R. Vose,

Sash Fastener.

No. 51,982. Patented Jan. 9, 1866.

Fig. 4.

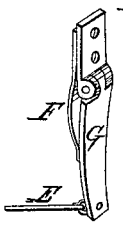


Fig. 1.

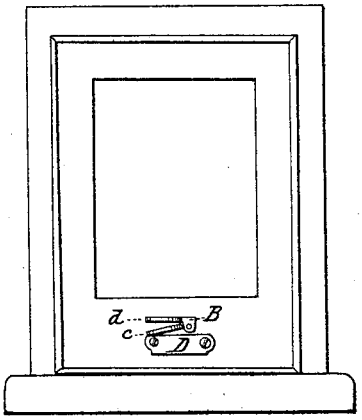


Fig. 2.

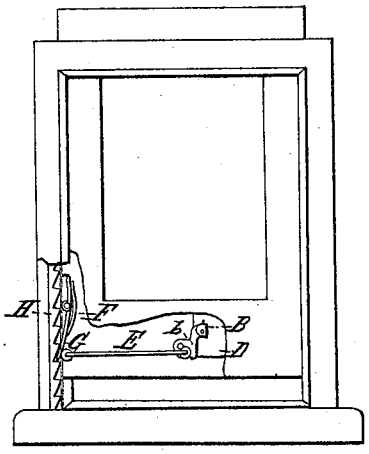
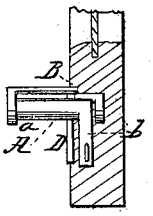


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

RICHARD VOSE, OF NEW YORK, N. Y.

SASH-FASTENER.

Specification forming part of Letters Patent No. **51,982**, dated January 9, 1866.

To all whom it may concern:

Be it known that I, RICHARD VOSE, of the city, county, and State of New York, have invented a new and useful Improvement in Sash-Fasteners; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an elevation of the inside of the window-sash of a railroad-car having my improved fastener combined therewith. Fig. 2 is an elevation of the exterior of the same with the window partially raised and a portion of the sash and frame broken away, exposing to view the fastener in the former and the rack in the latter. Fig. 3 is a detached view of the lever in my fastener and its frame and the position of the same in the sash. Fig. 4 is a perspective view of the hinged swinging pawl or catch and spring, detached.

Similar letters indicate like parts in all of the figures.

The nature of my improvement consists in the construction and arrangement of a simple angular lever, in combination with a hinged or jointed swinging pawl or catch and spring, operated directly by a rod or chain connecting the same with said lever, in the manner and for the purpose hereinafter described.

By the use of a hinged or jointed pawl or catch and spring, the least possible force brought to bear on the angular lever A serves to move the hinged pawl sufficiently far in the required direction to release its hold on the notched rack H, thereby allowing the sash to descend.

The angular lever A, Fig. 3, consists of a simple rod or roller *a*, having arms *b* and *c* extending out radially from either end thereof, at right angles to each other. The rod *a* of the lever is pivoted at each end in a metallic frame, B, secured to a plate, D, which extends between the two arms *b* and *c*, parallel thereto, in such a manner as to separate them, leaving one to vibrate in front and the other in the rear thereof. The outer arm, *c*, of the lever is fashioned so as to form a thumb-piece or knob, which will work up against a corresponding stop or projection, *d*, from the face-plate, as seen in Fig. 1. A recess is cut in the window-sash to receive the inner end of the metallic frame supporting the lever, and also the inner arm of said lever.

The face-plate D is made large enough to cover the recess upon the sash, so that when secured in place it shall conceal the inner arm, *b*, of the lever, as illustrated in Fig. 1. A recess or aperature is also cut in the sash to receive the rod or chain E, connecting the inner arm, *b*, of the lever with a swinging catch, G, upon its edge. The lower end of this catch is bent or hooked outwardly, to engage with a notched rack, H, placed upon the inside of the window-frame, and a spring, F, is placed back of the catch, to force it outwardly against said rack, all as illustrated in Fig. 2 of the drawings. The resistance of this spring is overcome, and the catch G withdrawn from the rack, by the operation of the lever A, as an upward pressure upon the thumb-piece *c*, such as is necessary to raise the sash, will cause the inner arm, *b*, of the lever A to swing away from the rack H, and by means of the connecting-rod E will draw back the catch G therefrom. So soon as the pressure upon the thumb-piece *c* is discontinued the spring will immediately force back the catch against the rack, to retain and support the window at that point. I contemplate so arranging the angular lever A, in combination with the face-plate D, as that the vibrating arm *c* of the lever, in front of said plate, shall play above instead of beneath the stationary knob or thumb-piece *d* of said face-plate. When so arranged a downward pressure upon the arm *c* will serve to release the catch G from the rack H in the frame and allow the window to fall, which may be preferable in connection with light sashes, such as are found in railroad-cars.

If it be desirable to lock the window by means of the catch, instead of merely supporting it, a rack containing a series of slots to receive the catch may be substituted for the simple notched rack illustrated in the drawings.

I am aware that combinations of levers have been used in window-sashes for the purpose of operating spring-catches to support the same, but in those now in use either the thumb-piece traverses horizontally, so as that a pinching movement requiring strength in the fingers becomes necessary to disengage the fastening, or else two or more levers are combined to produce the desired result; but in the arrange-

ment of my improved fastening I use but one lever, which, connected by a simple rod or chain with the catch, operates readily to disengage the window-fastening by the mere pressure necessarily exerted to raise the sash, and my invention combines the greater degree of simplicity and economy in material and arrangement with entire efficiency.

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

The construction and arrangement of a hinged or jointed swinging pawl, G, and spring F, in combination with rack H, rod or chain E, and angular lever A, substantially in the manner and for the purpose herein set forth.

The foregoing specification of my improved sash-fastener signed by me this 24th day of August, A. D. 1865.

RICHD. VOSE.

Witnesses:
W. TOSBACH,
GEORGE W. PALFREY.