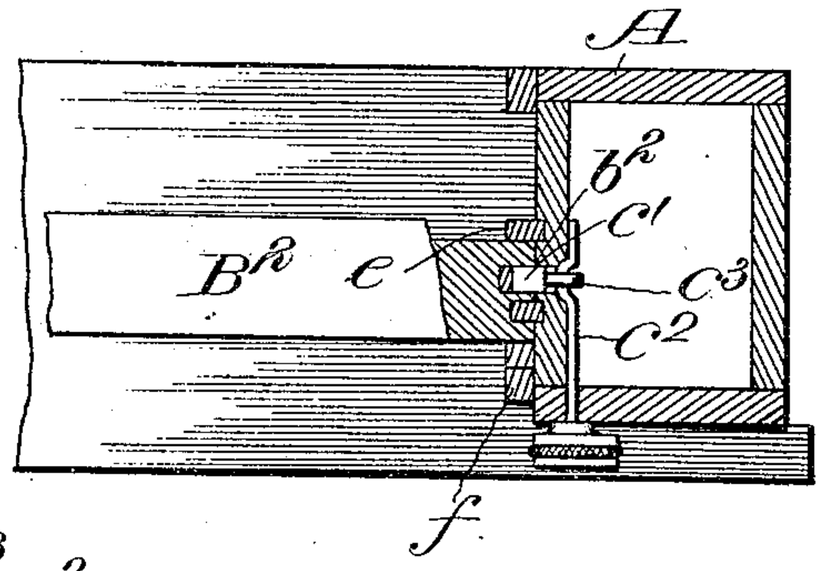


Fig. 6.

Inventor
Charles E. Gale.

By Eugene H. Johnson
Attorney

No. 765,828. Patented July 26, 1904.

UNITED STATES PATENT OFFICE.

CHARLES E. GALE, OF UTICA, NEW YORK, ASSIGNOR OF ONE-HALF TO MARTIN G. WHITNEY, OF WATERTOWN, NEW YORK.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 765,828, dated July 26, 1904.

Application filed April 25, 1903. Serial No. 154,286. (No model.)

To all whom it may concern:

Be it known that I, CHARLES EDISON GALE, a citizen of the United States, residing at Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Windows, of which the following is a specification.

This invention relates to certain new and useful improvements in sash holders and locks; and it consists in the construction and combination of the parts, as will be hereinafter set forth.

In the accompanying drawings, which illustrate the invention, Figure 1 is a vertical longitudinal section of a window-frame having my improvement applied thereto. Fig. 2 is a side elevation of the sashes. Figs. 3, 4, and 5 are transverse sections on the dotted lines 3 3, 4 4, 5 5; and Fig. 6 is a perspective view of the sash-lock detached.

The window frame or casing A is constructed to receive an inner or lower and an outer or upper sash, the frame having pulleys for the sash-cords and the usual pockets for the sash-weights. The upper or outer sash B is preferably provided near its outer edge with a recess *b*, and when such sash is raised a bead or strip *a* on the window-casing enters this recess, and in practice the lower end of this bead or strip *a* is beveled or tapered. The strip is rigidly attached to the window-casing and is of less length than the sash. The edge of the sash parallel with the recess *b* has a recess *b'*, within which is secured a ratchet-bar B', the inclined portions of the ratchet-teeth being positioned to admit of the upper sash being raised without actuating or moving the sash holders or locks.

The window-frame or sash-casing has through the side portions an opening b^2, through which is passed an inward-projecting portion of the sash holder or lock, the lock consisting of a spring *c*, which for the upper sash is made fast at its lower end to the casing, the spring having on its upper end a detent *c'* and opposite thereto a flat projecting portion c^3 of sufficient length to extend through the wall of the casing for the reception of the sash-weights, and the inward-projecting portion is apertured for the passage of a crank portion of a bar c^2. The bar c^2 bears against the inner side of the box or housing for the sash-weight, and when the knob or handle on said bar is turned the detent will be drawn inward and out of engagement with the ratchet-teeth, and when so placed the sash-weights, which are sufficient to overbalance the sash, will raise the same without being manually lifted. If desired, the sash-weights may just balance the sash, and in such instance the sash would have to be assisted in its upward movement. The spring-pressure exerted by the detent on the ratchet-bars will be sufficient to overcome the upward tendency of the sash, and when the pressure is removed the sash will automatically close. The position or inclination of the teeth of the ratchet-bar and the detent engaging the horizontal portions thereof will prevent the upper sash being lowered when such parts are in engagement.

The lower part of the casing and the inner or lower sash are constructed somewhat similar to the upper or outer sash, the recess *d* in the lower sash, which receives the ratchet-bar, being adjacent to the center longitudinal parting-strip *e* of the casing.

The ratchet-bar of the lower sash B^2 is maintained in a reverse position from the one attached to the upper sash B, and the spring extends downward and carries at its lower end the detent. By such construction the lower sash may be lowered without turning the bar c^2 to withdraw the detent from the ratchet-teeth, and to raise the sash it is only necessary to turn the knob, so as to draw the detent inward.

The inner or lower sash is held in place by a divided strip *f*, having a slot near its upper end for the passage of a pivot-screw *f'*, and when the other retaining-screw, f^2, is removed the upper section of the strip *f* may be lowered and swung outward to provide an opening for the removal of the lower sash from the casing. Should it be desired to remove the upper sash, the parting-strip *e* is sprung out of place and removed, and when the sash

is lowered it may be moved inward and upward and then outward, when it will be separated from the casing.

The strips which enter the recesses make a tight joint when the sashes are placed to close the window-opening, and the spring-actuated detents by pressing against the ratchet-bars prevent the sashes rattling in the frame. The construction shown provides a simple, cheap, and effective sash guide, holder, and lock, and by simply overweighting the sashes they will automatically raise when the holder and lock are held out of engagement with the ratchet-bar.

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

A window-casing having a side stile with an opening therethrough and a side piece provided with an opening for the passage of a bar, a spring secured to the side stile and provided opposite the opening therethrough on one side with a detent and on the other side with an apertured lug, a bar having a crank or bent portion which passes through the lug and a sash having a ratchet-bar attached thereto in line with the detent, substantially as shown and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two witnesses.

CHARLES E. GALE.

Witnesses:
FRANK S. APPLEMAN,
EUGENE W. JOHNSON.