

J. ANDREWS.

FASTENERS FOR THE MEETING-RAILS OF SASHES.

No. 192,959.

Patented July 10, 1877.

Fig. 5.

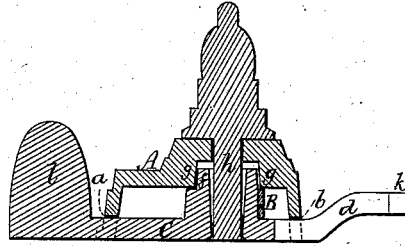


Fig. 4.

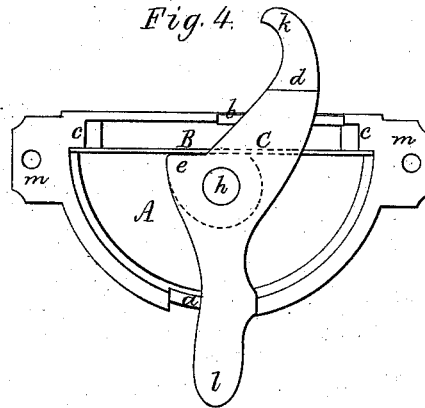


Fig. 3.

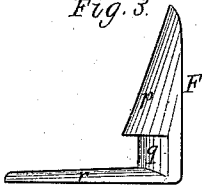


Fig. 10.

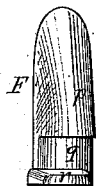


Fig. 8.

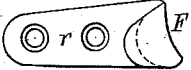


Fig. 9.

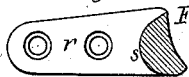


Fig. 7.

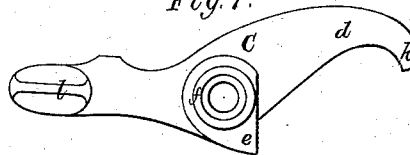
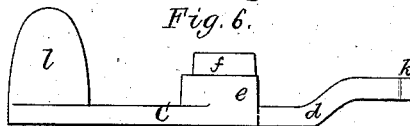


Fig. 6.



Witnesses.

S. V. Piper.

L. M. Miller.

John Andrews.

by his attorney

R. H. S. S. S.

UNITED STATES PATENT OFFICE.

JOHN ANDREWS, OF MARLBOROUGH, MASSACHUSETTS.

IMPROVEMENT IN FASTENERS FOR THE MEETING-RAILS OF SASHES.

Specification forming part of Letters Patent No. 192,959, dated July 10, 1877; application filed December 18, 1876.

To all whom it may concern:

Be it known that I, JOHN ANDREWS, of Marlborough, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Window-Sash Fasteners; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front elevation, and Fig. 2 a top view, of my improved sash-fastener as applied to the meeting-rails of two sashes. Fig. 3 is a side elevation, and Fig. 8 a top view, of the notched catch. Fig. 4 is an under-side view of the catch-lever, its case and operative spring. Fig. 5 is a transverse section of the case and the said catch-lever and its spring. Fig. 6 is an edge elevation, and Fig. 7 a top view, of the said catch-lever.

My invention relates to an improved construction of a sash-fastener, whereby it not only is made to perform the operation of locking the sashes, but that of drawing them together and pressing them laterally in opposite directions, so as to prevent them from rattling in their grooves.

The nature of my invention consists in a spring supported at its ends and arranged in a case, as described, in combination with a swinging catch-lever extending across the spring, and provided with a projection to bear against the spring, the lever, by its arrangement with the spring, serving to hold or retain it in its case against its end bearings; also, in a catch provided with a notch and bevel, and arranged with or to be applied to the upper sash, as set forth, in combination with the catch-lever provided with an operative spring, and applied to the lower sash, as and to operate as hereinafter explained; and, also, in a catch provided with a notch, a cam, and a bevel, and arranged with or to be applied to the upper sash, as described, in combination with a catch-lever provided with a hook and an operative spring, and applied or to be applied to the lower sash, all being substantially as and to operate as hereinafter more fully described and definitely claimed.

The said case A is a semicircular box, open at bottom, and provided in its peripheral and

diametric sides with notches *a b*, to receive the arms of the catch-lever C. Within the case, and projecting from its diametric side, as shown, are two abutments or bearings, *c c*, for a straight spring, B, to rest against near its ends. This spring between the abutments extends over and across the arm *d* of the catch-lever C, and rests against the side of a tooth, *e*, projecting from such lever, in manner as represented.

The lever C is furnished with a tubular journal, *f*, that enters a corresponding bearing, *g*, in the case. A headed pin, *h*, arranged in the case and lever, as shown, and riveted to the latter, serves to keep the lever, the case, and the spring from falling apart when off a sash.

At one end the lever C has a hook, *k*, and at the other a knob or projection, *l*, all being as and arranged as shown. The case has two ears, *m m*, projecting from it, to enable it to be fastened upon the top rail *n* of the lower of two sashes, D E, by screws going through such ears.

To operate with the said catch-lever is a beveled and notched catch, F, which is fastened on the lower rail *o* of the upper sash, the beveled part of the catch being shown at *p* and the notch at *q*. The base portion *r* of the catch rests on the rail, and is secured to it by screws going through such portion.

On pressing the thumb against the knob of the catch-lever, such lever may be moved so as to carry its hooked arm out of the notch of the catch, in order to admit of the lower sash being raised within the window-frame G. In the operation of depressing or closing the lower sash the catch-arm of the lever C will be borne down against and along the bevel of the catch F, and the lever will be moved laterally thereby, until it may come opposite the notch *q*, when, by the action of the spring B, the catch-arm of said lever will be forced into such notch, the hook also engaging with the catch, and, by means of it, operating to draw the upper bar of the lower sash closely up to the lower bar of the upper sash.

Fig. 9 is a horizontal section of the catch, taken through its notch, Fig. 10 being an end elevation of such catch.

The vertical base of the notch is cam-shaped

or rounded, as shown at *s*, in order for the catch and the lever to co-operate in drawing the sashes together.

The spring acts not only to couple the catch and lever, but, with the latter, to force each sash laterally toward and closely into one of its grooves, the two sashes being moved opposite ways. From this it will be seen that the sash-fastener not only operates to lock the sashes, but to draw one up to the other, and to move both laterally—that is, one in one way and the other in the other—so as to prevent the sashes from rattling in the grooves of the window-frame.

I do not broadly claim, in a window-sash fastening, a spring supported at its ends and a catch-lever to bear against such spring, without extending across it, in a manner to operate in holding it in place; but,

Having fully described my said improvements, I claim as my invention—

1. The spring B, supported at its ends, and arranged in the case, as described, in combination with the swinging catch-lever C, extending across such spring, and provided with

the tooth or projection *e*, to operate with such spring, all being substantially as represented.

2. The catch F, provided with a notch, *q*, and bevel *p*, and arranged with or to be applied to the upper sash, as described, in combination with the swinging catch-lever C, provided with an operative spring, and applied or to be applied to the lower sash, so as to operate with such beveled and notched catch in locking the sashes, as set forth.

3. The catch F, provided with the notch *q*, cam *s*, and bevel *p*, and arranged with or to be applied to the upper sash, as described, in combination with the catch-lever C, provided with the hook *k* and an operative spring, B, and applied or to be applied to the lower sash, so as to operate with the said catch F in locking the two sashes, drawing them together, and forcing them laterally into their grooves, all substantially as set forth.

JOHN ANDREWS.

Witnesses:

R. H. EDDY,
J. R. SNOW.