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2 SHEETS—SHEET 1.

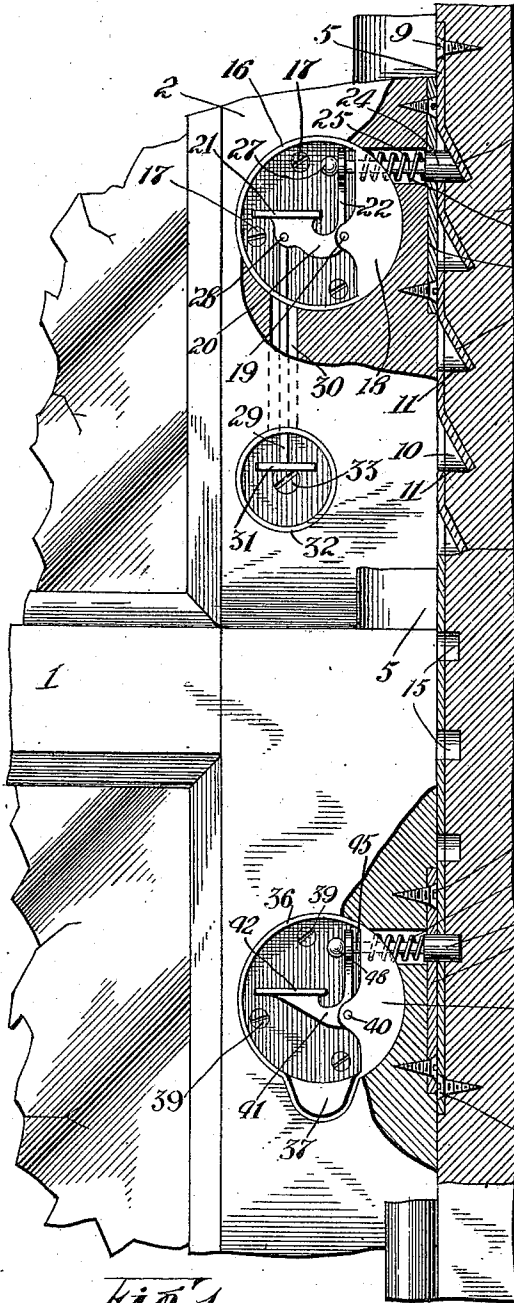


Fig. 1.

Witnesses
 Eugene W. Lacey.
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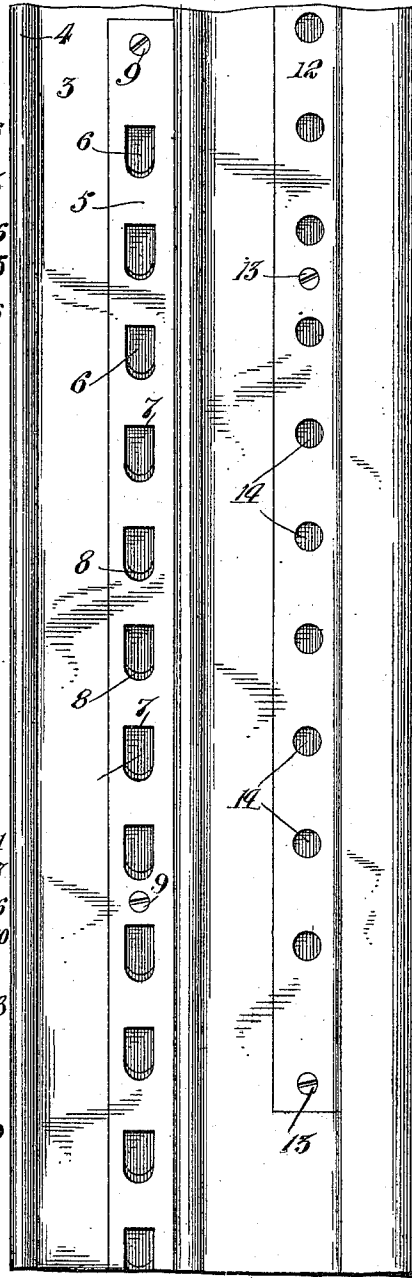


Fig. 2.

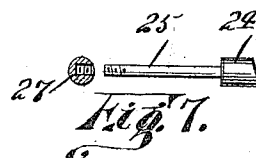
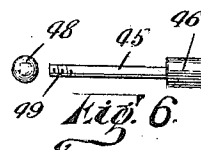
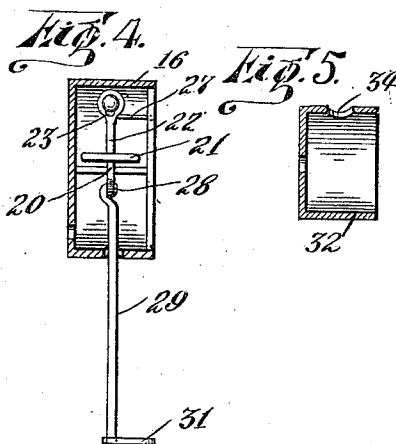
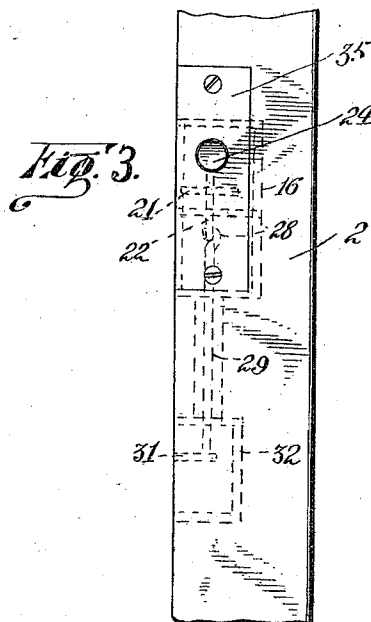
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989,483.

E. BROMBACHER.
SASH LOCK AND LIFT.
APPLICATION FILED JAN. 24, 1910.

Patented Apr. 11, 1911.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

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SASH LOCK AND LIFT.

989,483.

Specification of Letters Patent. Patented Apr. 11, 1911.

Application filed January 24, 1910. Serial No. 539,669.

To all whom it may concern:

Be it known that I, EMIL BROMBACHER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Sash Locks and Lifts, of which the following is a specification.

This invention relates to sash locks and lifts and one of the principal objects of the invention is to provide simple, reliable and efficient means for holding the sash locked at any desirable point of adjustment.

Another object of the invention is to provide a simple and durable lock for window sash, which will not be visible from the outside of the window, thus providing an additional safeguard against tampering with the window sash by unauthorized persons upon the outside of the building.

Still another object of the invention is to provide a lock for upper sash which can be easily operated for supporting said sash at any desired adjustment for providing a ventilating opening at the top of said sash, said lock being capable of operation only upon the inside of the room, and said lock being invisible from the outside.

Another object of the invention is to provide a lock and lift for the lower sash, which will hold said sash at any point of adjustment in the locked condition, the locking means being of simple construction and invisible from the outside of the building.

These and other objects may be attained by means of the construction illustrated in the accompanying drawings in which,

Figure 1 is a front elevation and partial section of a portion of the upper and lower sash and window casing showing the sash locks and lift made in accordance with my invention. Fig. 2 is a view in elevation looking at the guideways for the sash formed in the window casing, said guideways being provided with locking strips made in accordance with my invention. Fig. 3 is a view looking at the upper sash at the point at which the upper lock is secured thereto, portions of said lock being shown in dotted lines. Fig. 4 is a vertical sectional view of the lock for the upper sash. Fig. 5 is a vertical sectional view of the hollow metal casing for the finger-hold for operating the upper sash lock. Fig. 6 is a detail view of the locking bolt for the lower sash. Fig. 7 is a similar view of the locking

bolt for the upper sash. Fig. 8 is a detail view showing one of the springs for projecting the bolt.

Referring to the drawings the numeral 1 designates the lower sash, 2 the upper sash and 3 the window casing provided with the usual outer bead 4 and the parting strip, all of said parts being of the usual or any preferred form. The locking plate 5 for the upper sash comprises a strip of metal having tongues 6 stamped up from the body of the strip, said tongues being connected at the point 7 with the strip and the lower ends of the tongues being rounded as at 8. The plate 5 is set in flush with the inner face of the sash guideway of the window casing and said plate is held in position by means of the screws 9. Coincident recesses 10 are formed in the guideway and the tongues 6 are bent into these recesses, as shown more clearly in Fig. 1, the tongues 6 being disposed each at an incline, as shown in said figure, thus providing a supporting shoulder 11 adjacent to each tongue for the locking bolt for the upper sash.

The guideway for the lower sash is provided with a locking plate 12 secured in a recess flush with the guide way by means of countersunk screws 13. The plate 12 comprises a metal strip provided with a series of perforations in vertical alinement, said perforations being disposed on the window casing in alinement with sockets or recesses 15 in which the lock for the lower sash is adapted to fit.

The lock for the upper sash comprises a circular hollow casing 16 fitted flush in the upper sash at one side thereof, said casing being held in place by means of screws 17. The casing 16 is provided with a face plate 18 which partially covers the casing and pivoted to this face plate at 19 is a lever 20 having a finger-hold 21 which projects at right angles to said lever and which is disposed within the casing 16. Projecting upward from the lever is a shank 22 provided with a slot 23 at its upper end. The locking bolt, provided with the beveled head 24, is disposed in a recess in the edge of the sash and is provided with a reduced shank 25 encircled by a spring 26, one end of which bears against the head 24, while the other end 27 is secured to the sash. Secured to the threaded end of the shank 25 is a ball or keeper 27, which serves to hold the shank 22 formed on the lever 20 in connection with

the locking bolt. Pivotally connected at 28 to the lever 20 is a connecting rod 29 which extends through the casing 16 and through the recess 30 in the sash. On the lower end 5 of the connecting rod 29 is a finger-hold 31 disposed in a cap or casing 32 secured by means of a screw 33 in a recess flush with the inner face of the sash, said cap or casing being provided with a perforation 34 through 10 which the connecting rod 29 extends. The head 24 of the locking bolt for the upper sash extends through a plate 35 secured flush in the edge of the upper sash 2.

The lock for the lower sash comprises a 15 hollow circular casing 36 similar to the casing 16 and provided with a lip or lifting device 37 at the lower edge thereof. This casing is also provided with a face plate 38 which extends over the face of the casing, 20 which casing is secured in the recess in the lower sash by means of screws 39. Pivoted at 40 to the face plate 38 is a lever 41 provided with a thumb hold 42 which projects slightly beyond the outer face of the casing 25 above the lift 37. Projecting from the lever 41 is a shank 43 provided with a slot 44 at its upper end through which the shank 45 of the bolt of the lower sash lock projects. This bolt is provided with a round head 46 and 30 the shank 45 is encircled by a spring 47 similar to the spring 26. A threaded ball or head 48 is fitted to the threaded end 49 of the shank 45 for holding the shank in connection with the slot in the shank 43. The head 46 35 of the bolt extends through a plate 50 secured to the outer edge of the lower sash by means of screws 51.

The operation of my invention may be briefly described as follows: Should it be 40 desired to lower the upper sash to provide a ventilating opening at the top thereof, the finger hold 31 is moved downward and the sash is lowered until the head 24 of the locking bolt comes into coincidence with any one 45 of the recesses 10 in the window casing, when, upon releasing the finger hold the head

24 is projected to rest on one of the shoulders 11 by means of the spring 26. Owing to the bevel of the head 24 the upper sash may be raised without withdrawing the bolt, since 50 it will ride over the inclined portions of the tongues 6. When it is desired to adjust the lower sash the index finger is placed underneath the lift 37 and the thumb is placed upon the thumb-rest 42 and by slight pressure 55 the head 46 of the bolt is withdrawn from one of the recesses 15. When the sash is properly adjusted by releasing the thumb-rest the spring 47 will project the bolt into one of the recesses 15 and hold the sash 60 locked in that position.

From the foregoing it will be obvious that a sash lock and lift made in accordance with my invention, is invisible from the outside of the house, can be easily operated from the 65 inside to hold the upper or lower sash located in any adjusted position.

My invention provides reliable and efficient means for protection against the entry of burglars or other unauthorized persons 70 and at the same time will permit quick and easy adjustment of the sash.

Having thus fully described the invention what is claimed as new is:

A sash lock and lift comprising a circular 75 case fitted into a recess in the sash, a spring projected bolt for engaging recesses in the window casing, a lever pivoted in the case, a connecting rod pivoted to said lever, a finger hold on said connecting rod, a case fitted in 80 the sash for inclosing said finger hold, a knob removably fitted to the end of the sliding bolt for detachably connecting said lever, to said bolt, said lever having a finger hold extending parallel to the finger hold on the 85 connecting rod.

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

EMIL BROMBACHER.

Witnesses:

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