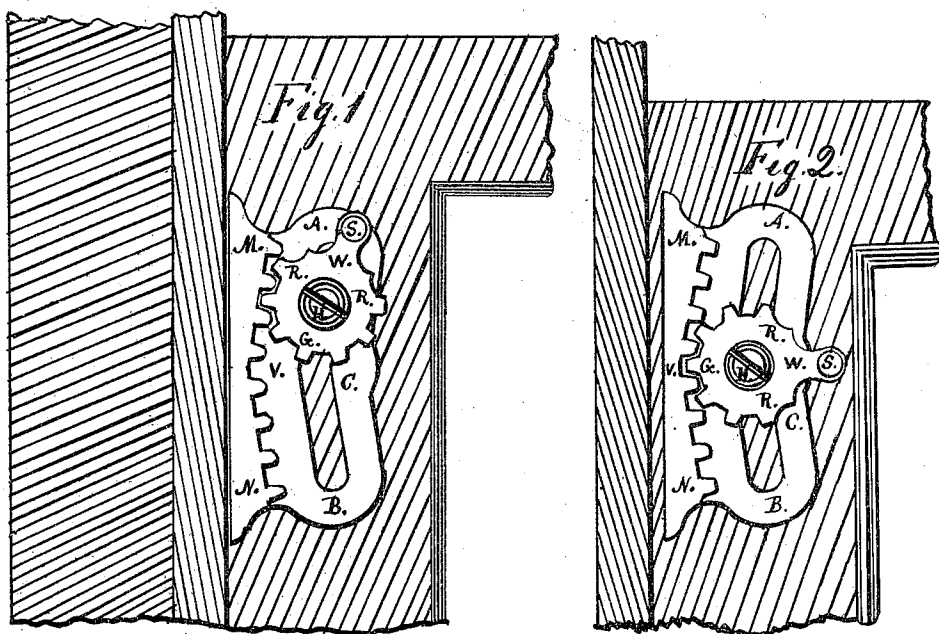


T. WEAVER.
Sash-Holders.

No. 141,904.

Patented August 19, 1873.



Witnesses:
Jno. B. Nicholas.
Geo. J. Nicholas.

Inventor:
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UNITED STATES PATENT OFFICE.

THEOPHILUS WEAVER, OF HARRISBURG, PENNSYLVANIA, ASSIGNOR TO
HENRY C. DEMING, OF SAME PLACE.

IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. **141,904**, dated August 19, 1873; application filed
April 28, 1873.

To all whom it may concern:

Be it known that I, THEOPHILUS WEAVER, of the city of Harrisburg, county of Dauphin and State of Pennsylvania, have invented an Improved Sash-Holder, of which the following is a specification:

My improved sash-holder consists of two parts—namely, a rotating lever provided with a handle and a sliding double-inclined plate, the crown or round part of the lever being toothed to register in the two-way inclined toothed rack on the plate, and the lever being held imposed on the plate by a screw, which serves as the fulcrum for the lever. The object of my invention is to provide a self-acting lock when the sash is down, a support at any desired point when it is raised or lowered, and a means to facilitate the disengagement of the parts.

In the accompanying drawings, Figure 1 is a front view of the holder as applied to the sash in position to hold the sash closed. Fig. 2 is also a front elevation of the holder in position on the sash in the act of disengagement.

In the Figs. 1 and 2, M N is the double-inclined track or graded bench on the side of the plate A C B V, and W G is the rotating lever, its crown R G R being toothed, and its tail-piece W having the knob S thereon. The plate A C B V is made in form, as shown, with an attached bar, C, whose inner edge is inclined toward the center of the plate, or parallel to the pitch of the double-inclined rack M N, which is made, in relation to the lever-crown, to have an up grade both ways from the middle V to its ends, and is equally and regularly subdivided from its middle into teeth, which are an even number, as eight, while the lever-crown is likewise subdivided into the next lower odd number of teeth, as seven, so that the middle tooth on the lever may mesh into the middle space on the rack, and that the inclines of the rack will be stepped over by a partial revolution of the lever-crown both ways. The bar C is made in such proximity to the rack M N and the diameter of the lever-crown is such that, when the pivot or screw H is inserted to connect the parts on the sash-rail, the teeth will remain meshed in all positions to which the plate may be shifted by the tail-piece W.

The plate A C B V may be cut away between the attached bar C and rack M N, except a portion to keep the gears in their planes, for the action of the lever-crown on the rack is from the pivot H as a fulcrum in shifting and holding the plate, the bar C acting only to retain it in reach of the teeth. When the plate is cut in double-inclined slots, as shown, the slot must be such as to free its side next the rack from the screw or pivot H, thus allowing the lever-crown to receive the action of the rack upon it. The lever-crown ends both ways in dents R R, which serve as stops on the ends of the rack, and the cut in the plate A C B V is also made to stop the rack against the screw-shank H at the same limit. The lever sides from R are converged to form the tail-piece W, on which is formed a knob, whereby it may be manipulated.

When the lever tail-piece is directed as shown in Fig. 2, the rack-plate is withdrawn, so that its straight edge is free from the window-bead. Held thus the sash may be raised, or if left free it may be lowered. The weight of the rack will act to bring the parts from the position shown in Fig. 2 to that shown in Fig. 1, which is the position of a locked or closed sash. It is therefore a self-acting lock for the lower sash. To support or stop the sash at any desired elevation the holder is disengaged, as shown in position in Fig. 2, and held disengaged until the sash is at the desired elevation, and is then clamped moderately by depressing the handle W and allowing the weight of the sash to move the lever-crown to the point of full impact. To fasten the upper sash up the handle W must be pressed down firmly.

The difference between my device and simply inclined slotted plates on stiles or compensating wedge-blocks pivoted together, consists in its having less friction in the compensating part, while the impact on the window-bead is not less. It has, therefore, a surface-friction instead of an anti-friction pivot. The disengagement of the parts from the state of impact is also less difficult, not only in the same ratio, but by the leverage which may be used as recited. Moreover, my device saves marring the bead, as the friction on the wood is so much greater than that about the pivot that

the travel is at once removed or stopped on the wood and transferred to the lever-crown and sash by slight compression.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A sash-holder, consisting of the double-inclined toothed rack M N and the slotted plate A C B V in one piece, and the rotating lever

W G provided with the toothed crown R G R and handle W S, all constructed, arranged, and operating as shown and described, and for the purpose set forth.

THEOPHILUS WEAVER.

Witnesses:

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