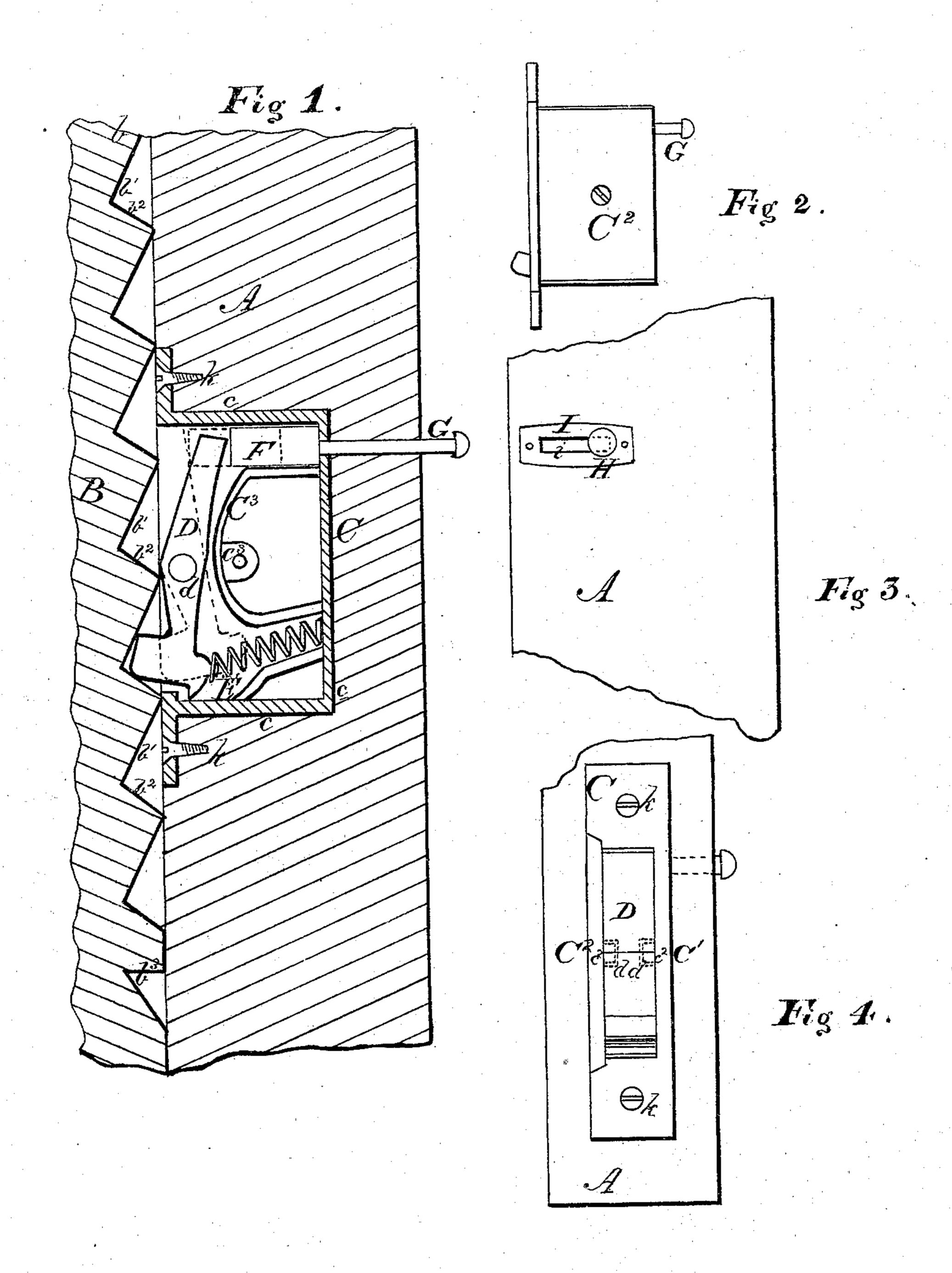
## J. ZIMMERMAN. Sash-Fasteners.

No.151,189.

Patented May 19, 1874.



WITNESSES
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## UNITED STATES PATENT OFFICE.

JOHN ZIMMERMAN, OF GRATER'S FORD, PENNSYLVANIA.

## IMPROVEMENT IN SASH-FASTENERS.

Specification forming part of Letters Patent No. 151,189, dated May 19, 1874; application filed January 15, 1874.

To all whom it may concern:

Be it known that I, John Zimmerman, of Grater's Ford, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Window-Sash Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a vertical section of my invention applied, the lock C being taken in line x, Fig. 4. Fig. 2 is a side elevation of the lock. Fig. 3 is a side elevation of a section of a sash with lock applied, showing a modification. Fig. 4 is a front or edge view or elevation of sash with lock in position therein.

My invention has for its object to provide a window-sash lock simple in construction, easily applied, and effective in operation.

This invention will be first clearly described, and then set forth specifically in the claim.

In the accompanying drawing, which illustrates my invention, A is a window-sash, and B a jamb, to which my improvements are applied. C is the lock, formed in two sections, C1 C2, the former having walls c c c upon which the latter rests, being secured thereon by means of a screw,  $c^1$ , which enters the threaded stud  $c^3$ .  $C^3$  is a curved wall forming a bearing for the spring E and block F. c2 c2 are studs or projections cast on the inside of the sections C1 C2, and which serve as pivots or fulcrums for the latch or pawl D, entering recesses d d in the side thereof. E is a spring for holding the lower part of said pawl in contact with the rack b; and F is a sliding block, which, when pushed in by the headed-pin G, forces back the lower part of the pawl to allow the sash to descend. It will be observed that the upper facets  $b^1$  of the rack b form an obtuse angle with the lower facets  $b^2$ . By this arrangement, when the sash is pushed upwardly the pawl D will slide easily over said facets b1. Returning downwardly, however, the pawl D engages with the facets  $b^2$ , and will hold the sash firmly in position until released

by pushing in the rod G. By means of this device, then, the window may be raised with one hand, without having recourse to the lock, which, however, sustains the sash in the position left on withdrawing the hand, the springpawl D operating automatically. In order to lock the sash when the window is down, I make the facet  $b^3$  horizontal. The pawl D will not slide past this unless the rod G be pushed in, this arrangement thus forming a safe and economical lock, preventing the window, when the sash is fully lowered, from being opened by persons outside.

If desired, instead of having a rod, G, arranged as shown in a line with the block D, and coming out beside the glass, a similar rod, H, moving in a slot, i, in a plate, I, may be arranged transversely to said block D. The operation is substantially the same in both cases, the latter arrangement being designed principally for sashes of slight depth or thickness, as those used in cars.

To apply my invention to a window the lock is fitted in the recess formed in the side of the sash, and fastened by screws k k. An opening—as a gimlet-hole for the rod G, or a slot for the rod G—is then formed in the sash, and rod G or G in the sack is then cut out, or one previously made of wood or metal may be inserted in the jamb G. If desired the adjusters may be applied to both sides of the sash, but for all ordinary purposes one on one side, in my judgment, will be sufficient.

The sash-lock consisting of the casing C formed in two sections,  $C^1$   $C^2$ , and having the wall or bearing  $C^3$ , and studs or projections  $c^2$ , the pivoted dog D recessed at d, the sliding block F provided with handle G or H, spring E, and rack b, all constructed and combined as shown and specified.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of January, 1874.

JOHN ZIMMERMAN.

Witnesses:
GEORGE SCHATZ,
GEORGE PRINGLE.