S. RUSH.

SASH-FASTENER.

No. 192,529. Patented June 26, 1877.

Fig. 1.

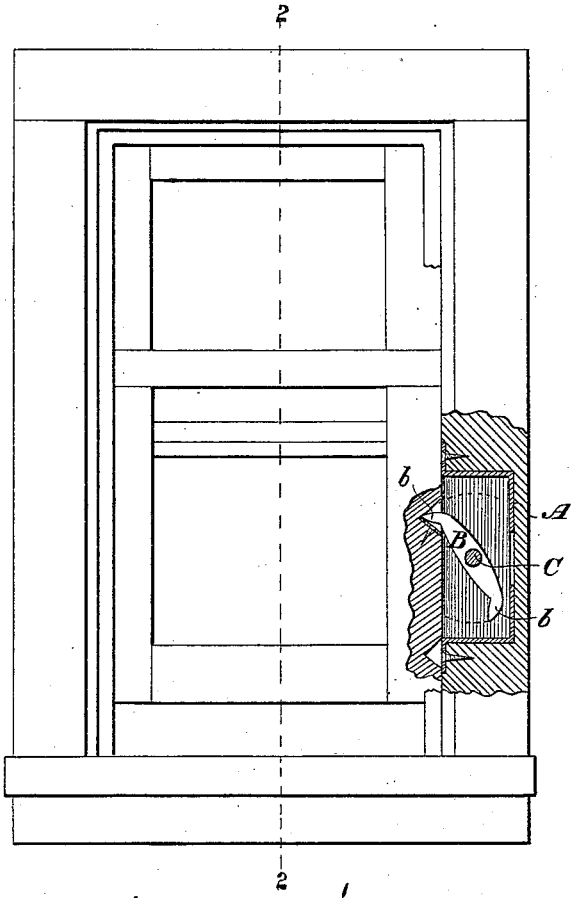


Fig. 2.

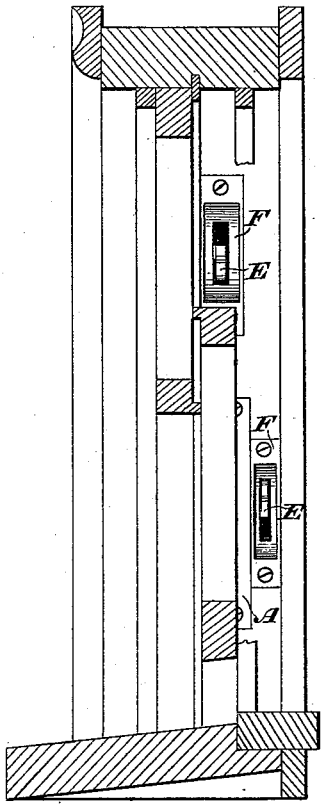


Fig. 3

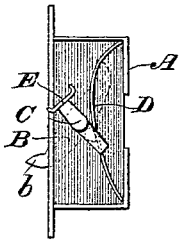
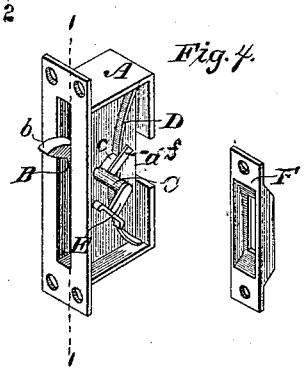


Fig. 4.



WITNESSES

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IMPROVEMENT IN SASH-FASTENERS.

Specification forming part of Letters Patent No. **192,529**, dated June 26, 1877; application filed May 26, 1877.

To all whom it may concern:

Be it known that I, STEPHEN RUSH, of Tyrone, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Sash Locks or Fasteners, of which the following is a specification:

My invention relates to that class of sash locks or fasteners in which the lock is inserted in a mortise in the window-casing, its bolt being adapted to engage in notches or recesses formed in the side rail of the sash to lock it in position.

The object of my invention is to provide a cheap, simple, and reliable lock, which shall be reversible—that is, capable of being applied with equal advantage upon either side of the window, and so constructed that the act of releasing the bolt to permit of the movement of the sash in one direction will reset and adapt it automatically to prevent a movement of the sash in the reverse or opposite direction.

The subject-matter claimed hereinafter specifically will be designated.

In the accompanying drawings, Figure 1 is a view of a window, from the inside, with my improved lock applied thereto, a portion of the casing and sash being broken away to show the manner of applying the lock and of its engagement with the sash, the lock being in section on the line 1 1 of Fig. 4, with its bolt in position to prevent a downward movement of the sash; Fig. 2, a vertical section through the window, showing a lock for each sash, and the key or handle for operating them; Fig. 3, a side view of the lock detached; and Fig. 4, a perspective view of the same, with an escutcheon adapted to be applied to the window-casing to protect the handle by which the bolt is operated.

The lock-casing A may be of the usual construction for mortise-locks, and is divided centrally and longitudinally by a partition-plate, *a*. In one of the compartments thus formed by the partition-plate is centrally journaled a lever, B, provided with bent or hooked ends *b*, either one of which, when the lever is vibrated upon its axis, may project beyond the face-plate of the lock to constitute a bolt, the face-plate being slotted longitudinally for the purpose.

The shaft C, upon which the lever B is keyed, rocks in bearings in the casing, and is provided, where it projects into the compartment next the one containing the lever, with a cam or projection, *c*, upon which the tension of a curved spring, D, is exerted. The ends of the spring rest in the corners of the casing, and obviate the necessity of fastening them.

To prevent lateral displacement of the spring, I provide the cam or projection, upon which it exerts its pressure, with a plate, *f*, projecting beyond it face in such manner as to confine the spring between it and the partition-plate of the lock.

To provide a convenient means for controlling the vibration or to reverse the bolt I mount upon the end of the shaft upon which it is keyed a crank, handle, or key, E, to which access is readily had, when the lock is in place in the casing, through a slot in an escutcheon-plate, F.

By the movement of the handle the shaft is rocked in its bearings, and one end or the other, as the case may be, of the bolt is thrust outward beyond the face of the lock, the withdrawal of one end being followed by an ejectment of the other, and whichever end may be thrown out is prevented from accidental withdrawal by the tension of the spring, which acts upon the cam on the shaft, and prevents said shaft rocking in its bearings.

It will be obvious that locks constructed as shown and described may be applied with equal advantage upon either side of the window, and that the lock of one sash will not interfere with that of another.

I will now describe the operation of my improved lock as applied to a window, reference being had to Fig. 1 of the drawings, which shows the device as adapted to fasten the lower sash. When the upper end of the bolt is thrown out, as in said figure, and engages in one of a series of notches cut in the side rail of the sash in a well-known way, said sash is securely locked from a downward movement, any force exerted in that direction tending to force the bolt end still farther outward, binding it tightly in the recess, the force or thrust on the bolt being sustained by the shaft or journal upon which it is mounted. The sash is, however, free to be moved in an upward direction, the bolt yielding freely in that direction. When it is desired to lower the sash

and lock it from an upward movement the bolt is vibrated by the handle or key, withdrawing the upper and ejecting the lower end thereof, which movement reverses the action of the bolt; and when said lower end is engaged in a notch in the sash any pressure applied thereto in an upward direction binds the bolt more tightly.

Having thus fully described my invention, what I claim as of my own invention is—

1. The combination of the casing, the division-plate, forming two compartments therein, a vibrating lever or bolt mounted in one of the compartments, and a spring for preventing accidental withdrawal of the bolt, when shot, mounted in the other compartment, substantially as described.

2. The combination, substantially as hereinbefore set forth, of the casing, the vibrating lever mounted therein, either end of which is adapted to constitute a bolt, its shaft, the cam or projection on the shaft, a spring acting on the cam, and a handle or key for controlling the vibration of the lever.

3. The combination of the casing, its division-plate, the shaft rocking in bearings in the casing, the cam mounted thereon, the spring acting on the cam, and a plate carried by the shaft or cam, between which and the division-plate the spring is confined to prevent lateral displacement thereof.

In testimony whereof I have hereunto subscribed my name.

STEPHEN RUSH.

Witnesses:
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JOHN F. PARET.