M. FOSTER.

FASTENERS FOR THE MEETING-RAILS OF SASHES.

No. 187,263. Patented Feb. 13, 1877.

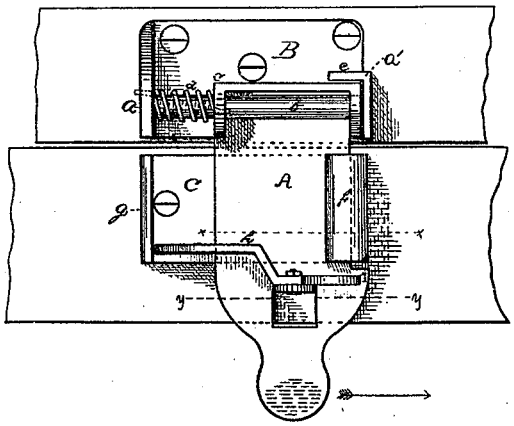

Fig. 1.

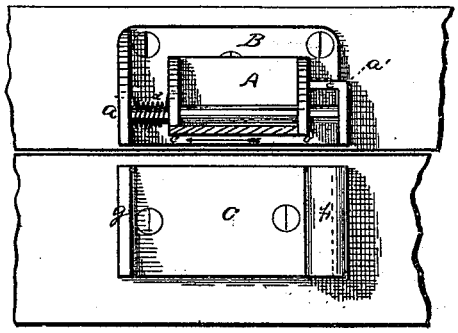

Fig. 2.

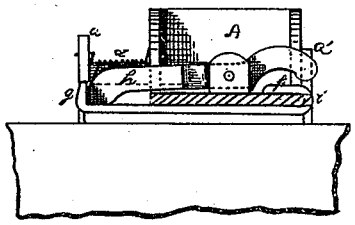

Fig. 3.

Witnesses.

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MORRISON FOSTER, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN FASTENERS FOR THE MEETING-RAILS OF SASHES.

Specification forming part of Letters Patent No. **187,263**, dated February 13, 1877; application filed August 4, 1876.

To all whom it may concern:

Be it known that I, MORRISON FOSTER, of Pittsburg, in Allegheny county, State of Pennsylvania, have invented a new and useful Improvement in the Mode of Fastening the Meeting-Rails of Window-Sashes; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing.

My invention relates to that class of locking devices known as fasteners for the meeting-rails of window-sashes, and consists in a hinged-bar attached to the meeting-rail of one sash, and drawn down from a vertical to a horizontal position across the meeting-rail of the other sash, and then moved laterally to lock the two sashes together; also, in the combination of the locking-bar with a spring, which performs the double function of pushing the locking-bar under the locking-hook, or in front of the abutment or stop, and of raising it to a vertical position when unlocked; and, also, in the combination of a self-acting pawl with the locking-bar to prevent the latter from being unlocked; all as hereinafter more fully described and definitely claimed.

In the accompanying drawing Figure 1 is a plan view showing the sash-fastener locked. Fig. 2 is a plan view (with the long arm of the locking-bar broken away at or about the line *x x*, Fig. 1,) showing the fastener when the long arm of the locking-bar is up. Fig. three is a cross-section through line *y y*, Fig. 1.

Like letters of reference indicate like parts wherever they occur.

A is a locking-bar, (which may be L-shaped,) hinged at *c*, and attached by means of shaft or pin *b* to lugs *a a'* on a base-plate B, which base-plate B is fixed to the top part of the lower rail of the upper sash, inside the glass. The shaft *b* is longer than the width of the locking-bar A, so that when the latter is drawn from a vertical down to a horizontal position it may be moved laterally along the shaft *b* to be locked, and also to make room on the shaft for the spring *d*. *e* is an abutment or lug fixed on the base-plate B, which prevents the locking-bar from being moved laterally when in a vertical position, and aids in holding the locking-bar in position when locked. *f* is a hook at one end of a base-plate, C, which base-plate is fixed to the top-bar of the lower sash. Under this hook *f* the locking-bar A passes laterally to lock the fastener. The lug *g* and hook *f* are both fixed to base-plate C and stand apart, opposite the locking-bar A, when the latter is up, it being drawn down between them before passing laterally under the hook *f*. *h* is a pawl attached to the locking-bar A, which engages with the lug *g* when the locking-bar is moved under the hook *f*, and prevents the fastener from being unlocked. This is especially useful in preventing the opening of the fastener from the outside by a knife inserted between the sashes. The pawl *h* has a small lever-extension beyond its fulcrum, to be used in raising the pawl. *d* is a spiral spring encircling the axis-shaft *b*, with one end fixed to lug *a'* and the other end fixed to the locking-bar A, and so arranged that by a pushing-action it will cause the locking-bar A to move laterally under the hook *f*, and by a torsional action it will bring the locking-bar A to a vertical position when released from the hook *f*. *i* is a hook on one side of the locking-bar A, which engages with the edge of the hook *f* and prevents the sashes from being wedged apart. This hook *i* may be made sloping part of the way from its point for the purpose of drawing the sashes closer together. To fasten the sashes, pull down the locking-bar A and it will lock itself, being actuated thereto by the spring *d*, the pawl *h* at the same time engaging with the lug *g* to prevent the locking-bar from being pushed back. To unfasten the sashes, it is only necessary to raise the pawl *h*, pull the locking-bar back laterally clear of the hook *f* and abutment *e* and it will rise to its vertical position by means of the torsional action of the spring *d*. In performing this operation, but one grip is necessary. The fastener can be locked by the bar A without the use of the spring *d*, but the device is more perfect with that function of the spring. This fastener is preferably made entirely of metal; and may be made of pieces punched out from plates or cast in molds, (with the exception of spring *d* and shaft *b*.) The locking-hook *f* may be omitted, as the stop or abutment *e* prevents the raising of the

locking-bar A when in a locked position, but I prefer to make the fastener with both.

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

1. The hinged locking-bar A, having both vertical and lateral movement, in combination with a stop *e* or hook *f* for engaging it in a locked position, substantially as described.

2. The combination of the locking-bar A, having vertical and lateral movement, the spring *d*, having a torsional and a pushing-action, and the stop *e* or hook *f*, substantially as and for the purpose described.

3. The combination of the pivoted-pawl *h*, the locking-bar A, and the lug *g*, for automatically locking the device, substantially as and for the purpose described.

MORRISON FOSTER.

Witnesses:
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