

No. 777,099.

PATENTED DEC. 13, 1904.

N. S. HILLYARD.
ADJUSTABLE SASH FASTENER AND TIGHTENER.

APPLICATION FILED AUG. 11, 1904.

NO MODEL.

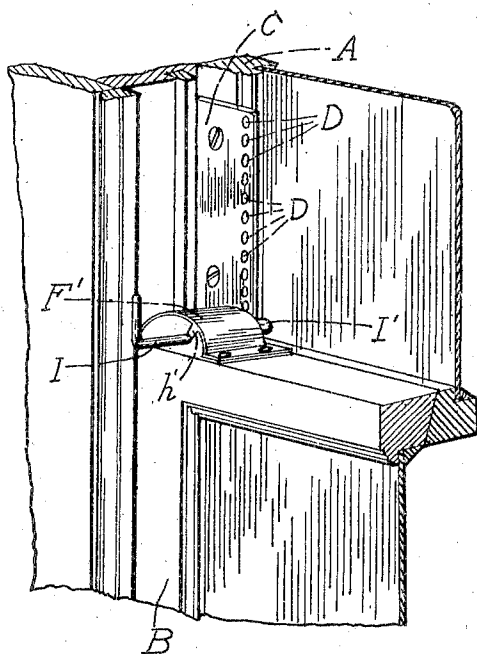


FIG. 1.

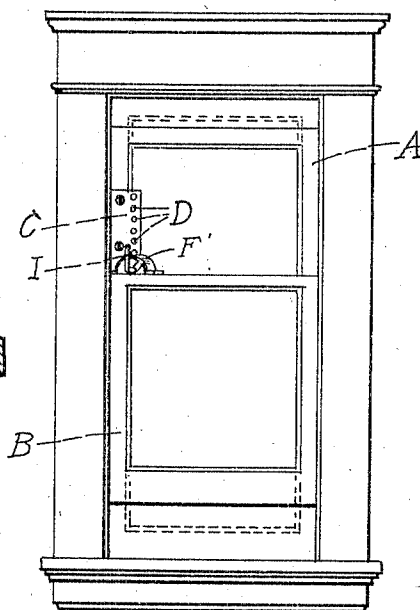


FIG. 2.

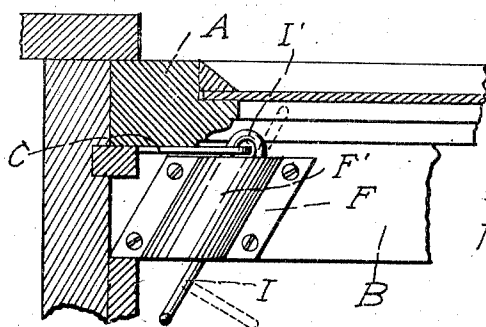


FIG. 3.

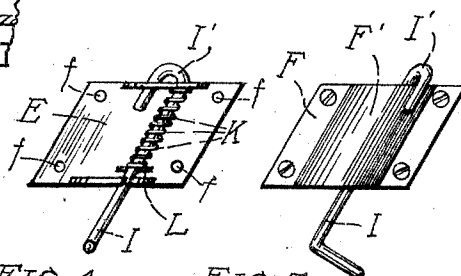


FIG. 4.

FIG. 7.

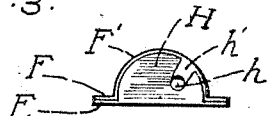


FIG. 5.

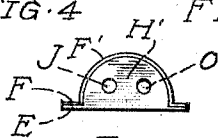


FIG. 6.

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ADJUSTABLE SASH FASTENER AND TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 777,099, dated December 13, 1904.

Application filed August 11, 1904. Serial No. 220,384. (No model.)

To all whom it may concern:

Be it known that I, NEWTON S. HILLYARD, a citizen of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented certain new and useful Improvements in Adjustable Sash Fasteners and Tighteners; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improved fastener for window-sashes that permits ventilation at top or bottom of sashes or simultaneously at both, that when the sashes are closed or open alike secures against the entrance of burglars, that at all times binds and tightens the sashes one against the other, thereby preventing the entrance of air or dust through the crack that from shrinkage or other cause frequently exists between the meeting-rails of the sashes, and also obviating the annoying rattle that is apt to occur when a gusty or strong wind prevails.

The invention consists in the simple, strong, inexpensive, safe, and novel combination hereinafter fully described, and shown by the accompanying drawings, in which—

Figure 1 is a perspective of the device, both sashes shown closed and locked. Fig. 2 is a front elevation of a window locked, the top sash lowered, and the bottom sash raised, the dotted lines indicating the position of the sashes when closed. Fig. 3 is a top view of the device attached to sashes broken away, the fastener being shown in locked position, the dotted lines indicating the position the bolt will assume as it is being pressed in for locking or unlocking the sashes. Fig. 4 is a top view of the base of the lock-case and its flanges, the bolt carried therein, and its coil-spring and pin, the device being shown in the position it will assume when locked. Fig. 5 is a front view of the case, showing the front flange, the slot and finger fitted therein, and the aperture for the bolt. Fig. 6 is a view of the back of the case, showing the rear flange,

the perforation therein in which the hook end of the bolt operates, and the perforation through which the hook end of the bolt reënters the case when in the locked position shown in Fig. 4; and Fig. 7 is a top view of the case, the bolt therein shown in the position it will assume when the fastener is unlocked.

In the drawings, A represents the upper and B the lower sash of a window.

C is a plate adapted to be attached to a face of a stile of an upper sash by screws or other convenient means. This plate projects sufficiently beyond the face of the inner edge of the stile to permit perforations D D in the edge thereof to be accessible from the rear of said plate C. This plate extends from the meeting-rail of the upper sash any desired length and is provided with a sufficient number of perforations D D to allow adjustment of the sashes to as many positions as may be desirable. On the top of the meeting-rail of the lower sash on the same side of the window with plate C there is a locking-case preferably consisting of two pieces—a base-piece E and a top piece F—said pieces being provided with corresponding perforations f , f' , through which they may be rigidly fastened on said last-mentioned meeting-rail and at the same time held immovably together with screws or otherwise. The body or casing F' of said top piece F is elevated to form a housing for locking mechanism, the front and back of said housing being closed by flanges H and H' , respectively, on base E. Each of these flanges is preferably cut or struck from the metal as a part of base-piece E of a form suited when bent upward to fit into the body F' of the top piece F. A slot h in flange H permits the insertion therein of a lock-bolt I before top piece F is placed on base E. This bolt is provided with a hooked end I' and is supported at its opposite handle end in the lower part of said slot h . A finger or projection h' , which is a part of metal top piece F bent downward at a right angle, is adapted to fit in the upper part of said slot h and assist in retaining bolt I in position. Flange H' also serves as a support for bolt I, it being provided with a perforation J, through which the hooked end protrudes. A coil-spring

K is carried on said bolt I, its forward end being held in position by a pin L in said bolt, or it may be held in position by a lug, if preferred. O is also a perforation in said flanges H. It serves the purpose of receiving the hooked end of bolt I when said end has been pushed back of the line of plate C and turned to position in which to engage with a perforation D and the pressure of the hand of the operator has been withdrawn from the handle of the bolt, the tension of spring K then instantly drawing the hooked end I' through said perforation D and into perforation O, thus locking the sashes and at the same time tightening the sashes one against the other.

To unlock the device, it is simply necessary to press the bolt in until the hooked end has passed back of the line of engagement with its perforation D, press the bolt-handle downward until the hooked end is turned beyond the line of contact with the edge of plate C, and release the pressure of the hand. The tension of spring K then automatically and instantly drives the bolt out to the position shown in Fig. 7.

As indicated in Figs. 3, 4, and 7, the upper and lower plates of the device are preferably made rhombiform, the object being to place the device as close as possible to the casement of the window and to have it correspond with the usual slope on the inside edge of the stile, thereby preventing possible interference of the hooked end of the bolt and the stile without unnecessarily widening plate C and also obviating any possible obstruction by the device with the light through the window; but I desire to reserve to myself the right to construct it of other shape, to omit the base-piece supporting the bolt from flanges on the top piece instead, or make such other mechanical changes as do not involve inventive genius.

From the foregoing description it will be

seen that my fastener is so constructed that it can be attached to a window without damaging the sashes or window-casing and without the aid of a mechanic.

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

1. In a window-sash lock and tightener, the combination with the upper and lower window-sashes, of a plate attached on the face of a stile of the upper sash provided with a plurality of perforations along its inner vertical edge, a case for housing locking mechanism consisting of a perforated base-piece adapted to be attached on the meeting-rail of the lower sash forward of said plate and the upwardly-turned flanges thereon provided with a slot and perforations, the top piece adapted to fit thereover, the finger engaging with said slot, the lock-bolt carried by said flanges through said slot and a perforation and provided with a handle, the hooked end of said bolt adapted to engage simultaneously with perforations in said plate and in the rear flange of the case, substantially as set forth and shown.

2. In a window fastening and tightening device an elongated metal plate adapted to be attached on the face of an upper stile and whose perforated edge projects slightly inward of the face of the stile, a case adapted to be attached on the meeting-rail of a lower sash, a lock-bolt carried in a slot and perforation in flanges on the case, a coil-spring, a turned end of said bolt adapted to lock and tighten the sashes by engaging from the rear of said plate with a perforation therein and a perforation in the back of said case, substantially as set forth and shown.

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

NEWTON S. HILLYARD.

Witnesses:

GEORGE DEHAET,
NETA ROSS.