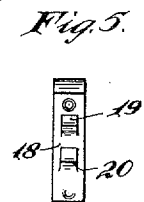
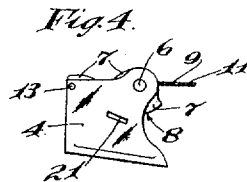
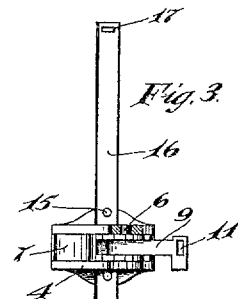
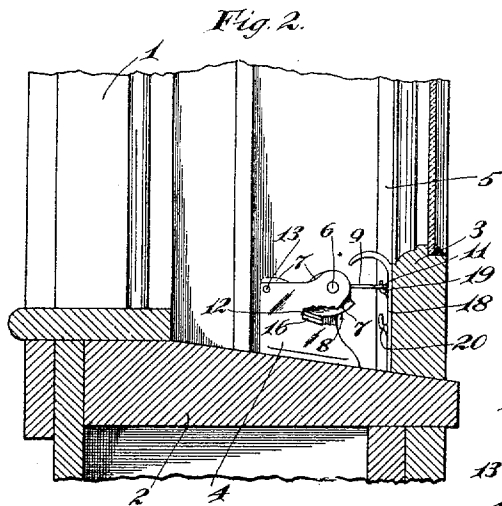
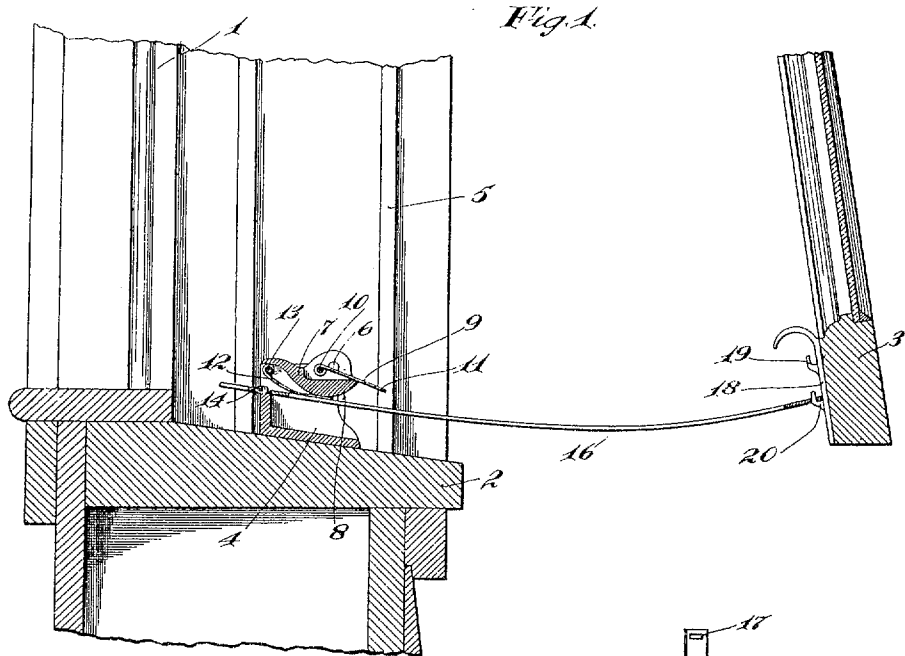


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STORM SASH HOLDER.
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Patented Aug. 9, 1910.



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TO J. J. LEE, OF MINNEAPOLIS, MINNESOTA.

STORM-SASH HOLDER.

966,930.

Specification of Letters Patent.

Patented Aug. 9, 1910.

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To all whom it may concern:

Be it known that I, JOHN B. LEE, Jr., a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Storm-Sash Holders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide a simple and highly efficient storm sash holder or fastener and, to this end, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

Hitherto, devices have been provided which will securely hold storm sash in closed positions, but, so far as I am aware, no satisfactory device has been provided which will securely hold a storm sash in an open position and prevent rattling thereof or even danger of the sash being blown from its hinges. The annoyance produced by the rattling of an open storm sash secured by the customary hook rod and eye has generally been so great that storm sash are seldom left open at night, although this is highly desirable, especially in sleeping rooms, for the purpose of ventilation. Furthermore, in many buildings, such as flats, hotels and apartment houses, which are usually built close to the street, many personal accidents have been caused by the blowing of open storm sash from their hinges, which hinges are customarily of the separable type applied to the upper edges of the sash.

My invention provides an extremely simple and highly efficient device by means of which storm sash may be securely locked in closed positions and, furthermore, may be securely held in open positions without possibility of rattling under the action of the wind and without danger of the sash being blown from its hinges.

The invention is illustrated in the accompanying drawings wherein like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a view in vertical section, showing the lower

portions of a window frame and storm sash and showing the latter held in an open position by one of my improved holders; Fig. 2 is a view corresponding to Fig. 1, but showing the storm sash locked in a closed position; Fig. 3 is a plan view of the improved holder, some parts being broken away; Fig. 4 is a side elevation of the holder; and Fig. 5 is a detail in elevation, showing a combined finger piece and lock clip which is applied to the lower portion of the storm sash.

The numeral 1 indicates an ordinary window frame having the customary sill 2, and the numeral 3 indicates the storm sash which, in the present instance, will be assumed to be hung on hinges applied to the upper edge thereof. In applying my improved holder to the storm sash hung in this manner, the base member 4 of the device is rigidly secured, by screws or otherwise, to the window sill 2 just inward of the plane of the stop strips 5 against which the storm sash 3 is seated when closed. This base member 4 is, as shown, in the form of a bifurcated bracket and, located between and pivotally connected at 6 to the sides thereof, is a lock lever 7 provided with a cam or eccentric portion 8. The body of the lock lever 7 is also preferably bifurcated to form laterally spaced lugs to which a short lock bar 9 is pivotally connected at one end by a pin 10, which pin is eccentric to the lever pivot 6. At its free end, the lock bar 9 is provided with a perforated head 11. The cam surface 8 of the lock lever 7 is engageable with the free end portion of a spring presser plate 12 shown as attached at one end to a pin 13 which, in turn, is secured to the sides of the base bracket 4. This pin 13 serves as a stop to limit the movement of the lock lever 7, as is shown in Fig. 1. Below the pin 13, the inner transverse web of the anchor bracket 4 is provided with an anchoring pin 14 that is adapted to engage with any one of a series of perforations 15 formed in a relatively long lock bar 16. This long lock bar 16 is preferably made of spring metal and, at its outer end, it is provided with a perforation or lug seat 17.

Secured on the inner surface of the lower bar of the storm sash 3 is a small metallic

clip or plate 18, the upper end of which, as shown, serves as a finger piece. This clip 18 is preferably provided with upper and lower hook lugs 19 and 20, respectively.

5 When the storm sash is closed, the perforated head 11 of the short lock bar 9 is adapted to be engaged with the upper hook lug 19, (when the lock lever 7 is moved pivotally toward the right in respect to Fig. 1), and when the said lock lever is moved
10 back into the positions shown in Figs. 1 and 2, the storm sash will be tightly drawn and securely locked in its closed position. By reference particularly to Figs. 1 and 2, it
15 will be noted that, when the lock lever 7 is moved in its extreme position toward the left, the pin 10 is moved below a dead center in respect to the lever pivot 6 and the upper hook lug 19, so that the said lever will tend
20 to remain in its locking position.

When it is desired to secure the storm sash in an open position, the seat 17 at the outer end of the long spring bar 16 is engaged, preferably, with the lower hook lug 20, and
25 one of the perforations 15 thereof is engaged with the anchor pin 14 of the anchor bracket 4. This should preferably be done while the lever 7 is turned toward the right or into an inverted position in respect to that shown in
30 Fig. 1, and when the said lever is then turned back to its position shown in Fig. 1, its cam portion 8, acting on the spring plate 12, will press the latter downward against the bar 16, thereby producing a considerable
35 bend in the said bar and a very considerable downward pressure thereof which insures a safe engagement between the outer end of the said bar and the engaged hook 20. This
40 spring action of the bar 16 and the downward pressure thereof takes up all play between the several parts, and prevents rattling as well as accidental disengagement between the bar and the open storm sash.

When the long bar 16 is out of use, it is
45 adapted to be inserted through a transverse seat 21 formed in the sides of the anchoring bracket 4 and, when the said bar is thus held, it will occupy a position which will not interfere with the customary window sash and
50 the movements thereof.

This device, while herein designated as a storm sash holder or fastener, is, as is evident, capable of use generally for holding
55 swinging window devices or even doors, for that matter, and would be especially serviceable for use in connection with window blinds. When applied to a sash or a blind mounted on side hinges, the device should, of course, be applied to one side of the
60 window frame and to one side of such sash or blind. Attention is further called to the fact that the spring bar, when bent downward, exerts a yielding downward pull on

the open storm sash and serves efficiently to hold in engagement and against rattling the
65 cooperating members of the separable hinges applied in the customary way to support a storm sash from its upper edge. When greater downward pressure is desired than
70 is produced by engagement of the outer end of the spring bar 16 with the lower hook lug 20, this may be obtained by engaging the outer end of said bar 16 with the upper hook lug 19.

What I claim is:

1. The combination with a swinging sash
75 or similar device and a relatively fixed support of an anchor bracket secured to said support, a bar adapted to have interlocking engagement with said anchor bracket and
80 with a part carried by said sash, and a device applied to said anchor bracket for depressing the intermediate portion of said bar and for holding the same interlocked with the cooperating engaged parts, sub-
85 stantially as described.

2. A device of the kind described comprising a base bracket adapted for attachment to a window frame, a cam lever pivoted to said bracket, and a holding bar having interlock-
90 ing engagement with said bracket and adapted for connection to the window sash, the said cam lever serving to hold said bar interlocked with said bracket, substantially
95 as described.

3. The combination with a window sash or similar device and a relatively fixed support, of an anchor bracket secured to said support and provided with a bar support-
100 ing ledge and anchor pin, a hook lug on said sash, a spring bar having a perforation at its outer end adapted to engage said hook lug and having perforations at its inner end portion engageable with said anchor pin,
105 and a cam lever pivoted to said anchor bracket and operative on said spring bar to depress the intermediate portion thereof and to hold the same interlocked with said hook lug and anchor pin, substantially as de-
110 scribed.

4. In a device of the kind described comprising a base bracket, a bar adapted to have interlocking engagement with said base bracket, a yielding presser plate attached to
115 said bracket and directly engageable with said bar and a cam lever pivoted to said base bracket and directly engageable with said presser plate, substantially as described.

5. The combination with a swinging sash or similar device and a fixed support, of an
120 anchor bracket secured to said support and provided with a bearing ledge with projecting anchor pin, a cam lever pivoted to said anchor bracket, a relatively short lock bar eccentrically attached to said cam lever and
125 adapted to have interlocking engagement

with a part on said sash for securing said
sash in a closed position, and a relatively
long spring bar engageable with said anchor
pin, engaged by said cam lever and adapted
5 to have interlocking engagement with a part
on said sash for securing the same in an open
position, substantially as described.

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

JOHN B. LEE, JR.

Witnesses:

HARRY D. KILGORE,

FRANK D. MERCHANT.