

(No Model.)

U. H. BALCOM.
SASH FASTENER.

No. 524,697.

Patented Aug. 21, 1894.

Fig. 5.

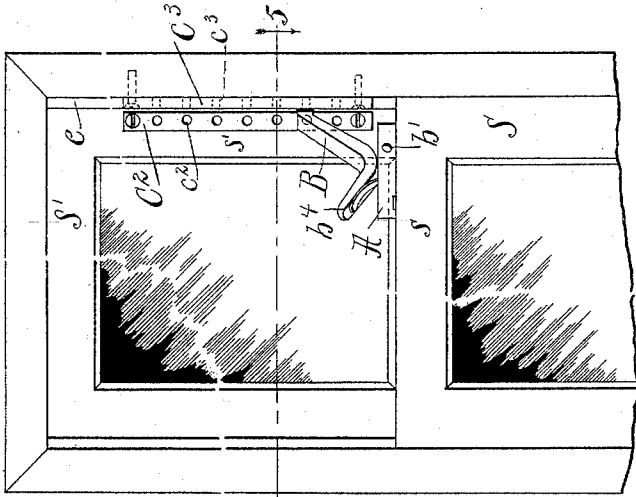


Fig. 6.

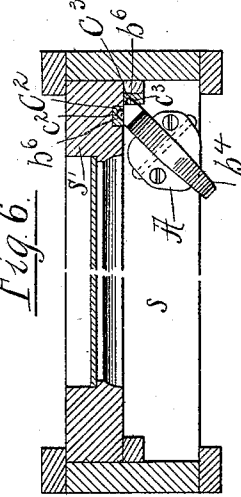


Fig. 3.

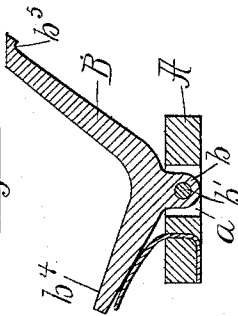


Fig. 4.

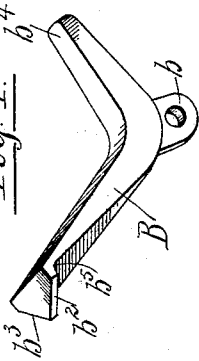


Fig. 1.

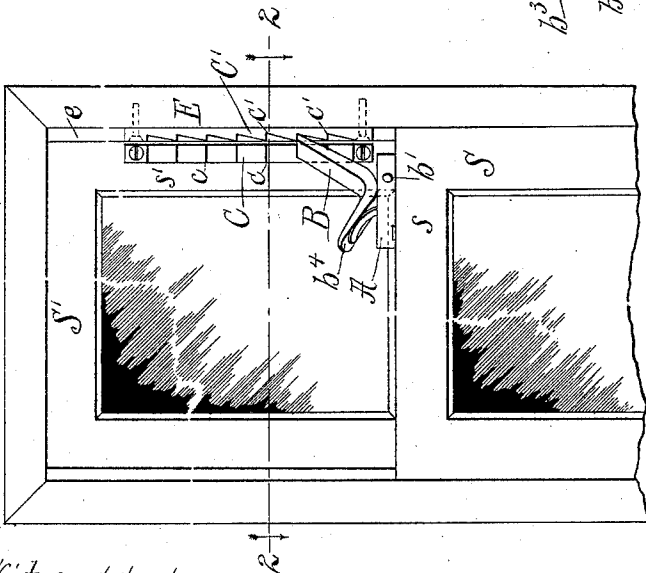
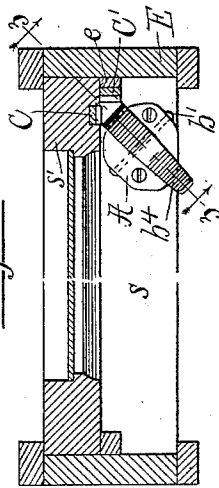


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

URIAH H. BALCOM, OF DOWNER'S GROVE, ILLINOIS.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 524,697, dated August 21, 1894.

Application filed April 18, 1893. Serial No. 470,910. (No model.)

To all whom it may concern:

Be it known that I, URIAH H. BALCOM, a resident of Downer's Grove, in the county of Du Page and State of Illinois, have invented certain new and useful Improvements in Window-Sash Fasteners; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to sash fasteners for windows, of that class embracing a catch or detent by which the sash is held from movement relatively to the frame.

Various devices have been heretofore constructed, some designed to secure the sash against opening when closed, and others designed to adjustably support or secure one sash or the other at various degrees of opening. In the former class of fasteners, when the sash are once partially opened, the lock is useless to prevent the further opening thereof, while in the latter class a fastener must be provided for each sash.

My invention is designed to overcome these objections and combines various features of improvement embracing a fastener of the character described, adapted to lock both sash of the window against opening, and one adapted to lock the sash together when partially open and against further opening with relation to each other and to the window casing.

The invention may be more readily understood by reference to the accompanying drawings, in which are shown two slightly different forms of my invention.

In the drawings: Figure 1 is a front elevation of a window provided with my improved sash fastener. Fig. 2 is a top plan view of the fastener, showing the notched bars or stop plates in section taken on line 2—2 of Fig. 1. Fig. 3 is a vertical section of the fastener taken on the line 3—3 of Fig. 2. Fig. 4 is a perspective view of the pawl or detent shown in Fig. 1. Fig. 5 is a front elevation similar to that shown in Fig. 1, showing a modification of the fastener. Fig. 6 is a top plan view of the modification shown in Fig. 5, showing the apertured bars or stop plates in section taken on line 5—5 of Fig. 5.

Referring to said drawings, Figs. 1 to 4, A indicates the base plate of the fastener, which is adapted to be secured by screws or otherwise on the upper side of the top rail *s* of the inner or lower sash *S*, near one end thereof. To said plate *A* is pivoted an L-shaped pawl or detent *B*, adapted to swing in a vertical plane and having two arms, one of which extends upwardly and forms the pawl proper and the other laterally outwardly to form a finger piece for moving the pawl. As herein shown the pivotal connection of the pawl with the plate is formed by a slot *a* in the central rear portion of the plate, adapted to receive the pivot lug *b* formed on the exterior angle of the pawl or detent, and within which slot said pawl is pivoted by a pin *b'* passing transversely through the plate *A* and through an aperture in said lug *b*. Said base plate is adapted to be firmly secured to said top rail in such position that the pawl *B* shall project into the angle formed where the face of the side rail *s'* of the upper sash *S'* meets the inner side face of the window frame *E* or inner surface of the parting stop *e*, as clearly shown in said drawings. The upper end or arm of said L-shaped pawl is provided with two faces *b²*, *b³* arranged at an angle with each other and adapted to fit into said angle and to engage a series of ratchet teeth or notches *c c'* provided in ratchet bars *C*, *C'* secured, the one bar *C* vertically against the inner face of the side rail *s'* of the upper sash, and the other bar *C'* vertically against the inner face of the parting stop *e* of the window frame. The outwardly extending end of said pawl or detent *B* is suitably shaped to form a thumb-piece *b⁴* for manipulating the pawl, and the latter is held yieldingly against the ratchet plates *C* and *C'* by means of a U-shaped spring *F*, suitably secured to the base plate *A* and exerting its pressure against the under side of the thumb-piece *b⁴*. When the notches or stops *c c'* are formed in a separate strip or plate, as shown in this instance, these plates will be let into and flush with the face of the side rail of the sash and the inner face of the parting stop or window frame, respectively. It is obvious that with this construction either or both sash may be opened to any desired extent and the spring pressed pawl or detent will operate to auto-

5 matically engage the ratchet teeth or notches
 10 *c* and *c'* at any point at which it is desired to
 leave the sash and will thereby prevent the
 farther opening of the window, although it is
 15 obvious that owing to the shape of the said
 ratchet teeth, either sash may be closed with-
 out manipulating the fastener.

10 In order to avoid all possibility of the fastener
 being "picked" by the pawl B being
 15 forced out of the notches *c* by means of a thin
 knife or other instrument introduced between
 the sash from the outside, the under side
 of the pawl beneath the face *b*² is recessed
 20 so as to form an upwardly and inwardly
 inclined face or hooked portion *b*⁵, against
 which any instrument so inserted between the
 sash will strike and thereby tend to force
 the pawl farther into rather than out of the
 notches.

20 In Figs. 4 and 5 I have shown a modification,
 constructed similar in all respects to that
 shown in Figs. 1 to 6, with the exception that
 in place of the plates C C' provided with
 ratchet teeth or notches, are substituted
 25 plates C² and C³ provided with notches or
 recesses *c*² *c*³ having parallel sides, at right
 angles or nearly so with the faces of the
 plates, adapted to receive lugs *b*⁶ *b*⁶ formed
 on each of the two faces of the pawl or detent
 B.

30 The operation of the fastener constructed
 in this manner is exactly like that of the
 former construction, with the exception that
 in this instance the notches or recesses being
 without inclined faces, but on the contrary,
 35 having square shoulders for engagement with
 the lugs or projections *b*⁶ *b*⁶ of the pawl or
 detent, operate to rigidly or immovably lock
 the sash together and to the side of the casing,
 so that it is necessary to actuate the pawl or
 40 detent by pressure of the hand on the thumb-
 piece in order to effect the movement of the
 sash in either direction.

By the foregoing constructions I provide a
 sash fastener which is simple, strong, may be
 cheaply constructed by casting or otherwise
 45 forming from suitable metal, is easily applied,
 and which enables either or both sash to be
 left partially open without rendering the win-
 dow insecure against intrusion.

I claim as my invention—

50 1. A window sash fastener, comprising a
 base plate adapted for attachment to the top
 of the lower sash, a pawl or detent mounted
 on said plate so as to oscillate in a vertical
 plane oblique to the face of the sash and ar-
 55 ranged to project into the angle formed by the
 side casing of the window and the inner face
 of the upper sash, said pawl being provided
 with two similar projections adapted for sim-
 60 ultaneous engagement with notches located
 on the opposite sash and on the side of the
 window casing, and with a thumb-piece by
 which it may be actuated, substantially as set
 forth.

65 2. A window sash fastener, comprising two
 series of ratchet notches, located one on the
 side casing and the other on the inner face of
 the upper sash, a base plate adapted for at-
 70 tachment to the top of the lower sash, and a
 spring-pressed pawl or detent mounted on said
 base plate so as to oscillate in a vertical plane
 oblique to the face of the sash and arranged
 to project into the angle formed by the side
 casing of the window and the inner face of
 75 the upper sash, said pawl being adapted to
 simultaneously engage both of said series of
 ratchet notches, substantially as described.

In testimony that I claim the foregoing as
 my invention I hereto affix my signature in
 presence of two witnesses.

URIAH H. BALCOM.

Witnesses:

CLARENDON B. EYER,
 ALBERT H. GRAVES.