J. W. JOHNSON.

Fastener for Meeting Rails of Sashes.

No. 209,894. Patented Nov. 12, 1878.

Fig. 1

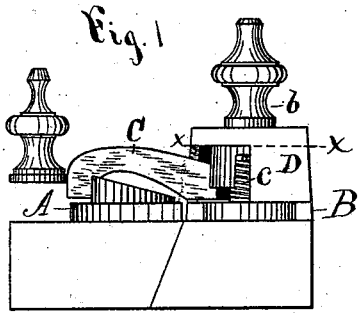
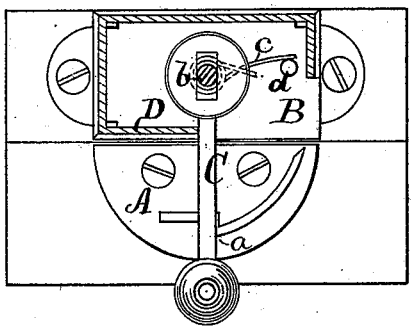


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOSEPH W. JOHNSON, OF NEW BRITAIN, ASSIGNOR TO JOHN P. CONNELL, OF KENSINGTON, CONNECTICUT.

IMPROVEMENT IN FASTENERS FOR MEETING-RAILS OF SASHES.

Specification forming part of Letters Patent No. **209,894**, dated November 12, 1878; application filed October 3, 1878.

To all whom it may concern:

Be it known that I, JOSEPH W. JOHNSON, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification:

My invention consists in a sash-fastener provided with a helical spring having two lateral arms projecting from the ends of the wire which forms the helix, and bearing against the sweep and base-plate, respectively, and adapted for throwing the sweep both longitudinally and sidewise, as hereinafter described; also, in the shouldered cam-plate, in combination with the slotted and chambered sweep, rear plate, and double-acting spring, one arm of which engages a stop on the rear plate, and the other engages the sweep at one side of the chambered portion, as hereinafter described.

In the accompanying drawing, Figure 1 is a side elevation of a sash-fastener which embodies my invention, and Fig. 2 is a horizontal section of the same on line *x x* of Fig. 1.

Sash-fasteners have heretofore been made with a slotted sweep pivoted to the back plate, and thrown longitudinally, to engage a notch on the front plate, by means of a spring located within the sweep and back of the pivot, the only office of which spring was to throw the sweep longitudinally. A like fastener has also been made with the parts reversed and pivoted to the front plate.

Various locking-sweeps have also been made in two parts, one of which moved to operate as a locking-bolt, all of which prior devices are hereby disclaimed.

A designates the cam-plate, provided with a shoulder, *a*, at the right-hand side of the middle of its length, which plate is designed to be secured to the top rail of the lower sash, and therefore it constitutes the front plate.

B designates the rear plate, designed to be secured to the bottom rail of the upper sash. Upon this plate is the sweep C, having both a longitudinal and a sidewise movement. Said sweep is slotted and chambered at its rear or inner end, the pivot-pin or pintle *b* passing through the slot in said sweep, (see Fig. 2,) and being firmly secured to the rear plate, B.

c designates a spring, which I prefer to make of wire in helical form, but with both ends of the wire standing out laterally from the coils. This spring is received in the chambered end of the sweep and surrounds the pivot-pin. One arm rests upon the stud *d* or other suitable stop on the rear plate, and the other arm of the spring bears upon the sweep at one side of the chambered end, as shown. This end of the sweep and the bulk of the rear plate are covered by a suitable box or frame, D.

When the sweep is left free the spring forces it around to the right, so as to clear the front plate. When the sweep is brought around to the front, as shown in Fig. 1, the ordinary downward-projecting lug on the free end of the sweep engages the edge of the cam-plate A, draws the meeting-rails of the sash together, when the spring gives and allows the sweep to move endwise, so that it may pass the shoulder *a* of said plate, when it is stopped by engagement with the frame or box D.

The spring has a constant tendency to hold the sweep to the rear as well as to the right, and thereby prevents the sashes from rattling and disengagement from the shoulder *a*.

To unlock the fastener, it is only necessary to draw the sweep forward to disengage it from the shoulder *a*, when the spring will throw the sweep both endwise and sidewise into its former position, out of the way of the front plate.

I claim as my invention—

1. A sash-fastener provided with the double-acting and two-armed helical spring, with its horizontal arms bearing against the sweep and base-plate, respectively, and adapted for throwing the sweep both endwise and sidewise, substantially as described.

2. The shouldered cam-plate A, in combination with the slotted and chambered sweep C, rear plate, B, and double-acting spring *c*, one arm of which engages a stop on the rear plate at one side of the sweep, and the other engages the sweep at one side of the chambered portion, substantially as described, and for the purpose specified.

JOSEPH W. JOHNSON.

Witnesses:

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