

UNITED STATES PATENT OFFICE.

ELIAS K. BRECKENRIDGE, OF WEST MERIDEN, CONNECTICUT.

IMPROVEMENT IN FASTENERS FOR THE MEETING-RAILS OF SASHES.

Specification forming part of Letters Patent No. 162,614, dated April 27, 1875; application filed March 17, 1875.

To all whom it may concern:

Be it known that I, ELIAS K. BRECKENRIDGE, of West Meriden, in the county of New Haven and State of Connecticut, have invented an Improved Meeting-Rail Fastener for Window-Sashes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification.

My invention consists in a novel construction and combination of a fastening-arm, locking-lever spring, and a peculiarly-formed base-plate, whereby the sash is securely fastened and the parts locked in position, and their operation greatly facilitated.

In the accompanying drawing, Figure 1 is a top view of my improved fastener applied to the meeting-rails of a window-sash, showing the window fastened. Fig. 2 is a side view with the meeting-rails in section. Fig. 3 is a horizontal section taken in the line *y y* of Fig. 2. Fig. 4 is a vertical section taken in the line *x x* of Fig. 1. Fig. 5 is a detail perspective view of the base-plate.

A represents the meeting-rail of the lower sash, and B the meeting-rail of the upper sash. To the rail A is attached the base-plate C of the fastening-arm and locking-lever, and to the rail B is attached the striking-plate E. In the base-plate C (see Fig. 5) is a hole for the reception of a pivot. Surrounding this hole is an upwardly-projecting circular rim, *c*, in which are two openings or notches, *c*¹ *c*², about ninety degrees from each other; and in the plate C are two holes, *i*¹ *i*², contiguous to the notches *c*¹ *c*², and in corresponding positions with relation to each other. To the base-plate C is attached, by a pivot, *d*, a cap, D, from one side of which projects the fastening-arm G, the extreme end of which is formed with a hook, *g*, for engagement with a pin, bolt, or screw, *f*, attached to or passing through the striking-plate E, so as to draw the two meeting-rails toward each other and close the crevice between them. In the cap D, on the side opposite the arm G, is an opening, *g*^x. The locking-lever H is provided with a handle or knob, *h*, at its outer end for operating it; and on its under side are two downwardly-projecting studs or lips, *h*¹ *h*², one of which is at or near the inner end of the lever, and the other is about midway of the length

thereof. Between the studs or lips *h*¹ *h*² is an enlarged, elliptical, or elongated hole, *h*³. The inner end of the locking-lever H is passed through the opening *g*^x in the cap D, and the cap, lever, and base-plate are secured together by the pivot *d*, which may be a bolt, screw, or rivet. Surrounding the pivot *d*, between the top of the cap and upper side of the lever, is a spiral spring, *m*. When the parts are in the position shown in Figs. 1, 2, and 4, the hook *g* or outer end of the fastening-arm G is engaged with the striking-plate E to fasten the sash, the short arm of the lever H is engaged with the notch *c*¹, and the stud *h*¹ with the hole *i* in the plate C, said lever being held down by the spring *m*. Thus the sash is fastened by the fastening-arm G, and said arm is locked by the lever H and prevented from turning or becoming displaced. When the sash is to be unfastened the knob or handle *h* is pressed down so as to lift the stud *h*¹ out of the hole *i*¹, the stud *h*² bearing on the plate C and serving as a fulcrum for the lever H, and the elongated hole *h*³ allowing the lever to vibrate on the pivot *d*. The arm G is then readily disengaged from the striking-plate E, so as to unfasten the sash by turning the lever H to a position at right angles with the first position, as shown in Fig. 3, in which position it is held by the engagement of its short arm with the notch *c*² and of the lip or stud *h*¹ with the hole *i*², and prevented from displacement until the knob or handle is again pressed down, as before described.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the plates C and E, of the fastening-arm G, the locking-lever H, moving with said arm but having an independent movement perpendicularly thereto, and the spring-arm *m*, substantially as shown and described.

2. The combination, with the base-plate C, of the lip or stud *h*², on the lever H, serving as a fulcrum for the latter, substantially as shown and described.

3. The combination of the notches or holes in the plate C, and the projection *h*¹ on the lever H, substantially as described.

E. K. BRECKENRIDGE.

Witnesses:

HENRY T. BROWN,
MICHAEL RYAN.