(No Model.)

F. W. QUITMAN.

WINDOW OR DOOR BUTTON.

No. 415,652. Patented Nov. 19, 1889.

Fig. 1

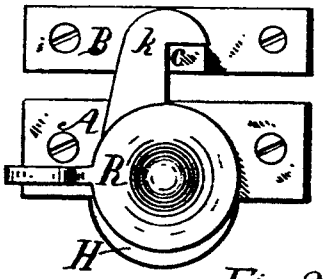


Fig. 2

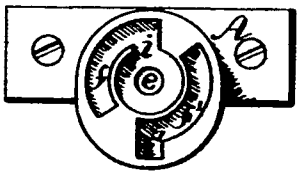


Fig. 3

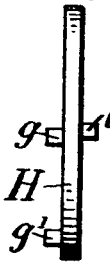


Fig. 4

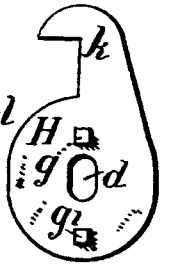


Fig. 5

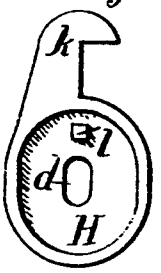


Fig. 6

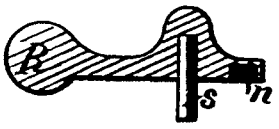
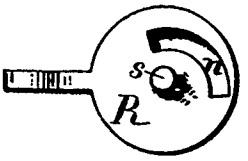


Fig. 7



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FREDERICK W. QUITMAN, OF NORWALK, CONNECTICUT, ASSIGNOR TO HOBART B. IVES & CO.

WINDOW OR DOOR BUTTON.

SPECIFICATION forming part of Letters Patent No. 415,652, dated November 19, 1889.

Application filed September 29, 1886. Serial No. 214,881. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. QUITMAN, a citizen of the United States, residing in the town of Norwalk and State of Connecticut, have invented new and useful Improvements in Fastenings for Meeting-Rails for Sashes, of which the following is a specification.

My invention relates to that class of sash-fasteners in which the mechanism is adapted to clamp the meeting-rails of sashes tightly together, and thus hold them securely locked.

The invention consists in the novel construction of the external knob or handle and the latch, as hereinafter more fully described and claimed.

In the accompanying drawings, Figure 1 is a plan view of my improved sash-fastener. Fig. 2 is a plan view of the base-plate. Fig. 3 is a side view of the latch. Figs. 4 and 5 show, respectively, the lower and upper sides of the latch. Fig. 6 is a sectional view of the knob or handle, and Fig. 7 is a view of the bottom side of the same.

Referring to the drawings, A represents the base-plate which is mounted on the meeting-rail of the lower sash, and B represents a smaller base-plate provided with a vertical projection or post C, and secured on the meeting-rail of the upper sash. The base-plate A is provided with a central perforation *e* and two opposite curved slots *f f'*, which open into opposite radial slots *i i'*. The radial slots are in a transverse line with the central perforation *e* in the base-plate, the forward radial slot *i* extending inward from its curved slot *f* and the rear radial slot extending outward from the slot *f*, as shown. The slots may be countersunk in the face of the base-plate or extended through it, as preferred.

H denotes the latch of the fastener, which is mounted upon the base-plate A and provided with a hook K for engaging the projection on the meeting-rail of the upper sash. The latch has two projections *g g'* on its lower side, which are received and guided in the slots in the base-plate, and is provided with a longitudinal slot *d* in the central portion of its body. The slots in the base-plate permit, it will be seen, the latch to swing about a quarter of a revolution, and to move rearwardly lengthwise when it has reached the extremity of its throw and lies transversely across the base-plate. On the upper side of the latch, between the central longitudinal slot *d* and the hook K, is a projection or crank-pin *l*, by means of which the latch is turned and operated.

The knob or handle R of the fastener is mounted upon the latch, and has a slot or groove *n*, which receives the projection *l*. A central stud S is secured in the knob or handle and passes down through the slot in the latch and the central perforation in the base-plate, and is riveted over at the end to hold the parts in place. The central perforation in the base therefore forms a bearing for the stud S in the knob or handle. The slot in the knob is formed eccentric to the central stud S, and consequently as the knob is oscillated on its center the eccentricity of the slot, as the knob moves over the latch, gives to the projection *l* on the latch a movement radial to the center of the knob. The slot extends through about a quarter of a revolution, and is located in the position to draw the projections *g g'* on the latch into the radial slots *i i'* in the base-plate when the latch strikes the projection or post C on the base-plate B.

It will be seen from the above description and from the drawings that the part of the knob or handle R which is provided with the eccentric slot *n* forms a rotary actuating-piece to move and lock the latch. I do not intend to limit myself to a knob form of such piece, as it is operative whether in the form of a knob with the handle, as shown, or not. It can be turned in any way or be provided with any desired means for rotating it without departure from my invention.

In operation, when the fastener is open, the projections *g g'* of the latch H are at that end of the curved slots *f f'* opposite the radial slots *i i'*, and the movement of the knob through about a quarter of a turn throws the latch around until it engages the post C, while a continued movement of the knob through a further quarter of a revolution draws the

latch longitudinally inward, so as to clamp the sashes together and to bring the projections g and g' on the latch into the radial locking-slots $i\,i'$, so as to lock the latch against any swinging movement. The eccentricity of the slot n holds the latch in place after the meeting-rails are clamped together, so that the latch cannot be unfastened except by the turning of the knob in the opposite or converse direction, and the fastener cannot therefore be unlocked from without or jarred open.

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

1. In a fastening for the meeting-rails of sashes, in combination with the swinging and reciprocating latch provided with an operating projection and a guiding and locking projection, a rotary piece provided with an eccentric slot engaging the operating projection on the latch, a suitable base or support provided with a curved guide to engage the guiding and locking projection on the latch, so as to hold the latch from longitudinal movement until it has been swung outward, and with a shoulder to engage such projection as the latch is moved longitudinally at the end of its swing, substantially as and for the purpose specified.

2. In a fastening for the meeting-rails of sashes, in combination with the longitudinally-slotted latch provided with a projection for guiding and locking it and with a projection on its upper side, a base-plate provided with a curved guide and a locking notch or offset to engage the guiding and locking projection on the latch, a rotary actuating-piece provided with an eccentric slot or groove to engage the projection on the upper side of the latch, and the pivot connecting the rotary actuating-piece with the base-plate passing through the slot in the latch, substantially as and for the purpose set forth.

3. In combination with the rotary and reciprocating latch having the projection on its upper side, the two projections on the lower side, and the longitudinal slot, the base having the two curved guides and locking-notches to engage the projections on the under side of the latch, the rotary latch-actuating piece having the eccentric groove extending part way around the piece, engaging the projection on the upper side of the latch, and the pivot connecting the rotary piece with the base and passing through the slot in the latch, substantially as and for the purpose set forth.

4. In a fastening for meeting-rails of sashes, the combination, with the swinging and reciprocating latch H, mounted and guided upon the base-plate A and provided with a vertical projection l upon its upper side, of the knob or handle R, provided with a central pivot, and having a groove or slot n extending through about a quarter of a circle eccentric to its pivot and adapted to receive the projection l on the latch and operate the same, substantially in the manner and for the purpose described.

5. In a fastening for meeting-rails of sashes, the combination, with the swinging and reciprocating latch H, mounted and guided upon the base-plate A, and provided with a vertical projection l upon its upper side, of the knob or handle R, provided with the central stud s, rigidly fixed in and turning with it, and having a groove or slot n extending through about a quarter of a circle eccentric to the stud s and adapted to receive the projection l on the latch and operate the same, substantially in the manner and for the purpose described.

6. In a fastening for the meeting-rails of sashes, in combination with the swinging and reciprocating latch provided with a guiding and locking projection and a longitudinal slot, the base provided with a curved guide to engage the latch projection, so as to guide the latch in its swing and with a shoulder at the end of such guide to engage the projection as the latch is moved longitudinally at the end of its swing, means on the base for limiting the swing of the latch as the projection passes off of the curved guide, the rotary actuating-piece provided with the eccentric curved slot extending part way around it, a projection on the latch engaging such slot and arranged substantially in line with the longitudinal slot in the latch, and a pivot for the actuating-piece, connecting such piece with the base and passing through the slot in the latch, substantially as and for the purpose described.

FREDERICK W. QUITMAN.

Witnesses:
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