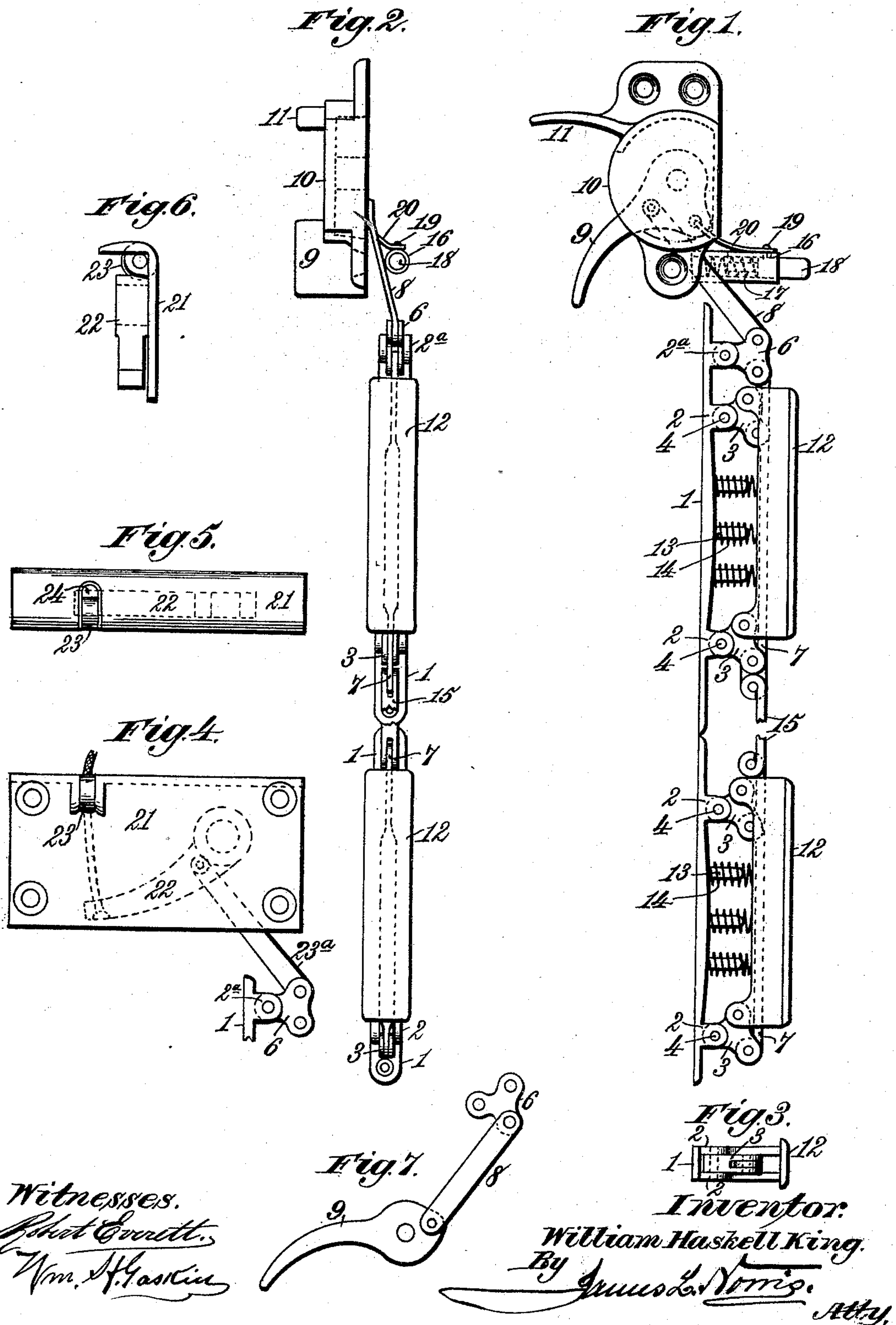


(No Model.)

W. H. KING.  
SASH HOLDER.

No. 497,245.

Patented May 9, 1893.





# UNITED STATES PATENT OFFICE.

WILLIAM HASKELL KING, OF NEW HAVEN, CONNECTICUT.

## SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 497,245, dated May 9, 1893.

Application filed November 11, 1892. Serial No. 451,647. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM HASKELL KING, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented new and useful Improvements in Sash Holders and Locks, of which the following is a specification.

My invention relates to sash holders and sash locks and it has for its object to provide new and useful devices for automatically holding window sashes in any desired position of elevation and which shall prevent rattling of the sash.

My invention also has for its object to provide a novel sash holder and sash lock and mechanism for operating the same simultaneously.

To these ends my invention consists in the features of construction and the combination or arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1, is a vertical side view illustrating a combined sash-holder and lock constructed according to my invention. Fig. 2, is a front elevation thereof. Fig. 3, is an end view. Fig. 4, is a side view, some of the parts being in dotted lines, illustrating a different arrangement of operating mechanism. Fig. 5, is an end elevation, and Fig. 6, is a top plan view of the mechanism shown in Fig. 4. Fig. 7, is a detail view showing a different arrangement of lever and link.

In the said drawings the reference numeral 1 designates a base plate or plates, of which there may be any suitable or necessary number, according to the size of sash to which my invention is applied, and of which two are shown in the drawings. The base plate is formed near its upper and lower ends with lugs or ears 2, provided with pivot openings or eyes.

The numeral 3, represents a three cornered plate substantially triangular in shape and which is provided with pivot holes or eyes at each of its three corners. These plates 3 are respectively, pivotally secured to the lugs 2 by a pivot pin 4, passing through the holes or eyes in said lugs and through a like hole in one corner of the plates 3, so that said plates are capable of rocking or oscillating on said pins 4. At one end of the base plate 1, are

formed ears or lugs 2<sup>a</sup> having pivot holes or eyes, and pivoted at one corner thereto so as to be capable of rocking or oscillating is a plate 6 in all respects like the plates 3, just described.

Secured to the corners of the three cornered or triangular plates 3 farthestmost from the operating mechanism hereinafter described is a connecting bar or lever 7, one end of which is also secured to the corresponding corner of the triangular plate 6, to the other corner of which plate is connected one end of a link 8 the other end of which is attached to an operating lever 9, pivotally mounted in a casing 10, which is adapted to be secured in any suitable manner to the side rail or other part of a window sash, and which is provided with an extension or finger-rest 11, against which the operator may place his finger or thumb to facilitate manipulating the lever 9.

The reference numeral 12 indicates a plunger or pad which is formed at both its ends with lugs or ears provided with pin or bolt holes and which is connected to the rocking plates 3, as shown. This plunger or pad may be constructed of metal or any other suitable material and is of the cross-sectional configuration shown in Fig. 3, and is provided with a guide way in which the connecting bar or lever 7 is adapted to move.

Formed upon the base plate 1, are a suitable number of pins or projections 13, which are surrounded by spiral or other springs 14, which bear at one end against the said base plate and at the other end against the plunger or pad 12, forcing the same normally outward and in frictional contact with the window jamb. The operation of this portion of my invention will be readily understood upon reference to the drawings. The parts being in the position shown in Fig. 1, when the lever 9 is drawn in the proper direction the plates 6 and 3 are rocked or oscillated in the arc of a circle through the medium of the link 8, and the connecting rod or lever 7, and the plunger or pad 12 carried by said plates 3, is moved vertically and laterally out of contact with the window jamb when the window may be adjusted to any desired elevation, and upon release of the lever 9, the said plunger or pad 12 is thrown outward into engagement with the window jamb by means of the springs



14, and the window sash thus held in its adjusted position and all rattling thereof prevented.

As stated hereinbefore, and as shown in the drawings, more than one base plate 1, and other described parts may be used where found useful or necessary, in which case the connecting rods or levers 7, are coupled together by a coupling link 15 in any convenient manner, and in this case it will be understood that only one triangular rocking plate 6, need be used; or in fact this plate 6, may, if desired, be omitted in all instances, the link 8, in such event being connected to that corner of one of the rocking plates 3 to which the plunger or pad 12, is attached.

In practice the window sash to which my improved holder is to be applied is provided in its side rail with a longitudinal channel in which the base plate or plates 1, and attached mechanism are entirely disposed being secured therein by screws or other fastening devices. In this manner the entire mechanism with the exception of the lever 9 and the casing in which it is mounted is concealed from view.

In connection with the sash holder described, I may provide a sash lock which is operated simultaneously with and by the movement of the same lever which operates the holder mechanism.

Located in a cylindrical recess formed in the window sash in proximity to the lever casing is a tubular case 16, provided with a longitudinal slot and situated in said case is a spring 17, and a sliding bolt 18, to the rear end of which is secured a pin or bolt 19, which extends through the slot in the casing and is connected to one end of an arm 20, the other end of which is attached to the lever 9, so that when said lever is moved to draw the plunger or plungers 12 away from the window jamb, the said sliding bolt is simultaneously and by the same movement of the lever withdrawn from its locking engagement with recesses formed therefor in said jamb.

Referring now to Figs. 4, 5 and 6, wherein I have illustrated a different arrangement of mechanism for operating the plungers 12, and which is more particularly adapted for carriage or other similar windows, the reference numeral 21 designates a casing designed to be secured to the top of the sash and which may be set in flush with the surface thereof. Pivotaly mounted in bearings formed therefor in said casing, is a lever 22, to the free end of which is secured a cord or other suitable device, which passes over a pulley or sheave 23, turning in bearings provided therefor in the casing 21, and down through an opening 24 in said casing to within reach of the operator's hand. Connected at one end to the lever 22, is a link 23<sup>a</sup> in all respects like the link 8 hereinbefore described and connected at its other end to the rocking plates 6, in a manner like the connection of said link 8.

By providing this different arrangement of manipulating mechanism the entire mechanism is concealed from view with the exception of the plate 21 which may be polished in a suitable manner to present an agreeable appearance. As hereinbefore described, my improved apparatus is arranged particularly for use in connection with windows which open downward, and the lever operating mechanism is designed to be located at or near the top of the window sash. It is evident, however, that my invention is equally adapted for use in connection with windows which open upwardly and when used with this class of windows I prefer to locate the lever operating mechanism at or near the bottom of the window sash and to form the lever 9 as shown in Fig. 7, and to connect the link 8 to said lever as shown in said figure. It is evident, however, that the lever operating mechanism may be located in various operating positions with relation to the other parts of my invention and to the window sash, and I desire to be understood as not limiting my invention to any particular location or arrangement of the lever operating mechanism.

Having thus described my invention, what I claim is—

1. The combination with a spring-pressed plunger or pad 12, of a pivoted rocking plate 3 located at each end portion of the plunger or pad and pivoted thereto so that both ends of the plunger or pad move uniformly, an operating lever, and connections between said lever and one of said rocking plates, substantially as described.

2. In a window sash holder, the combination with a base plate 1, of a rocking plate 3 pivoted to each end portion of the base plate, a plunger or pad 12 pivoted to each rocking plate, a rod 7 connecting the said rocking plates, a spring interposed between the plunger or pad and the base plate and acting to normally press the plunger or pad outwardly, a pivoted lever, a link pivotally connected with the lever, and connections between the link and the said rod, substantially as described.

3. In a combined window sash and lock, the combination with a plurality of base plates, of rocking plates pivotally supported by said base plates, pads or plungers carried by said rocking plates, rods connected to said rocking plates, a link connecting said rods, a pivoted lever, and connections between said lever and one of said rods, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

WILLIAM HASKELL KING. [L. S.]

Witnesses:

CHARLES A. CHAMBERLIN,  
HENRY O. JACOBUS.