

(No Model.)

M. C. HARGRAVE.

SASH HOLDER.

No. 345,050.

Patented July 6, 1886.

Fig. 1.

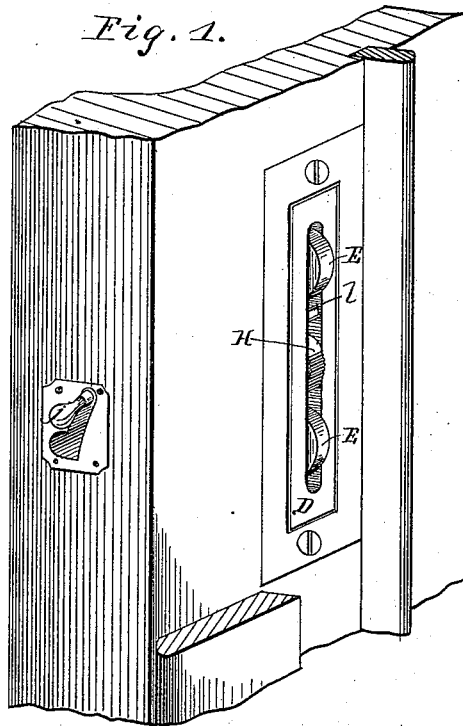


Fig. 2.

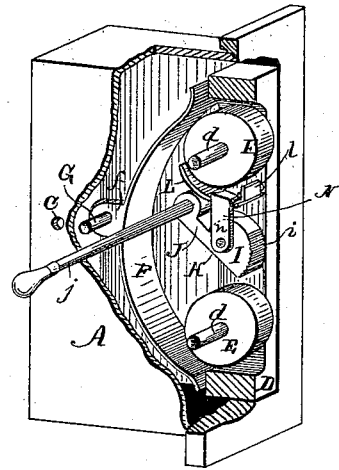


Fig. 3.

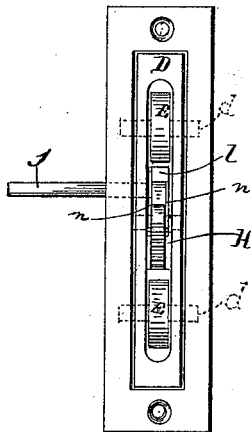


Fig. 4.

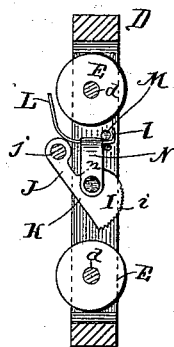
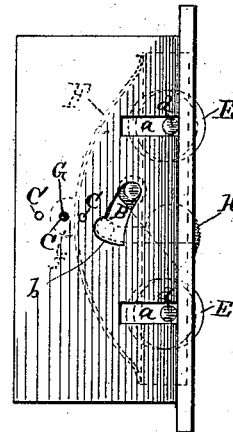


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 345,050, dated July 6, 1886.

Application filed December 24, 1885. Serial No. 186,654. (No model.)

To all whom it may concern:

Be it known that I, MOSES C. HARGRAVE, of Wilmington, in the county of New Hanover and State of North Carolina, have invented a new and useful Improvement in Sash-Holders, of which the following is a description.

Referring to the accompanying drawings, Figure 1 is a perspective view showing my device in place in a part of a window-casing. Fig. 2 is a perspective view of the device removed, part of its case being broken away to show the inner parts. Fig. 3 is a front view of the device. Fig. 4 is a side elevation of the carrier, the side being partially broken away to show the working parts, and Fig. 5 is a side elevation of the device with dotted lines to show parts when positions are changed.

The invention relates to that class of sash-holders in which spring-actuated pulleys are employed to bear against the edge of the sash as a substitute for the cords and weights.

The invention has for an object to combine with said pressure-pulleys a lock which can be conveniently manipulated to secure the sash, and to arrange such lock in the immediate carrier of the pulleys in such manner as to present no obstruction to the working thereof when the sash is unlocked.

It has for further objects other improvements, as will be explained.

The invention consists in certain novel constructions and combinations of parts, as will be hereinafter described.

The outer or main case A is formed somewhat similar to the cases now commonly used for the guide-pulleys used in connection with balance-weights. In the sides of this case A, I form parallel slots *a* and a curved or segmental slot, B. I also provide the case with a series of holes, C, for the purposes hereinafter explained. The carrier D is fitted and movable within the case A, and is provided with pins or studs *d*, which extend through the slots *a*, and serve to guide the movement of the carrier as well as to limit the extent of such movement. These studs *d* are preferably the extended ends of the axles of rollers E, the peripheries of which project beyond the face of the carrier and the case. A spring, F, is connected with the case and bears against the inner side of the carrier, giving the latter

an outward tension. This spring is preferably, as shown in the present instance, a curved bar-spring having its ends bearing against the inner side of the carrier at the ends thereof, for which purpose the carrier is formed solid for a considerable distance from its ends to form bearings for the spring. At its middle portion the spring is provided with ears *f*, projected rearwardly from its opposite sides, and having openings for the bolt G, which is passed through one opening C in the casing A, thence through openings *f* and the opposite opening C, securing the spring to the case. By adjusting the bolt into different pairs of openings C the spring may be caused to bear with greater or less tension on the carrier, and when the spring by use in one position has become partially relaxed or weakened, the bolt may be adjusted nearer to the carrier.

In operation the pulleys bearing against the edge of the sash by the pressure so exerted will hold the sash in any position to which it may be adjusted and yet permit it to be easily moved up or down, as desired. The carrier is also provided with a lock, H, by which to fasten the sash. This lock is substantially a lever pivoted between its ends midway the rollers E, and having a head, I, at one end and a handle, J, at the opposite end. The head I has a curved bearing-face, *i*, usually serrated, as shown, and such face is curved eccentrically to the pivot of the lock. At or near its extremity the handle J is provided with a lateral stem, which projects through the slot B. By this stem the lock may be adjusted into and out of engagement with the sash. When adjusted completely out of engagement with the sash, the lock will lie below the bearing-line of the rollers. When turned outward, the head I will engage the edge of the sash, and any effort to move the sash will only bind the lock more firmly thereagainst. The slot B, through which the stem *j* passes, is made sufficiently wide to permit the lateral movement of such stem in the movements of the carrier. At its end *b*, which, for convenience of reference I term its "rear end," the slot is extended to permit the inward movement of the stem when the head is pressed against the sash.

In order to prevent the lock-handle from striking the roller when such lock is adjusted

out of engagement with the sash, I employ the stop-plate L, which projects partly over the inner face of the roller, as shown. This plate is preferably provided with an extension, l, fitting around a cross-pin, M, and is supported on the crown of a bail or staple, N, the arms n of which are supported on the pivotal pin of the lever-lock.

In the use of my invention the case and contents are placed in the sash-channel of the window-case at a point at or nearly opposite the meeting-rail of the sash, and the stem of the lever-handle extends into the room through a slot, K, formed in the window-casing, said slot being curved concentrically with slot a to permit the movement of the stem necessary to adjust the lock into and out of engagement with the sash.

It is usual to employ two holders with each sash; but only one of such holders is provided with a lock.

The invention is much easier applied than the pulley and weight commonly used, can be used with any ordinary window-frame, and, in addition to supporting the sash at any desired point, prevents all rattling of the sash in the frame.

Having thus described my invention, what I claim as new, is---

1. In a sash-holder, the combination of a carrier provided with rollers, a spring supporting said carrier, and a lever-lock adjustable into engagement with the sash and supported in the carrier, whereby when the lock

is engaged with the sash the rollers will be held clear thereof, substantially as set forth.

2. A sash-holder comprising a carrier, rollers therein, a lever-lock, a stop-plate, L, having an extension, l, a bail or staple, N, and a spring engaging the carrier, substantially as set forth.

3. In a sash-holder, the combination of the case having a series of holes, C, the carrier, the bar-spring having its ends engaging said carrier, and the bolt connected centrally with said spring and adjustable into any desired pair of holes C, substantially as set forth.

4. In a sash-holder, the combination of the casing having a curved slot, b, the spring-actuated carrier provided with rollers, and the lever-lock having a curved head, I, and handle J, and a stem, j, connected with said handle and projecting through the slot B, substantially as set forth.

5. The improved sash-holder consisting of the casing having curved slot B and parallel slots a, and provided with a series of holes, C, the carrier having bearing-rollers and provided with lateral studs projected into slots a, the lever-lock having a head, I, curved at i eccentrically to its pivot, and provided with a handle, J, the stem j, extended from said handle through slot B, the stop-plate L, and the support N therefor, all arranged and operating substantially as set forth.

MOSES C. HARGRAVE.

Witnesses:

J. HAAR,
C. A. KING.