No. 788,515. PATENTED MAY 2, 1905.

A. W. CARLSON.

SASH FASTENER.

APPLICATION FILED APR. 2, 1904.

Fig. 1.

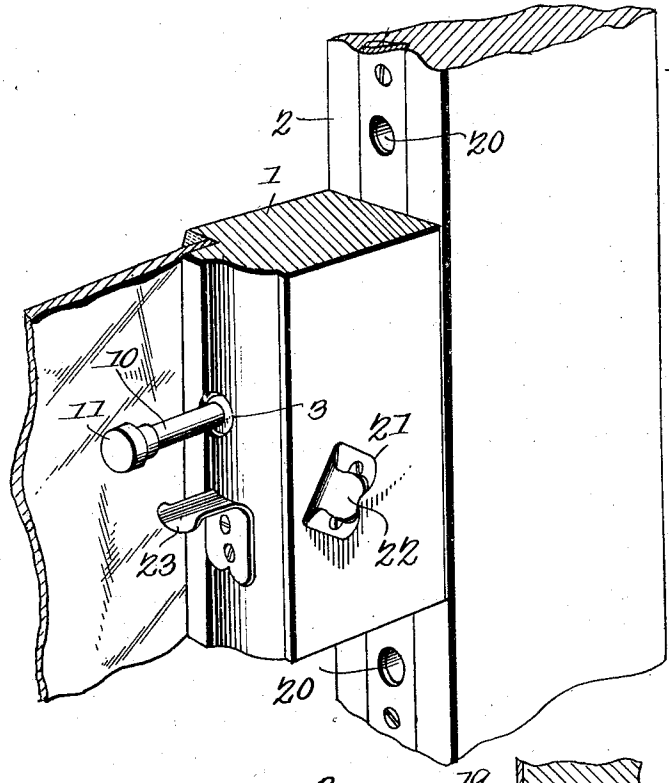
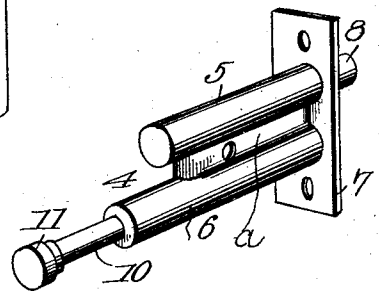


Fig. 3.



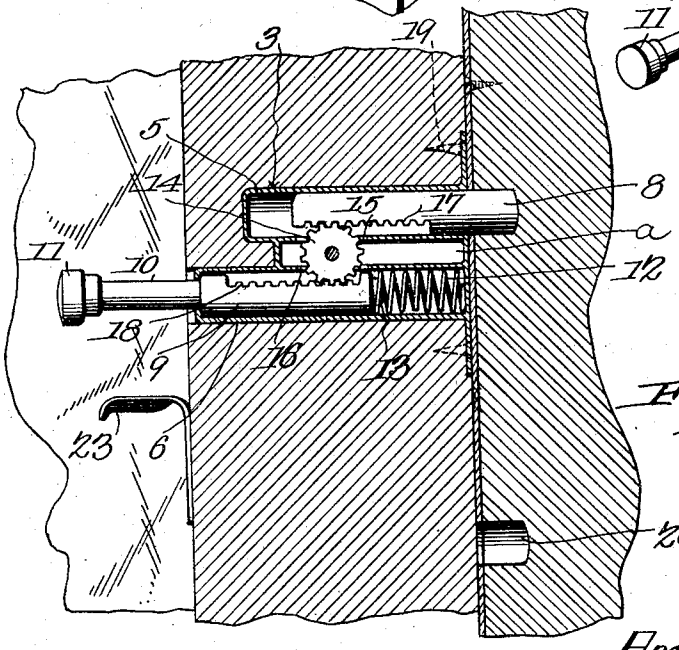


Fig. 2.

Witnesses

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No. 788,515. Patented May 2, 1905.

UNITED STATES PATENT OFFICE.

AXEL WILHELM CARLSON, OF ELY, MINNESOTA.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 788,515, dated May 2, 1905.

Application filed April 2, 1904. Serial No. 201,329.

To all whom it may concern:

Be it known that I, AXEL WILHELM CARLSON, a citizen of the United States, residing at Ely, in the county of St. Louis and State of Minnesota, have invented a new and useful Sash-Fastener, of which the following is a specification.

This invention relates to sash-fasteners, and has for its object to provide a simple and improved device of this character which is complete in itself and capable of convenient application to any ordinary window-sash for adjustably locking the same with the frame thereof without materially altering the sash and the frame.

It is furthermore designed to have the greater portion of the device housed within one of the side rails of a window-sash and at the same time to give convenient access to the finger-piece of the fastener, so as to facilitate the manipulation thereof.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a portion of a window sash and frame having the sash-fastener of the present invention applied thereto. Fig. 2 is a longitudinal sectional view taken through the fastener within the sash. Fig. 3 is a detail perspective view of the sash-fastener removed from the sash.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

For an adequate understanding of the application and operation of the present device a portion 1 of one of the side rails of a window-sash and the adjacent portion 2 of a window-frame have been illustrated in the accompanying drawings, the sash-rail being provided with a transverse mortise or opening 3 for the reception of the fastener.

In carrying out the present invention I employ a casing 4, having a pair of spaced parallel channels or guideways 5 and 6, with a face-plate 7, carried by the casing at the open front end of the channel or guideway 5. The guideways are rigidly connected by an interposed hollow web *a*. The guideway 6 is closed by the face-plate and has its rear end projected in rear of the guideway 5. A suitable endwise-slidable bolt 8 works in the guideway 5, with its forward end normally projected through the open front end of the guideway, and an actuating-plunger 9 is slidably mounted in the guideway 6, with its rear stem portion 10 projected through an opening in the rear end of the guideway and provided with a head or finger piece 11. A helical spring 12 is interposed between the front end of the plunger and the face-plate 7 to yieldably hold the plunger at its rearmost limit, the forward end of the plunger being provided with a reduced portion 13 to enter the spring and form a guard to prevent lateral displacement thereof.

In the hollow web *a* between the two guideways there is a pinion 14, which works in openings 15 and 16, formed in the adjacent walls of the guideways, in order that the pinion may mesh with the racks or toothed portions 17 and 18 of the bolt and the plunger, respectively, whereby the bolt may be worked back and forth through the medium of the plunger.

In applying the present device one of the side rails of the sash is provided with a transverse mortise or opening, as hereinbefore described, for the reception of the fastener, the face-plate 7 thereof being let in flush with the outer edge of the rail and rigidly secured thereto by means of suitable fastenings 19. When thus set in position, the finger-piece 11 is projected at the inner edge of the rail, and the bolt is projected at the outer edge thereof in order that it may take into one of a vertical series of openings 20, formed in the window-frame, and thereby lock the sash in any adjusted position. By pressing inwardly upon the finger-piece 11 the bolt will be retracted through the medium of the pinion 14, whereby

the sash will be freed from the frame in order that it may be raised or lowered.

To facilitate manipulation of the fastener, a handle or finger-piece consisting of an attaching plate or bracket 21, having a bowed projection 22, is secured to the front face of the rail at a point slightly below the fastener, with the projection set at an angle of about forty-five degrees, whereby the finger-piece is located so as to be conveniently engaged from the under side by the index-finger, and the hand is then in position for engaging the thumb with the finger-piece 11 to force the plunger inward, whereby the sash may be released and then raised or lowered without removing the hand from its original position, thereby materially facilitating the releasing and raising or lowering of the sash. If desired, another handle or finger-piece 23 may be secured to the outer face of the side rail of the sash at a point below the finger-piece of the fastener for convenience in raising the sash.

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

A sash-fastener comprising a casing having substantially parallel guideways, one of which guideways is open at one end and closed at the opposite end, a hollow web interposed between and rigidly connecting the guideways, an attaching-plate carried by the casing at the open end of said guideway and closing the adjacent end of the other guideway, said other guideway being open at its opposite end, a bolt working in the first-mentioned guideway and provided with a rack, a plunger working in the other guideway and provided with a rack and a finger-piece projected through the open end of said guideway, a spring interposed between the inner end of the plunger and the closed end of the guideway therefor, and a pinion mounted within the hollow web and in mesh with the racks of the bolt and the plunger.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

AXEL WILHELM CARLSON.

Witnesses:
CHAS. A. ROTHOFF,
A. J. THOMAS.