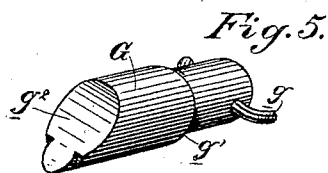
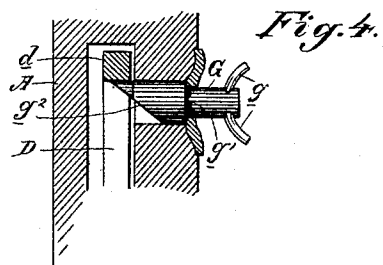
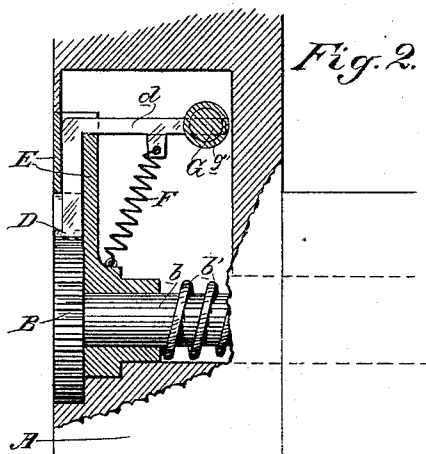
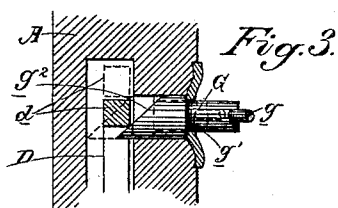
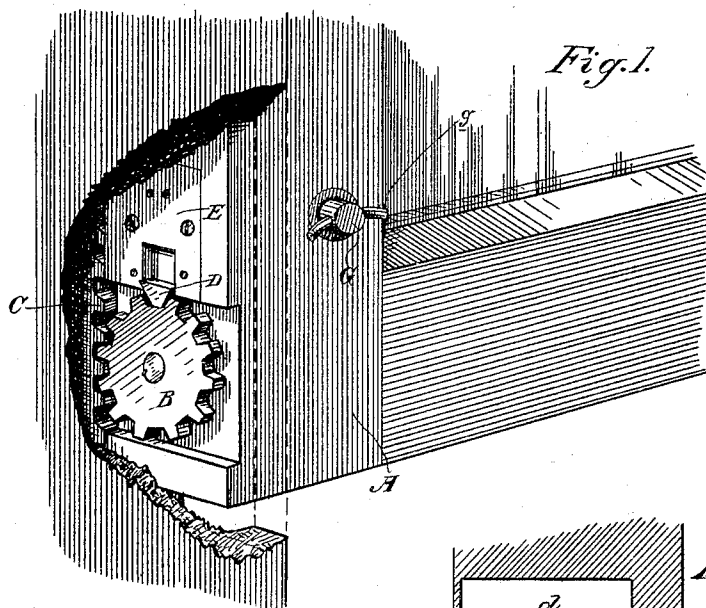


(No Model.)

B. MARSHALL.
SASH FASTENER.

No. 433,600.

Patented Aug. 5, 1890.



Witnesses,
Geo. H. Strong
J. H. House

Inventor
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UNITED STATES PATENT OFFICE.

BENJAMIN MARSHALL, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO THE MARSHALL IMPROVED WINDOW FURNITURE COMPANY, OF SAME PLACE.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 433,600, dated August 5, 1890.

Application filed March 26, 1890. Serial No. 345,355. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN MARSHALL, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Sash-Locks; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the class of sash-locks; and it consists in the novel catch and the means for operating it hereinafter fully described, and specifically pointed out in the claims.

The object of my invention is to provide a simple and effective means for operating any sash lock or catch which employs a detent or pawl adapted to be projected and withdrawn in order to effect the locking and the release of the sash.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of one corner of a window-sash, a portion of the casing being broken away to show the rack, the pinion, and the detent or pawl. Fig. 2 is a section of the sash-corner, showing the interior parts. Fig. 3 is a section showing the push-button, the dotted line showing it pushed in. Fig. 4 is a view showing the push-button turned axially. Fig. 5 is a perspective view of the push-button.

Although my invention is applicable to any locking mechanism wherein a detent or pawl is adapted to be projected and withdrawn from a given part, I have herein, for the better understanding of its construction and mode of operation, illustrated it, and will describe it in connection with that general form of sash-lock in which a pinion engages a rack, and especially in connection with that special form of sash balance or raiser secured to me by Letters Patent of the United States No. 420,425, dated January 28, 1890.

A is a sash. B is a pinion carried thereby. C is a rack fixed to the window-casing. These parts may represent a portion of one form of a sash-lock, which can be rendered complete by a suitable detent or pawl to lock the pinion. In my patent above referred to these parts form a portion of a sash balance or raiser, the pinion being on a turn-rod *b* and

affected by a spring *b'*, let into a bore in the sash-rail.

It will be seen that if the motion of the pinion be arrested by projecting a detent or pawl between its teeth the sash cannot be moved up or down and will be normally locked.

D is the sliding or movable detent or pawl, which is adapted to be projected between and to be withdrawn from the teeth of the pinion. This detent or pawl is seated in a plate E, attached to the sash, and has a top arm *d*. A spring F is connected at one end with the arm *d* and at its lower end with the plate E, and the tendency of said spring is to keep the detent or pawl to its engagement with the pinion, whereby the sash is normally in a locked condition. Now in order to easily and practically release this pawl, both temporarily and for a longer period, I have the following mechanism:

G is a push-button seated in the window-sash. Its outer end is provided with a suitable thumb-piece *g*, whereby it may be axially turned. The push-button is so mounted in its seat that it may have both a longitudinal sliding movement and an axially rotary one. It is held in its seat by means of a collar or flange *g'* upon it so that it cannot be pulled out. The inner end of the push-button is beveled, as shown at *g''*, and said end passes directly under the top arm *d* of the detent or pawl D. Now when it is desired to unlock the sash temporarily, so as to raise or lower it, the push-button is forced inwardly, whereby its beveled inner end, acting as an inclined plane or cam under the top arm *d* of the detent or pawl, raises said arm and lifts the detent or pawl out of its engagement with the pinion. As soon as the push-button is released, the spring F returns the pawl, and the top arm *d* forces the push-button out to its normal position. When it be desired to unlock and keep the sash unlocked for any appreciable length of time—as, for example, in working about it and cleaning the glass—the push-button is turned axially, whereby the edge of its inclined inner end comes in contact with and raises the arm *d* upon it until, having turned half-way around, it holds the arm in this position as long as may be required, thus keeping the detent from its engagement with

the pinion. The parts may be released again by turning the push-button back. In order to freely effect this turning action, I may slightly curve the edges of the inclined or beveled end g^2 of the push-button near its point, so that they will act without undue friction on arm d .

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

1. In a sash-lock, and in combination with a movable detent or pawl by which the locking is effected, the means for withdrawing said detent or pawl from its engagement, consisting of a single push-button adapted to have both a sliding and axial movement, and provided with an inclined or beveled inner end, whereby the detent or pawl is withdrawn by either movement of the button, substantially as herein described.

2. In a sash-lock, the combination of the plate E, attached to the sash, the sliding locking detent or pawl seated in said plate and having a horizontal arm d and a spring connecting said arm with the plate, whereby the detent or pawl is held normally projected, and a push-button adapted to have both a sliding and axial movement, and provided with an inclined or beveled end operating against the horizontal arm of the detent or pawl, substantially as herein described.

In witness whereof I have hereunto set my hand.

BENJAMIN MARSHALL.

Witnesses:

AXEL JOHNSON,
RALPH O. IVES.