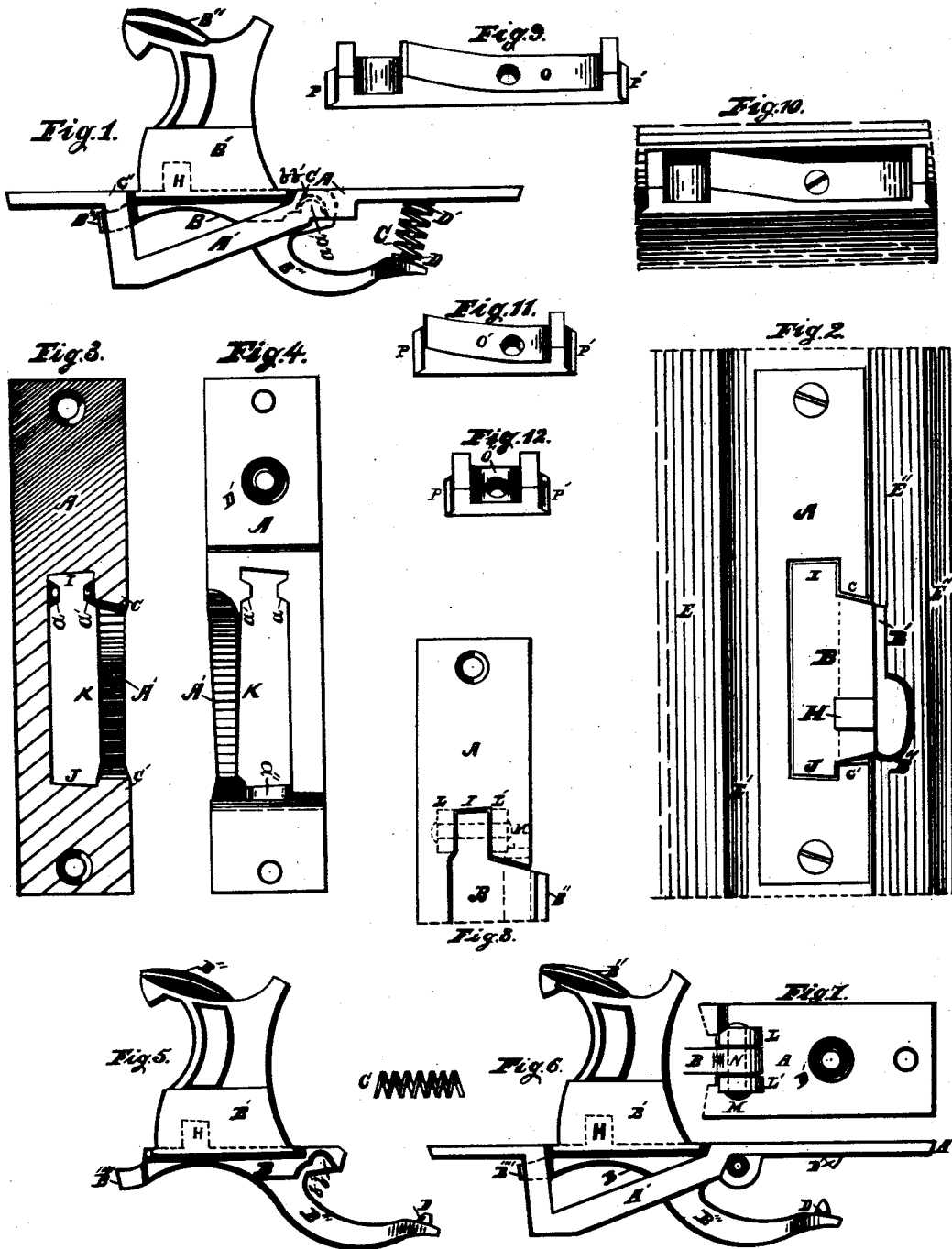


(No Model.)

R. B. HUGUNIN.
SASH FASTENER.

No. 579,980.

Patented Apr. 6, 1897.



Witnesses:
E. E. Guller
H. MacArthur

R. B. Hugunin
Inventor

UNITED STATES PATENT OFFICE.

ROBERT B. HUGUNIN, OF HARTFORD, CONNECTICUT.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 579,980, dated April 6, 1897.

Application filed January 4, 1897. Serial No. 617,894. (No model.)

To all whom it may concern:

Be it known that I, ROBERT B. HUGUNIN, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Sash-Lock, of which the following is a specification.

My invention relates to improvements in sash-locks in which a locking-tongue lever is pivoted to and operated in conjunction with a face-plate.

The objects of my invention are, first, to do away with a longitudinal slot and recess for the lever and tongue and employ in place thereof a central elongated transverse opening extending through the side of the plate, uniting the severed side and maintaining the strength of the plate by a rear depressed connecting-yoke, the body of the lever, with the locking-tongue, working within the opening between the faces of the plate and yoke, and the side of the lever, with the handle-arm, extending and working outside the side line of the plate, (see Figure 2;) second, to enable the application of the face-plate wholly within the sash-channel of the frame. (See Fig. 2.) Heretofore that part of the plate with the slot and lever was necessarily applied to come underneath the stop, necessitating the cutting away of the under half of the center stop the full length of the plate and a large part of what remained for the handle-arm. This cutting for the plate and arm caused the center stop to break, rendering the use of this style of lock for the rear sash impracticable.

My invention further relates to improvements in sash-locks in which a locking-tongue lever is pivoted to and operated in conjunction with a face-plate.

The objects of my improvements are, first, to unite in sash-fastening plates having a locking notch or notches for the engagement of the tongue of the lock in locking holding-flanges constructed upon the ends of the plate, with which the plate when driven into the mortise made for the plate on the edge of the sash is held down, insuring the firm locking of the sash should the fastening-screw become loosened. (See Fig. 10.) I attain these objects by means of the mechanism illustrated in the accompanying drawings, in which—

Fig. 1 is an elevation plan view showing

the features of my invention, to wit: the face-plate A, side connecting-yoke A', locking-tongue lever B, lever-handle arm B', lever-handle B'', spring-arm B''', lever-stop B''', spring C, spring-seats D D', pivotal bearings a a' and b b', severed side of plate c c', connected by yoke A'. Fig. 2 is a front plan view of Fig. 1 applied to rear-sash channel of frame, showing rear stop E, rear-sash channel E', center stop E'', front-sash channel E''', face-plate A, locking-tongue lever B, lever-handle arm B', lever-handle B'', locking-tongue H, pivoting and stop ends I and I; Figs. 3 and 4, front and rear plan views of plate A, showing central and transverse opening K, connecting-yoke A', pivoting-bearings a a', plate-stop a'', spring-seat D', pivoting and stop ends I and I; Fig. 5, a side plan view of lever B removed from the plate, showing handle-arm B', handle B'', spring-arm B''', stop B''', recessed pivot-bearings b b', resting when in the plate on bearings a a', spring-seat D, spring C; Figs. 6, 7, and 8, elevation and rear and front section plan views showing pivoting modifications, as when the lever and plate are pivoted together by a rivet M, passing through a flange N on the rear of the pivoting end of the lever, and lugs L L' on the rear side of plate. (See Fig. 7.) Figs. 9, 10, 11, and 12 are perspective views of modified forms of sash-locking plates showing the holding-flanges P P' on the ends of the plates.

A is a face-plate having a central elongated transverse opening extending through the side of the plate, within the upper end of which are pivoting-bearings a a' and at the lower end a stop a'', the side of the plate severed between c c' being connected and the strength of the plate maintained by the yoke A'. (See Figs. 1 and 3.)

B is a locking-tongue lever having a face-plate corresponding with the central transverse opening for same in the plate, a handle-arm B', handle B'', spring-arm B''', stop B''', spring C, spring-seat D, recess pivot-bearings b b', which rest on the bearings a a' on the plate; H, locking-tongue.

C is an elastic spring interposed between spring-arm seat D and seat D' on rear of the plate; D D', spring-seats on the lever and plate; E, rear stop on the frame, (see Fig. 2;)

E', rear-sash channel; E'', center stop; E''', front-sash channel; H, sash-locking tongue made solid on the face-plate of lever B and side of handle-arm B', by means of which and
 5 a locking sash-plate O, with notch or notches applied to the side edge of the sash, the sash is fastened by the pressure of a spring exerted through the lever, forcing the tongue into the notch, fastening the sash, until the
 10 tongue is forced back by pressure applied to the lever-handle. As the tongue is located to work within the opening for the lever, no special recess is required, as formerly on this style of lock.

15 I is the hinging or pivoting end of an elongated transverse opening.

J is stop end of opening K.

K is a central elongated opening extending transversely through the side of the plate for
 20 the admission and pivotal working of locking-tongue lever B.

L L' are pivoting-lugs on the plate A, by means of which and flange N on the lever and rivet M, passing through the lugs and flange, the lever and plate are pivoted together, as
 25 shown in Fig. 7. Figs. 6, 7, and 8 are illustrations of this modified form of pivoting the lever to the plate instead of that preferred by means of bearings a a' on the plate and b b' on the lever. (See Figs. 3 and 5.) These bearings are employed with spring-pressure exerted through the spring end of the lever and resistance from the stop on the opposite end to hold them in position. (See Fig. 1.)
 30

35 M is the rivet; N, flange.

O O' O'' are notched sash-locking plates employed in forms shown in Figs. 9, 11, and 12 in connection with tongue sash-locks, each having the holding-flanges P P'. The plates
 40 are applied as shown in Fig. 10. A mortise is made on the side edge of the sash conforming to the plate employed, and the plate is driven sidewise into the same, the flanges P P' entering the solid wood at the end of the
 45 mortise. The two-notch form, Fig. 9, with the holding-flanges, is a locking and ventilating plate by means of which the sash are self-locked when closed and opened between the notches for ventilation. The plate shown
 50 in Fig. 11, with flanges, is employed with the lock for sash-holding purposes and to lock the sash, by reversing the plate in application, when closed. Several of these plates are applied to the side edge of the sash. The

plate shown in Fig. 12, with flanges, is applied 55 to the sash with the plates shown in Fig. 11 to lock the sash when open for ventilation from movement in either direction. The modified forms are applied similarly to the one shown in Fig. 10. 60

P P' are holding-flanges, preferably extending from the base beyond the ends of the sash-plate the full width of the plate. They are preferably made with a chisel edge, that form being more readily driven into the solid wood 65 at the ends of the mortise, holding the plate down securely should the fastening-screw employed therewith become loosened.

The locks are applied to the sash-channels of the frame, one for each sash, near the top 70 of front and bottom of rear sash, when the sash are closed. The sash-plates employed in connection therewith are applied to the side edge of the sash reversed for rear and front sash, the sash opening in opposite directions in such position to enable the tongue 75 of the lock to engage the locking-notch when closed and the ventilating-notch when opened for ventilation.

What I claim as my invention is— 80

1. In a sash-lock, the plate having a central elongated opening extending through the side of the plate, in combination with a locking-tongue lever, pivoted at front end of opening, the handle-arm and handle of the lever 85 extending and working outside the side line of the plate, with a spring interposed between a lever spring-arm and the plate, the lower end of the lever arranged to act as a stop against the plate, substantially as described. 90

2. In a sash-lock, the combination of a face-plate, a locking-tongue lever, operated by hand and spring pressure, pivoted at the upper end, in a central elongated opening extending transversely through the side of the 95 plate, the side ends, severed by the opening, connected by a rear depressed connecting-yoke, or plate, substantially as described.

3. In combination with a sash-lock, having a face-plate, locking-tongue lever, operated 100 by hand and spring pressure, a sash-plate having locking notch or notches provided with holding-flanges P, P', on the ends of the plate, substantially as described.

ROBT. B. HUGUNIN.

Witnesses:

F. E. FULLER,
 WM. WALDO HYDE.