(No Model.)

G. FITCH & R. W. WILLIAMS.

FASTENER FOR THE MEETING RAILS OF SASHES.

No. 408,228. Patented Aug. 6, 1889.

Fig. 1.

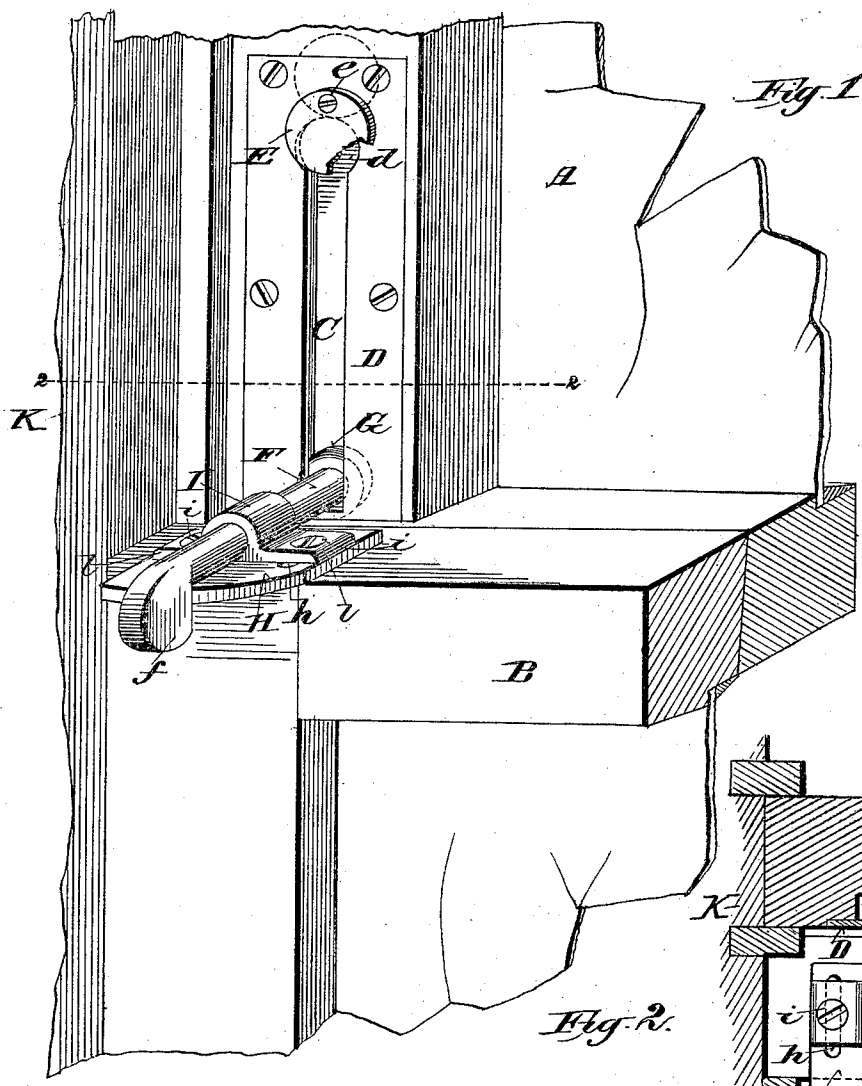
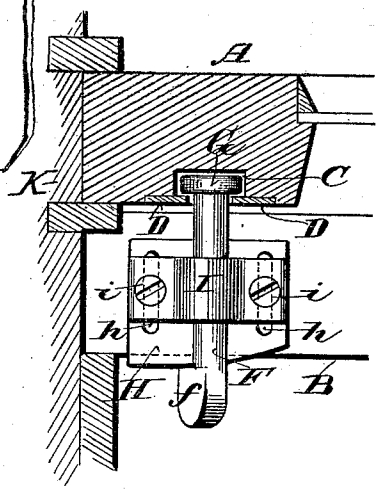


Fig. 2.



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UNITED STATES PATENT OFFICE.

GRANT FITCH AND ROBERT W. WILLIAMS, OF MILWAUKEE, WISCONSIN.

FASTENER FOR THE MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 408,228, dated August 6, 1889.

Application filed May 27, 1889. Serial No. 312,249. (No model.)

To all whom it may concern:

Be it known that we, GRANT FITCH and ROBERT W. WILLIAMS, citizens of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Sash Fasteners and Tighteners; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention is designed to provide means for enabling a window-sash to be opened within certain limits for purposes of ventilation, while at the same time guarding against any attempt from the outside of the window to open the sash beyond said limits, so as to effect an entrance into the dwelling.

A further object of our invention is to provide means for holding the meeting-rails of the sashes together, so as to prevent rattling when they are either in the closed or the open position.

In the accomplishment of these ends we have devised the construction and arrangement of parts illustrated in the accompanying drawings, wherein—

Figure 1 represents in perspective, and partly broken away, a portion of a window-frame and its sashes provided with our improvements. Fig. 2 represents a horizontal cross-section taken on a plane indicated by the line 2 2 of Fig. 1.

Similar letters of reference indicate similar parts throughout the several views.

Referring to the drawings, K indicates a portion of the window-frame provided with the usual stiles, rails, and parting-strips, as shown. A indicates the upper and B the lower sash, provided with the customary sash-weights and adapted to slide within grooves in the ordinary manner. The upper sash is provided with a vertical groove or recess C, and in front of said recess is located a countersunk plate D, having slot of less width than the groove C, and at its upper portion being enlarged, as shown at *d*, said enlargement being adapted to be covered by the pivoted drop E, suspended from the screw *e*. Upon the top rail of the lower sash is located a plate H, having longitudinal slots *h*, and being shaped at its forward edge in the form of a cam-segment, as shown. Upon the plate H is adapted to rest the saddle I, having a central longitudinal opening for the reception of a shank F, and being provided with lateral ears or projections *l*, suitably perforated for the reception of the adjusting-screws *i*. The shank F is provided at its inner end with a disk or annular shoulder G and at its outer end with a thumb-piece *f*, as shown.

The parts of our invention being constructed and arranged as described, the operation is as follows: In order to insert the disk G within the longitudinal groove C for the purposes of our invention, it is necessary to lower the upper sash or raise the lower one until the disk G comes into alignment with the opening *d* of the plate D. The pivoted drop E is thereupon revolved upon its pivot *e* into the position shown in dotted lines in Fig. 1, thereby uncovering the opening *d* and permitting the insertion of the disk G into the slot C. The sashes may then be drawn together into the position shown in Fig. 1, whereupon the pivoted drop is allowed to resume its original position, thereby closing the opening *d* and preventing, therefore, the disk G from working out of the slot. It is evident that with this arrangement of parts the sashes can be opened with respect to each other only for a distance corresponding to the length of the slot in the plate D, and that it will be impossible for any one from without to lower the upper sash or raise the lower one beyond such limits. Our invention therefore enables the sashes to be opened for a short distance to permit ventilation, while still securing the window against burglarious entrance from without. The function of the slots *h* and the plate H is to permit the fixture to be adjusted to correspond with different widths of sash-rails.

The forward cam-shaped edge of the plate H co-operates with the thumb-piece *f*, to enable the sashes to be clamped together while they are in their closed position or in their partially-open position, while they are at the same time prevented from rattling. The manner in which this result is secured will be apparent from the construction described and shown. The thumb-piece *f* bears against the

cam-shaped edge and draws the disk G outwardly and into frictional contact with the inner surface of the plate D, thereby holding the sashes together.

Having thus described our invention, what we claim is—

1. In a sash fastener and tightener, the combination of the sash A, having a longitudinal groove C, with the facing-plate D, provided with a longitudinal slot having an enlargement *d* and a covering-plate E, and a sash B, having a shank or pin F, provided with a disk or projection G, fitting within the groove C, substantially as described.

2. In a sash fastener and tightener, the combination, with the sash A, having a longitudinal groove C, of a slotted facing-plate D, and the sash B, having a shank or pin F, provided with a disk or projection G, fitting within the groove C, and having a thumb-piece *f*, a plate H, having at its forward end a cam-shaped edge, and a saddle I, substantially as described.

3. In a sash fastener and tightener, the combination, with the sash A, having a longitudinal groove C, of a slotted facing-plate D, the sash B, having a shank or pin F, provided with a disk or projection G, fitting within the groove C, and having a thumb-piece *f*, a plate H, having at its forward end a cam-shaped edge, said plate being provided with slots *h*, and a saddle I, provided with lateral lugs and screws *i*, substantially as set forth.

4. In a sash fastener and tightener, the combination of the sash A, having a longitudinal groove C, with the facing-plate D, provided with a longitudinal slot having an enlargement *d* and a covering-plate E, a sash B, having a shank or pin F, provided with a disk or projection G, fitting within the groove C, and having a thumb-piece *f*, a plate H, provided at its forward end with a cam-shaped edge and having slots *h*, and a saddle I, provided with lateral lugs and screws *i*, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

GRANT FITCH.
ROBERT W. WILLIAMS.

Witnesses:
H. J. GIBSON,
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