

(No Model.)

H. A. HOLT.
SASH FASTENER.

No. 385,461.

Patented July 3, 1888.

Fig2.

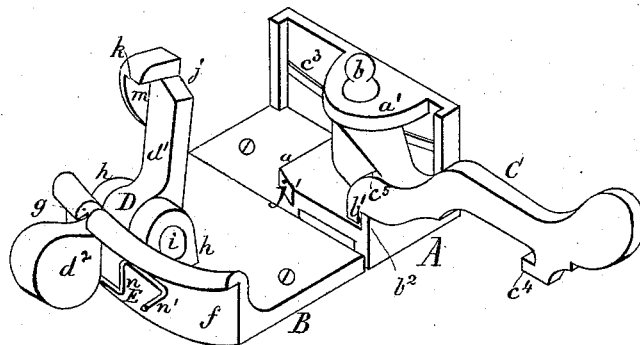


Fig1.

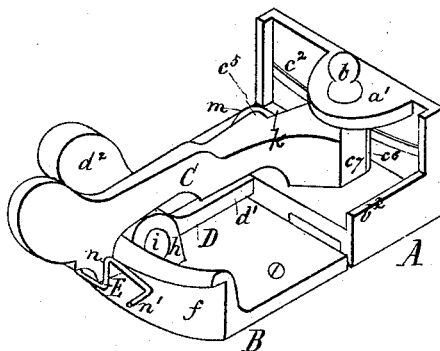
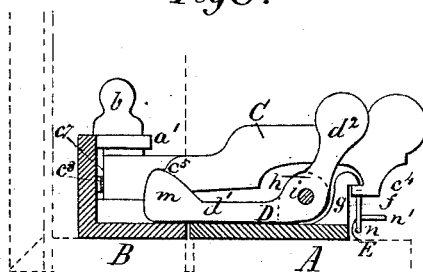


Fig 3.



Witnesses:
E. J. Fenwick,
W. S. Boyd,

Inventor:
Hiland A. Solt
by his Atty:
Mason, Fenwick & Lawrence.

UNITED STATES PATENT OFFICE.

HILAND A. HOLT, OF NASHUA, NEW HAMPSHIRE.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 385,461, dated July 3, 1888.

Application filed February 8, 1888. Serial No. 263,402. (No model.)

To all whom it may concern:

Be it known that I, HILAND A. HOLT, a citizen of the United States, residing at Nashua, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Sash-Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in that style of sash-fastener which is applied upon the horizontal parting-rails of the upper and lower sashes of a window; and it consists in certain novel combinations, constructions, and arrangements of parts, as will be hereinafter fully described, and pointed out in the claims, whereby I am enabled to provide a very simple, convenient, and safe sash-fastener, the safety device of which is made in the form of a bell-crank lever, the short arm of which may be weighted or acted upon by a spring, so as to render the lever self-adjusting when the latch is out of action, and the long arm provided with a stop on its end and a guard-plate on its side, which by co-operating with the latch, which is formed with a shoulder or projection, serves for frustrating the attempts of burglars to unfasten the latch from the outside unless the glass of the sash is first broken. The elbow-lever and the plate to which the latch is pivoted are also constructed, respectively, with beveled corners, so that the safety device can be placed nearly central of the two plates of the fastener; and an auxiliary spring is provided which serves for rendering the fastener still further secure against burglarious movements of its latch.

In the accompanying drawings, Figure 1 is a perspective view of the sash-fastener with its fastening-latch in contact with its keeper and retained by the angular spring and with the auxiliary safety device in position across the joint between the fastening-plates and the sashes. Fig. 2 is a perspective view of the same with its latch and auxiliary keeper so adjusted that the sashes can be moved without being interfered with by either the latch or the keeper. Fig. 3 is a vertical section of the fastener in a line which crosses the joint between the plates and the sashes.

In the drawings, A is the rear plate of the fastener, and B the front plate thereof, the former being attached to the parting-rail of the upper, and the latter to the parting-rail of the lower, sash.

The plate A is formed with two horizontal plane surfaces united so as to form a vertical shoulder, *a*, and on the surface above the shoulder and underneath an ear-bracket, *a'*, of the plate a fastening-latch, C, is arranged and secured by a pivot, as *b*, so as to be capable of swinging around horizontally to a proper distance, its movement being limited by a vertical front shoulder, *b'*, formed on the latch, and a vertical side flange, *b''*, of the plate A.

The latch C is constructed at its rear end in about the form of the letter V, and thus two broad beveled bearing-surfaces, as *c'*, with a knife-edge contact end, as *c''*, midway thereof are secured.

c'' is an ordinary bow-spring placed against the vertical rear portion of plate A and held in place by the narrow side corner flanges of said portion.

The latch C, by means of its knife-edge end *c''*, flattens or forces backward the bow of the spring while being moved to a position under the keeper-flange, or from the position shown in Fig. 2 to the position shown in Fig. 1, or from under said flange from the position shown in Fig. 1 to that shown in Fig. 2. When the latch stands either under the flange or away from under it, the spring and one or the other bevel-surfaces *c'* of the V end of the latch has a meeting-contact, slightly oblique, either right or left, to the rear vertical portion of the plate A, and the tendency of the spring is to hold the latch in one or the other of its extreme or set positions and prevent it being moved casually. On the front free end of the latch an underhooking angular lip, *c'*, of ordinary construction is provided, and at a short distance forward of its pivot *b* a rear angular shoulder, *c''*, is formed on it. The plate B is provided at its front end with the usual latch-keeper, *f*, and in the flange of this keeper a vertical slot, *g*, is formed, and in rear of the flange, on a line with said slot *g*, an auxiliary lever or stop, D, of a form similar to a bell-crank lever, is arranged between the two horizontally-perforated vertical ears *h* and pivoted, as at *i*. This

lever, forming what I have heretofore denominated a "safety device," has a long arm, d' , in rear of its pivot and a short weighted arm, d'' , forward of the same, and the end of the long arm has a beveled surface, j , corresponding with the beveled surface j' of the shoulder a , and said arm is provided with a vertical end stop, k , and a side guard, m , all as clearly shown in Fig. 2. The beveled surfaces $j j'$ permit the lever or stop D to extend over upon the plate A, with nearly one-half of its width lying on the right beyond the straight portion of the step or shoulder a , thus bringing said lever or stop nearly central upon the fastening-plates and in a proper relation for being held down by the latch C when said latch is in its fastened position. The lever or stop D, when acting as a safety-guard, occupies a horizontal position across the joint between the plates A and B and the sashes, and is held down by the latch being turned around over it and under the flange of the horizontal keeper f . When the latch is in this position, its shoulder c^b abuts against the rear end stop, k , while its side surface, which forms said shoulder c^b , bears against the guard-plate m , and the side surface near the fastening end of the latch bears against the weighted arm of the safety device.

With the parts adjusted as shown in Fig. 1 and as just described a burglar will find it impossible to move the latch around on its pivot by inserting an instrument between the plates A and B and the joint of the sashes, for the arm d' will prevent the device from being moved to the left, while the guard-plate m will prevent it from being moved to the right.

The arm d'' is so weighted, as shown, or may be so acted upon by a spring, as to lift the arm d' as soon as the latch is moved to the position shown in Fig. 2.

E is an angular spring-holder placed below the flange of keeper f and fastened by one of its ends to the lower sash or its plate. This holder is formed with a right-angular bend or shoulder, n , and terminates in an inclined portion with a thumb-piece, n' , as shown. By means of this spring-holder the latch, while it is allowed to pass under the flange of the

keeper f and over the inclined portion of the holder, is made to depress the inclined portion of the holder, which is forward of the shoulder n , until it arrives at its extreme fastening position, when it is caught by the shoulder n springing up behind it; and thus caught the latch will be retained until the spring-holder is depressed by the thumb applied to its portion n' and made to stand clear of the latch while it passes it out of contact with its keeper. The spring-holder E serves for positively preventing the latch being moved should a burglar's instrument be passed up through the joint between the plates and sashes and pressed against it in a manner to turn it aside; and inasmuch as the latch C cannot move it follows that the device D will be kept by the latch from moving.

What I claim is—

1. The combination of the elbow-lever D, pivoted to the plate B, having keeper f , with latch C, pivoted to plate A, substantially as described.

2. A sash-fastener comprising the plate B, having a keeper, f , and an elbow-lever, D, pivoted to ears of said plate, and provided at the end of its long arm d' with an end stop, k , and side guard-plate, m , a plate, A, and a latch, C, pivoted to the plate A, substantially as and for the purpose described.

3. The combination, with the fastener-plate A, provided with the shoulder a , having the beveled surface j' and vertical side flange, b^2 , and plate B, provided with keeper f , having slot g and ears $h h$, of elbow-lever D, formed with bevel surface j , stop k , plate m , and the latch C, formed with shoulders b' and c^b , substantially as and for the purpose described.

4. The described elbow-lever D, having its short arm d'' weighted, in combination with the described fastener-plates A and B, and latch C, substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

HILAND A. HOLT.

Witnesses

NATE W. GODDARD,
R. T. SMITH.