W. WINKEL.

Fastener for Meeting Rails of Sashes.

No. 209,785. Patented Nov. 12, 1878.

Fig: 1.

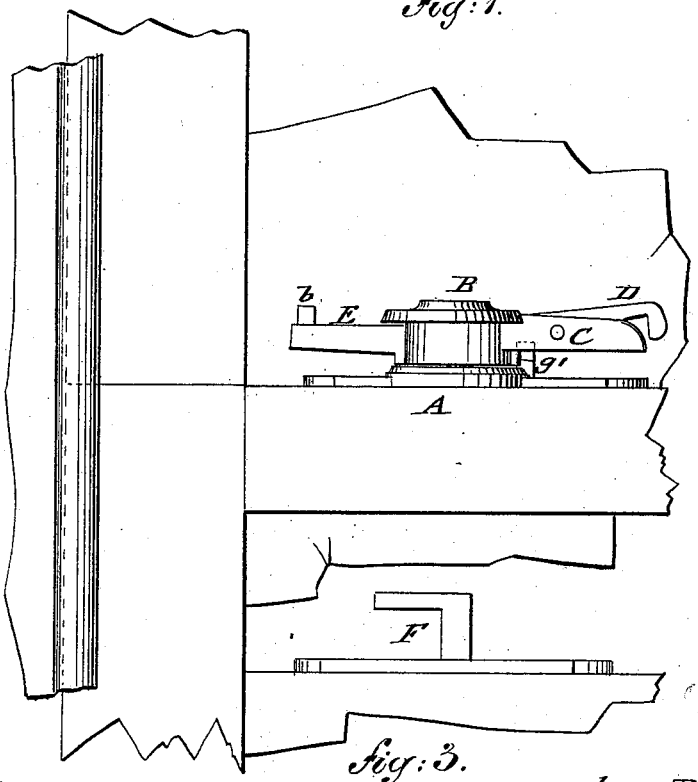


Fig: 2.

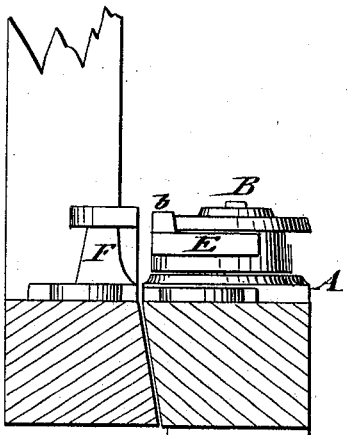


Fig: 4.

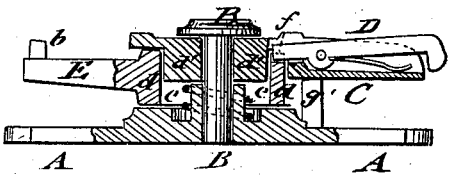


Fig: 3.

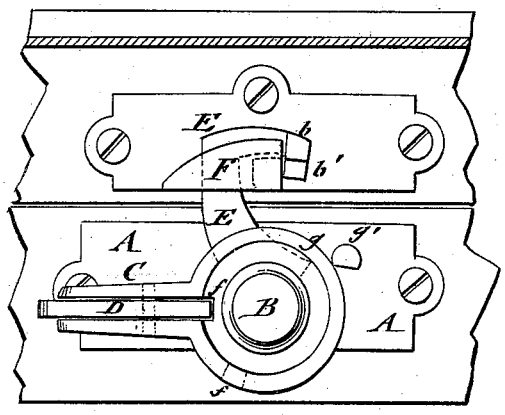
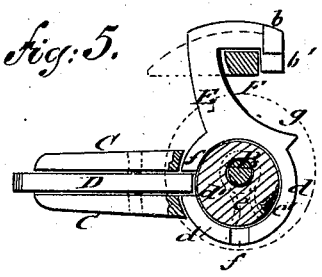


Fig: 5.



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WILLIAM WINKEL, OF PLUCKEMIN, NEW JERSEY.

IMPROVEMENT IN FASTENERS FOR MEETING-RAILS OF SASHES.

Specification forming part of Letters Patent No. **209,785**, dated November 12, 1878; application filed April 16, 1878.

To all whom it may concern:

Be it known that I, WILLIAM WINKEL, of Pluckemin, in the county of Somerset and State of New Jersey, have invented a new and Improved Fastener for the Meeting-Rails of Sashes, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation of my improved fastener for the meeting-rails of sashes, shown in open position, with the upper sash slightly lowered. Fig. 2 is a side view of the same, also in operation. Fig. 3 is a top view of the fastener in closed position, and Figs. 4 and 5 are respectively a vertical longitudinal section of the fastener in open position and a horizontal section of the same as closed.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish a reliable and effective construction of a fastener or lock for the meeting-rails of sashes, by which not only the rails of the sashes are drawn tightly toward each other, so as to prevent rattling and draft, but which has also the great advantage that none of the operating parts project beyond the rail of the inner sash, either in open or closed position, so as to interfere with inside blinds, or form otherwise an annoying feature of the fastener.

The invention consists of a fastener having an oscillating lever, made of two sections, swinging both on a common pivot. The hook-section of the lever binds on the catch-piece of the adjoining rail, and is spring-acted and eccentrically pivoted to the handle-section, so as to draw the rails firmly together.

The handle-section has a fulcrumed spring-bolt, that locks into notches of the spring-acted hook-section for opening and closing, but is released therefrom and carried into position at right angles thereto for locking the hook-section to the catch-piece.

Referring to the drawing, A represents the base-plate of my improved fastener or lock for the meeting-rails of sashes, which plate is screwed to the rails of the inner sash, and is provided with a hollow center sleeve for the connecting pivot-bolt, B, of the device. The fastener proper consists of an oscillating lever made in two sections—a handle-section, C, with spring-bolt D, and an eccentrically-pivoted hook-section, E, that swings over a guide and catch-piece of the rail of the upper sash, and locks the lower sash, by means of projections b' b', rigidly thereto.

The spring-bolt D is fulcrumed into a suitable recess of the handle-section C, and serves for two purposes—first, to lock the handle and hook sections longitudinally together, and, secondly, to release the handle-section from the hook section and carry the latter into position at right angles to the hook-section. The former position is assumed by the handle-section when the fastener is in open position; the latter when the same is closed, the handle-section being then carried over the inner rail, so as not to project to the inside of the same and be in the way of blinds, &c. The circular portion d of the hook-section E is guided on the solid eccentrical portion d' of the handle-section C, and is acted upon by a coiled spring, e, that bears by one end against an offset or projection, e', at the inside of the circular portion of the hook-section, and is fastened by the other end to the base-plate A.

The spring e serves to throw the oscillating lever into open position, as shown in Figs. 1 and 4, and to facilitate the opening of the fastener. The spring-bolt D of the handle-section locks into notches f of the circular portion of the hook-section, and serves thereby to carry both sections around the pivot B, and to lock the hook-section rigidly to the outer rail, as shown in Fig. 5.

The eccentricity of the portion d of the handle-section C draws the hook-section tightly on the catch-piece, and thereby the outer rail against the inner rail, so as to hold them firmly together, furnishing thus a tight joint, and preventing rattling.

As soon as the hook-section engages the catch-piece, the spring-bolt D is withdrawn from the notch of the hook-section and carried into position at right angles to the hook-section, so as to draw the eccentrically-pivoted hook-section against the shank of the catch-piece, as shown in Figs. 3 and 5.

The projection g of the hook-section bears against a pin, g', of the base-plate when the fastener is closed, and stops the lever when being turned in one direction, while in open

position the handle-section rests against the pin g', so as not to be thrown beyond the same by the spring of the hook-section.

When the handle-section is thrown sidewise of the hook-section, the spring-bolt locks into the second notch, f, of the sleeve d of the handle-section, and retains the hook-section in position until, for opening the fastener, the handle-section is thrown back into line with the hook-section, so as to release the hook-section from the catch-piece, the spring-bolt being thrown into the first notch of the hook-section and carried with the latter into open position. The catch-piece F is raised above the outer rail, so as to allow the passage of the hook below the same, the rear edge being of segmental shape for guiding the upward projection b of the hook-section along the same until the lower inward projection, b', may take hold of the recessed or cut-away shank of the catch-piece F by the action of the eccentric portion of the handle-section, and lock thereby the oscillating lever firmly to the catch-piece.

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

1. In a fastener for the meeting-rails of sashes, an oscillating lever, made of an eccentrically-pivoted and spring-acted hook-section, and of a handle-section that may be locked to or released from the hook-section, so as to actuate the latter for closing or opening the fastener, substantially as and for the purpose set forth.

2. The combination, in a fastener for the meeting-rails of sashes, of a spring-acted and eccentrically-pivoted hook-section, E, having vertical and horizontal end lugs, b b', and of an actuating handle-section, C, having spring-bolt D, that locks to or releases the hook-section with the catch-piece F, having raised segmental guide-piece and recessed shank, substantially as and for the purpose specified.

3. In a fastener for the meeting-rails of sashes, an oscillating lever consisting of a spring-acted and eccentrically-pivoted hook-section, and of an actuating handle-section, with locking spring-bolt, the hook-section having an exterior projection or stop, in combination with a fixed stop-pin or post of the base-plate, substantially as and for the purpose described.

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Witnesses:
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