To all whom it may concern:

Be it known that I, ALFRED CARLSON, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Fasteners for the Meeting-Rails of Sashes, of which the following is a specification.

This invention relates to improvements in fastenings for window-sashes whereby the meeting-rails are securely locked together when the windows are closed, so as to prevent burglars or unauthorized persons from entering the premises through the window when the sashes are locked, as will hereinafter be more fully shown and described, reference being had to the accompanying drawings, wherein—

Figure 1 is a top plan view of the device, showing the window-sashes locked together. Fig. 2 is a section on the line 2 2 shown in Fig. 1. Fig. 3 is a bottom plan view of Fig. 1, parts being shown in section; and Fig. 4 is a cross-section on the line 4 4 shown in Fig. 2.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

A and B are the inner and outer meeting-rails of window-sashes, as usual. To the rail B is secured the bolt-catch C, which is convex on its inner side and provided with a transverse perforation C', which receives the spring-pressed bolt D when the latter is in alignment with the catch-perforation C, as shown in the drawings. To the inner rail A is secured the metal shell or casing E, within which the bolt D is guided and longitudinally movable. The bolt D is guided in a perforation e in the outer wall of the shell or casing E, as shown.

Integral with the bolt D is made a crosshead D', provided with a pair of guide-rods d d, which are guided in perforations e' e' in the inner end of the casing E, as shown. To the inner ends of the guide-rods d d is secured a plate or cross-piece F, terminating as a downward-projecting hook f for a purpose as will hereinafter be described.

G is a coiled compressible spring interposed between the cross-head D' and the inner end of the casing E, and it serves to automatically hold the bolt D in the locked position shown in the drawings.

In practice I prefer to make on the rear of the cross-head D' and the inner end of the shell or casing E the respective cylindrical trunnions d' and e', adapted to receive the ends of the coiled spring G, as shown, whereby the latter is held properly in working position relative to said cross-head and casing during the manipulation of the device.

The outer end of the bolt D is made inclined or curved, so as to cause it to move inwardly when closing the sashes by coming in contact with the curved or inclined bolt-catch C and until the bolt D is in alignment with the catch-perforation C', when it is caused to be forced into such perforation by the spring G and held interlocked therein, as shown in the drawings.

The guide-rods d d, made integral with the bolt D and cross-head D', serve to properly guide said bolt and prevent its turning around its axis during its adjustment, which is desirable for the purpose of always retaining the inclined or curved end of the bolt D in proper position relative to the curvature or inclination of the bolt-catch C during the manipulation of the device.

The hook f, which is secured to the guide-rods d d and bolt D, serves for the purpose of pulling said bolt inward to disengage it from the locking-perforation in the catch C previous to raising the inner sash, and it also serves as a means for raising and lowering the said sash whenever so desired without the need of taking hold directly of the meeting-rail of the sash.

The operation of this my invention is as follows: If the sashes are locked, as shown in the drawings, and it is desired to raise the sash A, it is only necessary to take hold of the hook f and pull it sufficiently inward so that the bolt D is liberated from the catch C, when the sash may readily be raised more or less, as desired, simply by pulling upward on said hook f. After the sash has been raised the operator lets go his hold on the hook, causing the spring G to automatically return the bolt D and its connecting parts, as well as the hook f, to their normal positions. If it is desired to lower the sash A and close the
window, it is only necessary to move the sash downward, and as it approaches its closed position the bolt D is forced inward when contacting with the catch C, and when said bolt is opposite to the perforation C' in said catch it is automatically forced outward into the locking-perforation C' by the influence of the spring G, as shown in the drawings, causing the meeting edges of the sashes to be securely interlocked.

The invention is very simple in construction, is durable, and may readily be applied to window-sashes of any ordinary or well-known construction.

What I wish to secure by Letters Patent and claim is—

In a window-sash fastening a curved or inclined perforated bolt-catch secured to the outer sash, in combination with a casing secured to the inner sash, a single locking-bolt longitudinally movable in the casing and guided in a perforation in the outer end of the casing, a cross-head integral with the inner end of the bolt, two parallel guide-rods integral with the cross-head and guided in perforations in the inner end of the casing, a hook rigidly secured to the inner ends of the guide-rods for retracting the bolt and lifting the sash, and a coiled spring arranged between the inner end of the bolt and the inner end of the casing, the outer end of the bolt being curved or inclined to correspond with the shape of the bolt-catch, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

ALFRED CARLSON.

Witnesses:

ALBAN ANDRÉN,
LAURITZ N. MÖLLER.