

J. F. Zacharias,

Sash Holder.

No. 104,395.

Patented June 11, 1870.

Fig. 1.

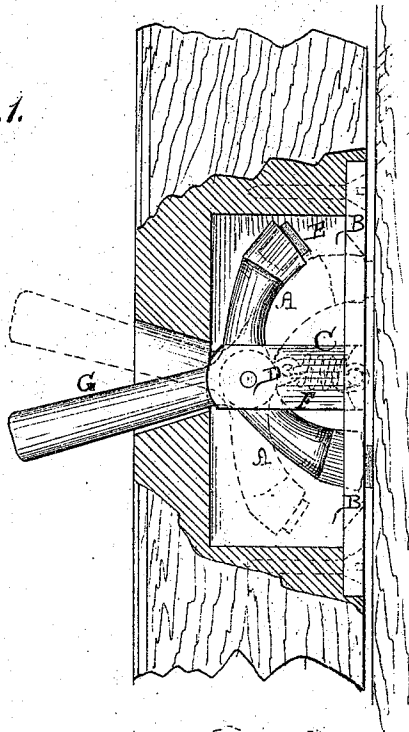
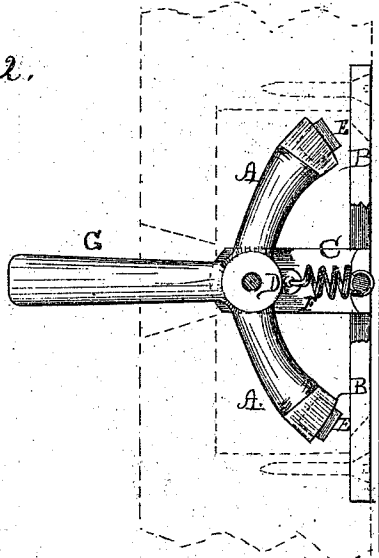


Fig. 2.



Witnesses
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United States Patent Office.

JOHN F. ZACHARIAS, OF LEESBURG, VIRGINIA.

Letters Patent No. 104,395, dated June 14, 1870.

IMPROVEMENT IN SASH-HOLDERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN F. ZACHARIAS, of Leesburg, in the county of Loudoun and State of Virginia, have invented a new and useful Improvement in Sash-Fasteners; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand and use the same, reference being had to the accompanying drawing making part of this invention, in which the figures are side views, illustrating the various positions which the fastener assumes during manipulation thereof.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in a sash-fastener, constructed of segmental arms, mounted on bearings formed with the face-plate, and having elastic feet, and a spring arranged to act on the center of arms, as will be hereinafter more fully described.

In the drawing—

A A represents two arms, continuous of each other, and forming somewhat of a segment of a circle. They are provided with a suitable operating handle, G.

The arms A, in the present case, are pivoted to bearings, F, formed with, or secured to, a face-plate, B, which has openings through which the ends of the arms may protrude, when turned to the full extent of the directions in which they swing.

To the center of the arms I secure one end of a coiled or other spring, C, whose other end is secured to the face-plate B. I prefer to form, on the arms, a projection, D, as a means of attachment for the spring, but this may be dispensed with, if desired.

In the ends of the arms I attach rubber feet, E, which may be let into the arms, or be cemented, or otherwise secured thereto.

The fastener is to be set, preferably, into a mortise in the sash-frame, with the handle projecting in such directions as to be conveniently reached and operated. When the handle is at or about right angles to the sash, neither the ends of the arms nor the rubbers are in contact with the window-frame. In this position the sash may be raised or lowered.

The operation on the lower sash is as follows:

The sash having been raised to its full or partial extent, will be held or sustained by throwing the lever or handle downward, thus bringing the lower arm in contact with the sash-frame. The gravity of the sash tends to force said arm tightly against the frame, whereby the sash is firmly held.

When the handle is first started, and moved past the center, the spring at once acts against the upper arm, and thereby forces out the lower arm. It thus assists in keeping the arm in place.

It will now be noticed that if the sash is only at a partial height, it may be raised still higher by lifting it, the pressure against the frame being then released, but it is advisable to bring the handle to a right angle, to prevent friction between the rubber and window-frame.

If the sash is to be lowered, the arm must be released from contact with the frame. Now lower the sash as far as desired, and let go the handle, and the result is the same as previously stated.

When the sash is fully lowered, it is securely locked by throwing up the handle, which operation draws in the lower arm and forces out the upper arm. The latter then wedges with the sash-frame, in a manner similar to that of the lower arm.

The operation on the upper sash will be in reverse order to that on the lower sash.

The segmental arms may be pivoted directly to the sash-frame, either on the outside, or in a mortise inside thereof, and a spring be properly located to operate with the arms. The rubbers D prevent injury to the wood-work of the window-frame, but are not extremely necessary to the operation of the fastener.

The fastener may likewise be connected to the window-frame, and operate against the sash-frame, but the manipulation and result are not different from that already stated.

The handle of the arms may be of any suitable form, for convenient and proper operation.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The projection D, arms A A, and handle G, formed in one piece, in combination with the open face-plate B and the bearings F, formed in one piece, operating together, in connection with the spring C, substantially as and for the purpose described.

2. The arms A A, mounted on the bearings F, cast or formed with the face-plate B, the elastic feet E, and spring C, combined and operating substantially as described.

To the above I have signed my name this 4th day of May, 1870.

JOHN F. ZACHARIAS.

Witnesses:

CARLTON SHAFER,
JNO. W. GORDON.