Sept. 6, 1949. A. E. WALTON 2,480,988

WINDOW SASH LOCK

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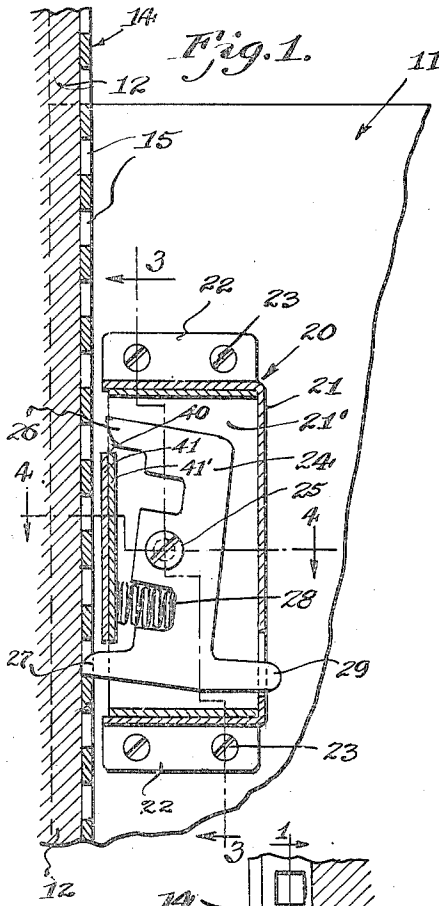

Fig. 1.

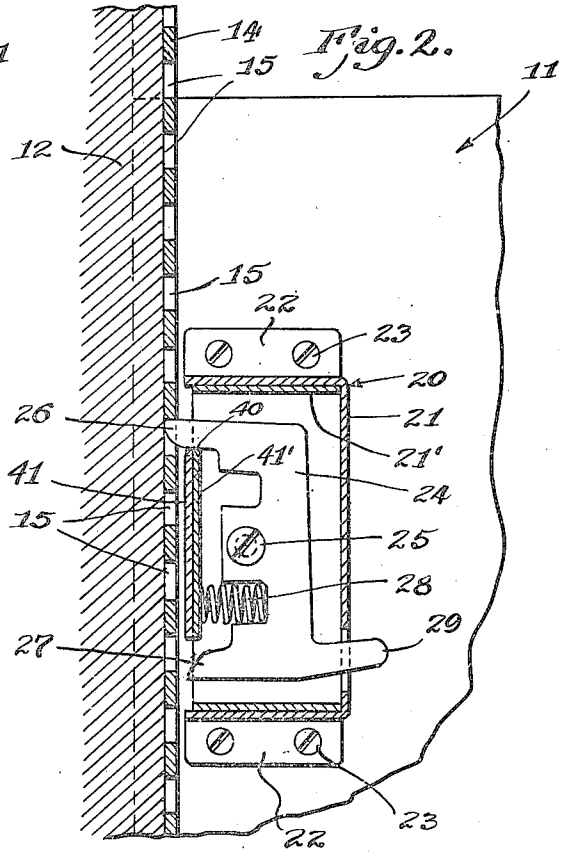

Fig. 2.

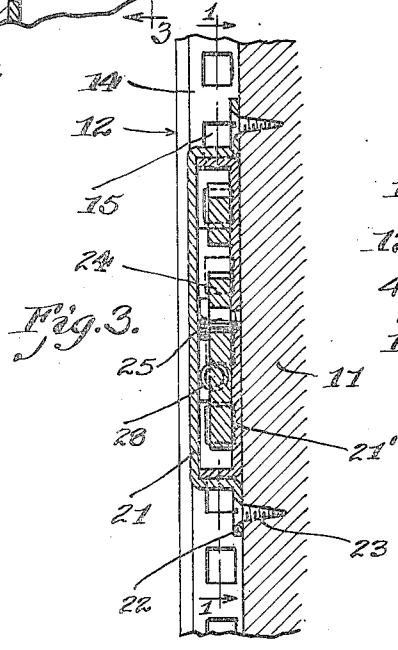

Fig. 3.

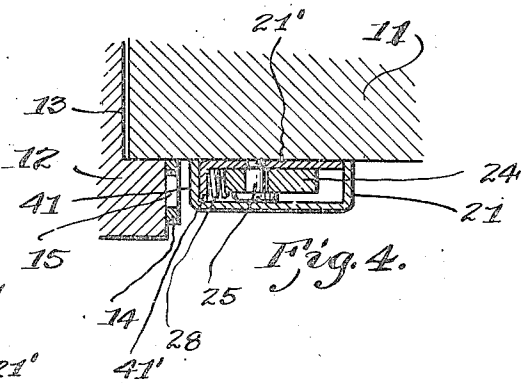

Fig. 4.

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WINDOW SASH LOCK

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3 Claims. (Cl. 292—218)

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My invention relates to a window sash lock and more particularly to one which is operable to support a window sash in a preselected partially raised or fully raised position, and at the same time, is operable to lock same against an unauthorized tampering from without.

Most difficulties with locking devices of this type result from the fact that same are not tamper proof, and thus such window sashes can only be securely locked when closed, or are so fastened as to make it difficult to even unlock same from inside.

An object of the present invention is to provide a window sash fastener which is comparatively simple in construction, but so positive in its action as to securely lock a window sash in any preselected partially raised or closed position in such a way as to make same substantially tamper proof. This is preferably accomplished by using a double acting swinging bolt, so constructed and arranged, as will be hereinafter described in detail, as to provide a window sash fastener of improved characteristics, but very simple to manufacture and apply to a standard window sash structure.

For a more detailed understanding of my invention, reference may be had to the accompanying drawings illustrating a preferred embodiment of the invention in which like parts throughout the several views are designated by like numerals, and in which:

Fig. 1 is an elevational detail sectional view of the window sash fastener showing the lower projection of the swinging bolt in operation to support the window in a raised position and taken substantially on the line 1—1 of Fig. 3,

Fig. 2 is a similar elevational detail sectional view showing the upper projection of the swinging bolt in locking position, and

Figs. 3 and 4 are detailed sectional views of the window sash fastener taken respectively on the lines 3—3 and 4—4 of Fig 1.

The window sash assembly comprises an upper window sash and a lower window sash both of which are vertically slidably supported in a window frame structure 12, said window frame having the usual grooves 13 in which the window sash is guided. A keeper 14 is secured to the window frame, said keeper comprising a metal strip provided with a plurality of vertically aligned substantially equally spaced notches or recesses 15. A suitable spring pressed latch may, if desired, be mounted on said upper sash and locked with the window frame in any suitable manner to lock the upper sash.

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My present invention is concerned primarily with the window sash fastener for locking the lower window sash 11. This fastener comprises a unit assembly 20 secured to the window sash, preferably near the top of same. I may, if desired, employ a pair of such fasteners, one on each side of the said window sash. Since these fasteners are substantially alike, except that one is a right hand and the other a left hand lock, a description of one is sufficient for a clear understanding of the invention.

The fastener comprises a housing constructed of complementary sheet metal stampings 21 and 21', the former having flanged ears 22 secured flush against the face of the window sash as at 23. A double acting swinging bolt 24 is pivotally supported to the housing part 21' by means of a pivot screw 25, and carries an upper bolt projection 26 and a lower bolt projection 27. The upper projection 26 is arranged to engage in one of the notches or recesses 15 as shown in Fig. 2 to lock the lower sash 11 from being raised, a spring 28 acting on said bolt to wedge said upper projection into the notch.

When it is desired to support the window sash 11 in a partially raised or fully raised position, the bolt may be manually actuated through an integral finger 29 to force the lower projection 27 into a notch or recess 15, holding same in while allowing the window sash to lower until its weight loads the bolt sufficiently to hold the projection 27 in the notch against the pressure of the spring 28. This it will do, but as soon as the dead weight load exerted by the window sash on said bolt is relieved, the spring 28 automatically urges the bolt in a counterclockwise direction as viewed in Fig. 2, thus withdrawing projection 27 and urging projection 26 into a notch for preventing the window sash from being raised further. Thus any unauthorized tampering with the window from the outside only releases the bolt so that the upper bolt projection 26 becomes operative.

It will be further noted, when the bolt projection 26 is engaged in a recess, that the underside of said bolt projection is substantially in contact with the edge 40 of the turned up flanges 41 and 41' of the housing structure 21 and 21' respectively. Thus if one were to endeavor to force the lock all strain is carried by the flanges 41—41' and not the pivot screw 25.

The finger 29 is rounded in order to prevent anyone from obtaining a grip on the same with a wire, such as is usually employed by a burglar seeking an unauthorized entrance through a window. The bolt must be pulled down and pressed

into release the bolt projection 26. It is quite apparent that the present novel construction is simple and lends itself to economical construction, and yet becomes a positively actuated fastener which is also very readily assembled to a window sash. Obviously, a similar fastener may, if desired, be employed with the upper window sash.

Although I have illustrated but one form of my invention and have described in detail but a single application thereof, it will be apparent to those skilled in the art to which my invention pertains, that various modifications and changes may be made therein without departing from the spirit of my invention or from the scope of the appended claims.

I claim:

1. A window sash fastener comprising a double acting swinging bolt adapted to be mounted on a window sash for engagement with a keeper member adapted to be mounted on a window frame, said keeper member having a plurality of vertically aligned and substantially equally spaced notches, said double acting swinging bolt having integral upper and lower projections adapted to selectively engage the notches, spring means normally urging said upper projection into a notch to lock said window sash against being raised and means for manually swinging said bolt against said spring loading means to engage said lower projection into a notch to support said window sash in a raised position, the weight of said window sash being sufficient to load said swinging bolt and hold said lower projection in its notch against the force of said spring means, whereupon any unauthorized tampering with said window sash results in relieving the load upon said swinging bolt induced by the weight of said window sash, thereby allowing said spring means to act and force said upper projection into a notch to lock said window sash against being raised.

2. A window sash fastener comprising a double acting swinging bolt adapted to be mounted on a window sash for engagement with a keeper member adapted to be mounted on a window frame, said keeper member having a plurality of vertically aligned and substantially equally spaced notches, a housing for said swinging bolt, said double acting swinging bolt having integral upper and lower projections selectively engaging said notches to respectively lock said window sash against being raised and to support same from lowering, said housing having openings in the side thereof facing said keeper member through which said bolt projections movably project, spring means normally urging said bolt to engage said upper projection in a notch of said keeper member, the under side of said upper bolt projection being supported by the edge of the opening in said housing, and thereby adapted to take all thrust of a force applied to said window sash intended to force the lock.

3. A window sash fastener comprising a double acting swinging bolt adapted to be mounted on a window sash for engagement with a keeper member adapted to be mounted on a window frame, said keeper member having a plurality of vertically aligned and substantially equally spaced notches, a housing for the swinging bolt, the double acting swinging bolt having integral upper and lower projections selectively engaging the notches to respectively lock the window sash against being raised and to support the sash against lowering, spring means normally urging the bolt to engage the upper projection in a notch, the under side of the upper projection being chamferred to allow the sash to be manually lowered, and a rounded finger carried by the bolt opposite the lower projection and extending rearwardly from the housing, the finger being manually actuable to release the upper projection from its notch to permit raising of the window, access to the finger being had only from the indoors side.

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