No. 611,291. Patented Sept. 27, 1898.

A. A. STEBBINS.

WINDOW FASTENER.

(Application filed June 2, 1897.)

(No Model.)

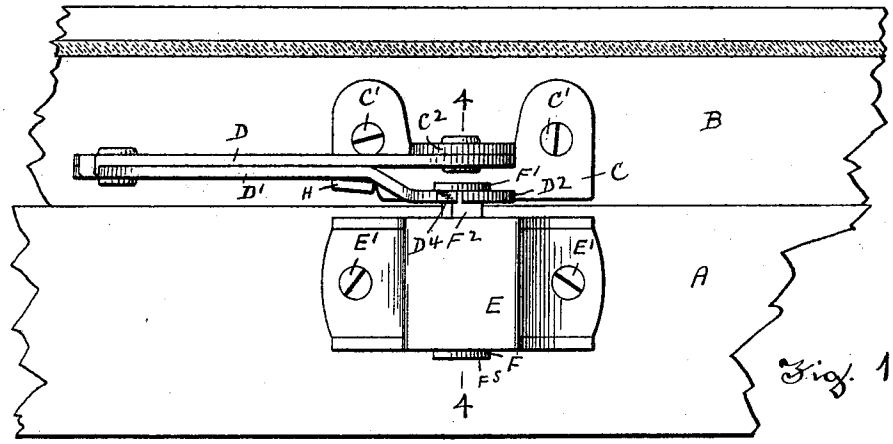


Fig. 1.

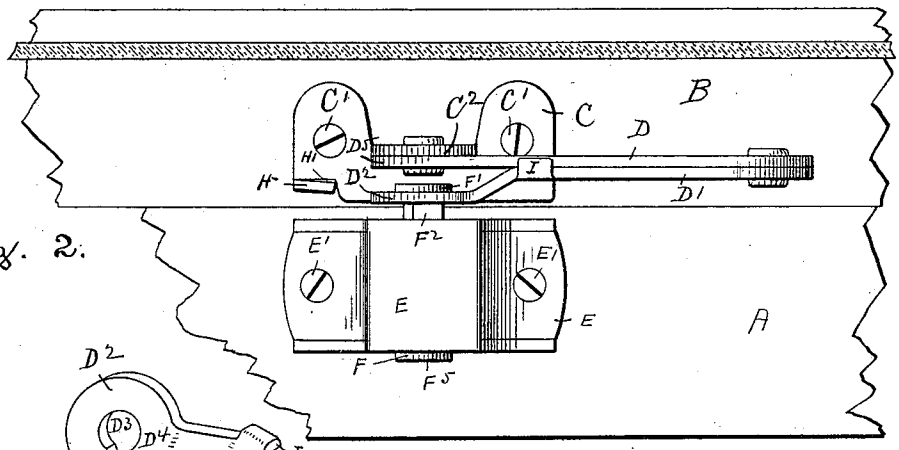


Fig. 2.

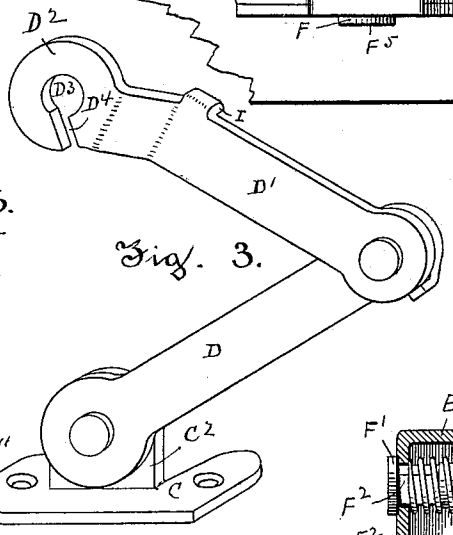


Fig. 3.

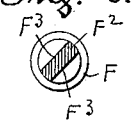


Fig. 6.

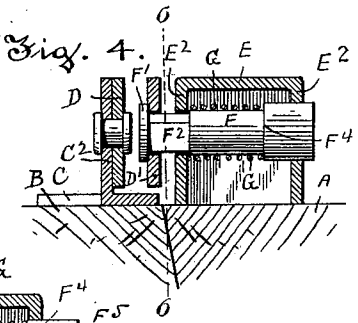


Fig. 4.

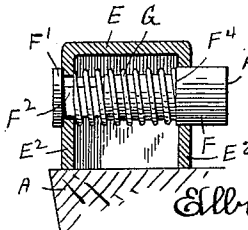


Fig. 5.

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UNITED STATES PATENT OFFICE.

ALBYN A. STEBBINS, OF PROVIDENCE, RHODE ISLAND.

WINDOW-FASTENER.

SPECIFICATION forming part of Letters Patent No. 611,291, dated September 27, 1898.

Application filed June 2, 1897. Serial No. 639,126. (No model.)

To all whom it may concern:

Be it known that I, ALBYN A. STEBBINS, of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Window-Fasteners, of which the following is a specification, reference being made to the accompanying drawings, forming a part of the same and representing a window-fastener embodying my invention.

Figure 1 represents a top view of my improved fastener represented as applied to a window and in a locked position, with the locking-levers brought against a cam-shaped lug in order to draw the meeting-rails of the sash together. Fig. 2 represents a top view of my improved fastener in a locked position, but before the levers are turned to draw the meeting-rails together. Fig. 3 is a perspective view of the locking-levers. Fig. 4 is a sectional view on line 4 4, Fig. 1. Fig. 5 is a sectional view of that part of the fastener which is attached to the lower sash, the section being taken on the same plane as represented in Fig. 4, but with the sliding bolt retracted by the tension of its spiral spring; and Fig. 6 is a sectional view of the sliding bolt, taken through its neck portion on line 6 6, Fig. 4.

Similar letters refer to similar parts in the different figures.

My invention relates to that class of window-fasteners comprising a pair of pivoted links by which the meeting-rails of the upper and lower sashes may be locked together, with the window closed or with one or both of the sashes partially open; and it consists in the construction and arrangement of parts, as hereinafter described, and pointed out in the annexed claims.

Referring to the drawings, A and B denote the meeting-rails of the sash, A being the upper rail of the lower sash and B the lower rail of the upper sash. To the rail B, I attach a plate C by screws C′ C′. The plate C is provided with an upwardly-projecting lug C^2, to which I pivot one end of a lever D. To the opposite end of the lever D, I hinge one end of a lever D′. The opposite end of the lever D′ is provided with a hook D^2, said hook being formed by a circular hole D^3 and an inclined slot D^4, communicating with the hole D^3.

E denotes a plate attached to the rail A by screws E′ and provided with flanges E^2, which support a sliding bolt F. The sliding bolt F is provided with a head F′ and a neck F^2, formed by cutting away the sides of the bolt on two opposite sides and leaving a thin neck F^2, having its opposite sides F^3 F^3 parallel and at a slight inclination to a vertical plane. The sliding bolt F has a spiral spring G applied between the flange E^2 and a shoulder F^4, formed on the sliding bolt, with the tension of the spring applied to draw the head F′ against the flange E^2, as represented in Fig. 5. By pressing against the end F^5 of the sliding bolt the spring G is compressed and the neck F^2 is pushed beyond the flange E^2 in position to be engaged by the hook D^2 of the lever D.

The rails A and B are locked together by raising the levers D D′, as represented in Fig. 3, so as to make the inclination of the slot D^4 correspond with the inclination of the neck F^2 and allow the hook D^2 to be pushed down over the neck of the bolt and bringing the levers D D′ into a horizontal position parallel with the rail B, as represented in Fig. 2. When the levers D and D′ are in the position shown in Fig. 2, if the sash-rail A is raised or the rail B lowered the levers D and D′ will become separated, either raising the hooked end D^2 of the lever D′ or depressing the end D^5 of the lever D, thereby allowing the rails A and B to be separated a distance equal to the combined lengths of the levers D and D′, but preventing them from being further separated.

The separation of the sash while locked together provides for ventilation, but limits the amount of opening to the length of the levers. By rotating the levers D and D′ from the position shown in Fig. 2 to that shown in Fig. 1 the rails A and B are drawn together by the pressure of the lever D′ against an inclined surface H′ on a lug H, which projects upwardly from the plate C, and the window-sash then become locked against any upward or downward movement by means of a lip I, projecting from the lever D′ and overlapping the edge of the lever D, thereby holding the rail B and lever D from being moved downward past the rail A and also holding the rail A and lever D′ from being moved upward past the rail B.

In order to unlock the rails A and B, the levers D and D′ are turned from the position shown in Fig. 1 to that represented in Fig. 2, thereby bringing the lip I upon the upper side of the lever D and allowing the hook D^2 to be disengaged from the bolt F.

I am aware that a pair of hinged levers have been employed to connect the meeting-rails of a window-sash, and I do not herein claim such; but

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

1. The combination in a window-fastener, of a hooked lever pivotally connected to a plate adapted to be attached to one of the sashes, a sliding bolt supported by a plate adapted to be attached to the other sash, said bolt having a sliding motion at right angles to the plane of rotation of said hooked lever and arranged to be pushed endwise into the path of said lever in position to be engaged thereby, and a spring by which said bolt is withdrawn out of the path of said lever and also out of operative position, substantially as described.

2. The combination of a plate adapted to be attached to one of the sashes, a sliding bolt supported by said plate, and provided with a reduced neck at one end, a hooked lever pivotally connected with the other sash and capable of a swinging motion in a plane at right angles to the movement of said sliding bolt, whereby the sliding movement of the bolt in one direction will carry its neck into the path of said hooked lever in position to be engaged thereby and its motion in the opposite direction will carry it out of the path of said hooked lever, substantially as described.

3. The combination of a supporting-plate adapted to be attached to one of the sashes, a sliding bolt supported by said plate and provided with a reduced neck disposed in an oblique plane, a lever pivotally connected with the other sash and provided with a circular opening, and an inclined slot communicating with said circular opening, whereby the neck of said bolt is adapted to be engaged by said lever and locked therein, when the sashes are separated, substantially as described.

4. The combination of a hooked lever pivotally connected to a plate adapted to be attached to one of the sash and capable of a slight lateral motion, a lug projecting from said plate and having a cam-surface arranged in the path of said lever by which said lever is moved laterally, and means connected with the other sash for engaging said hooked lever, substantially as described.

Dated this 29th day of May, 1897.

ALBYN A. STEBBINS.

Witnesses:
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