

2 Sheets—Sheet 1.

No. 556,858.

Patented Mar. 24, 1896.



INVENTOR.

Oscar Maher,
BY Edgar Tate & Co
ATTORNEYS,

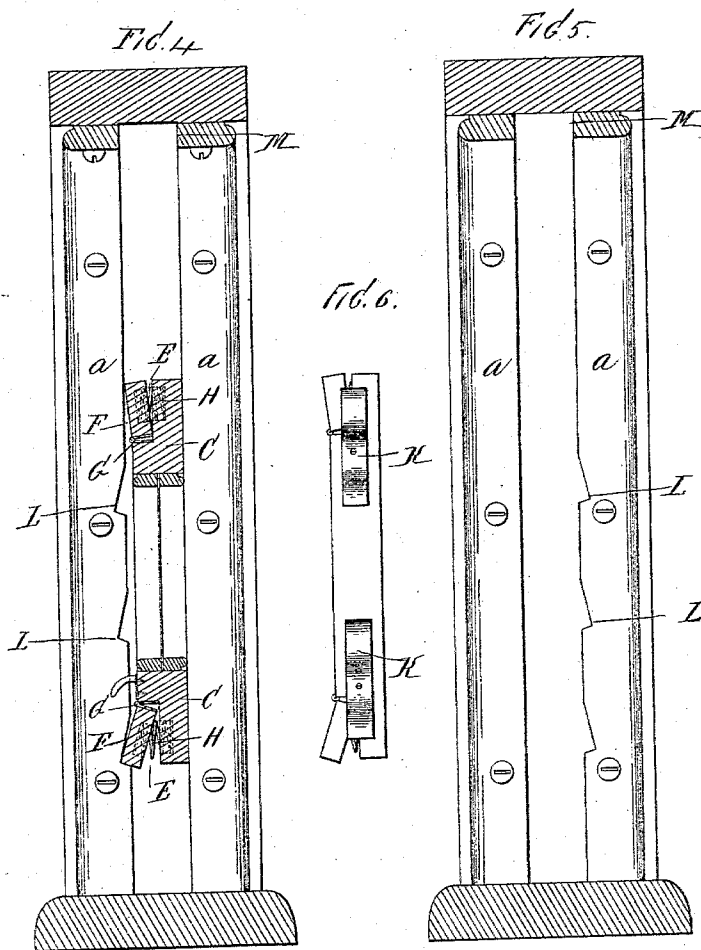
(No Model.)

2 Sheets—Sheet 2.

O. MAHER.
SASH HOLDER.

No. 556,858.

Patented Mar. 24, 1896.



WITNESSES.

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UNITED STATES PATENT OFFICE.

OSCAR MAHER, OF DURANGO, COLORADO, ASSIGNOR OF ONE-HALF TO E. D. MORGAN AND T. F. BURGESS, OF SAME PLACE.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 556,858, dated March 24, 1896.

Application filed August 3, 1895. Serial No. 558,081. (No model.)

To all whom it may concern:

Be it known that I, OSCAR MAHER, a citizen of the United States, and a resident of Durango, in the county of La Plata and State of Colorado, have invented certain new and useful Improvements in Locks or Supports for Windows, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to locks or supports for windows or window-sashes, and particularly for the sashes of car-windows, steam-vessels, &c., though, as will hereinafter appear, my invention is applicable to the windows of dwellings or other buildings of various kinds and classes.

The object of the invention is to provide a construction by which a window-sash may be supported at any desired point or at any predetermined number of points by means of a spring-operated attachment which operates in connection with notches or recesses formed in the beads or guide-strips of the window-frame; and with this and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a front view of a window-sash provided with my improvement; Fig. 2, a section thereof on the line 2 2, looking in the direction of the arrow *a*; Fig. 3, a similar section looking in the direction of the arrow *a*², showing the window-sash in position and the parts thereof broken away; Fig. 4, a section on the line 4 4, looking in the direction of the arrow *b*; Fig. 5, a section on the same line, looking in the direction of the arrow *b*², with the window-sash removed; and Fig. 6, an end or edge view of the window-sash.

Referring to the drawings, A A designate the sides, and B B the top and bottom, of a window-frame, and *a a* represent the beads or strips connected with the inner surfaces of the sides of the frame within which the window-sash is placed and between which it moves, and *b b* the beads or strips connected

with the top of the frame, which correspond with the side strips *a a*.

In the practice of my invention I employ a window-sash C, in which is placed a window D, and formed in the inner upper portion of the sash and the inner lower portion are longitudinal rectangular slots E, in which are hinged rectangular strips F, which correspond in form in cross-section with the form of the slots E, said strips being hinged at their inner edges, as shown at G, to the sash C.

In the inner surfaces of the hinged strips F are formed circular cavities, and corresponding circular cavities are formed in the adjacent surfaces of the sash C, and within these cavities are placed spiral springs H, which operate to throw outward the hinged strips F, as clearly shown in Fig. 4.

It will be observed that the sash C is somewhat narrower than the space between the beads or strips *a*, as shown in said Fig. 4, and said sash is also shorter than the space between the side frames A A, and connected with one end of the sash are curved plate-springs K, (shown in Figs. 1 and 6,) the object of this construction being to provide means for the free and easy movement of the sash, so as to prevent it from becoming fixed or locked in position, as frequently occurs in the case of car-windows and the windows of steam-vessels and other similar structures.

Formed in the inner side of the front bead or strip *a* are notches or recesses L, which are arranged at predetermined distances apart and the upper walls of which are inclined upwardly and the lower walls of which are slightly inclined downwardly, as clearly shown in Figs. 4 and 5. It will be understood that any desired number of these notches or recesses L may be employed, and the operation will be apparent from the foregoing description, when taken in connection with the accompanying drawings. The window-sash is raised in the usual manner, and by reason of the fact that the said sash fits loosely within the frame and within the guide strips or beads *a*, as hereinbefore described, the movement thereof is free and the raising or lowering thereof easily accomplished. When the sash is raised the springs H operate to throw out the lower hinged

strip F, and when the strip reaches one of the notches L it will be projected thereinto, and, as will be observed, said strip will form a safe and secure support for the sash, and the position of the window or the height to which it may be raised will be determined by the number of the notches or recesses L which are employed. In this operation the upper hinged strip F is thrown out, as shown in Fig. 4, and presses against the bead or strip *a* adjacent thereto, and by this means the sash is held securely in position and the rattling or shaking thereof is prevented, and it will also be observed that the curved plate-springs K assist in producing this result.

Whenever it is desired to lower the window it is only necessary to press inward on the hinged strip F, when it will be freed from the notch or recess L and the sash may be readily lowered, the weight thereof being sufficient for this purpose. It will also be observed that the innerside of one of the beads *a* is inclined inwardly, as shown at M, Fig. 3, and also at M in Figs. 1, 4 and 5, and the object of this construction is to reduce the friction so as to assist in the easy and free movement of the sash.

It is evident that changes in the form, construction and arrangement of the various parts of my improvement may be made with-

out departing from the spirit of my invention or sacrificing its advantages, and I therefore reserve the right to make all such alterations as fairly come within the scope of the invention.

Having fully described my invention, I claim and desire to secure by Letters Patent—

The combination with a window-frame, provided with the usual beads or strips and between which is placed the window-sash, one of said beads or strips being provided with notches or recesses adjacent to the window-sash, of a window-sash the top portions of which are provided with spring-operated hinged strips the lower one of which is adapted to be thrown out and operate in connection with said notches or recesses to hold the window open, and the upper one of which is adapted to be thrown out against the bead or strip, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 25th day of July, 1895.

OSCAR MAHER.

Witnesses:

CYRUS EUGENE BEARD,
CHARLES FREMONT CRAM.