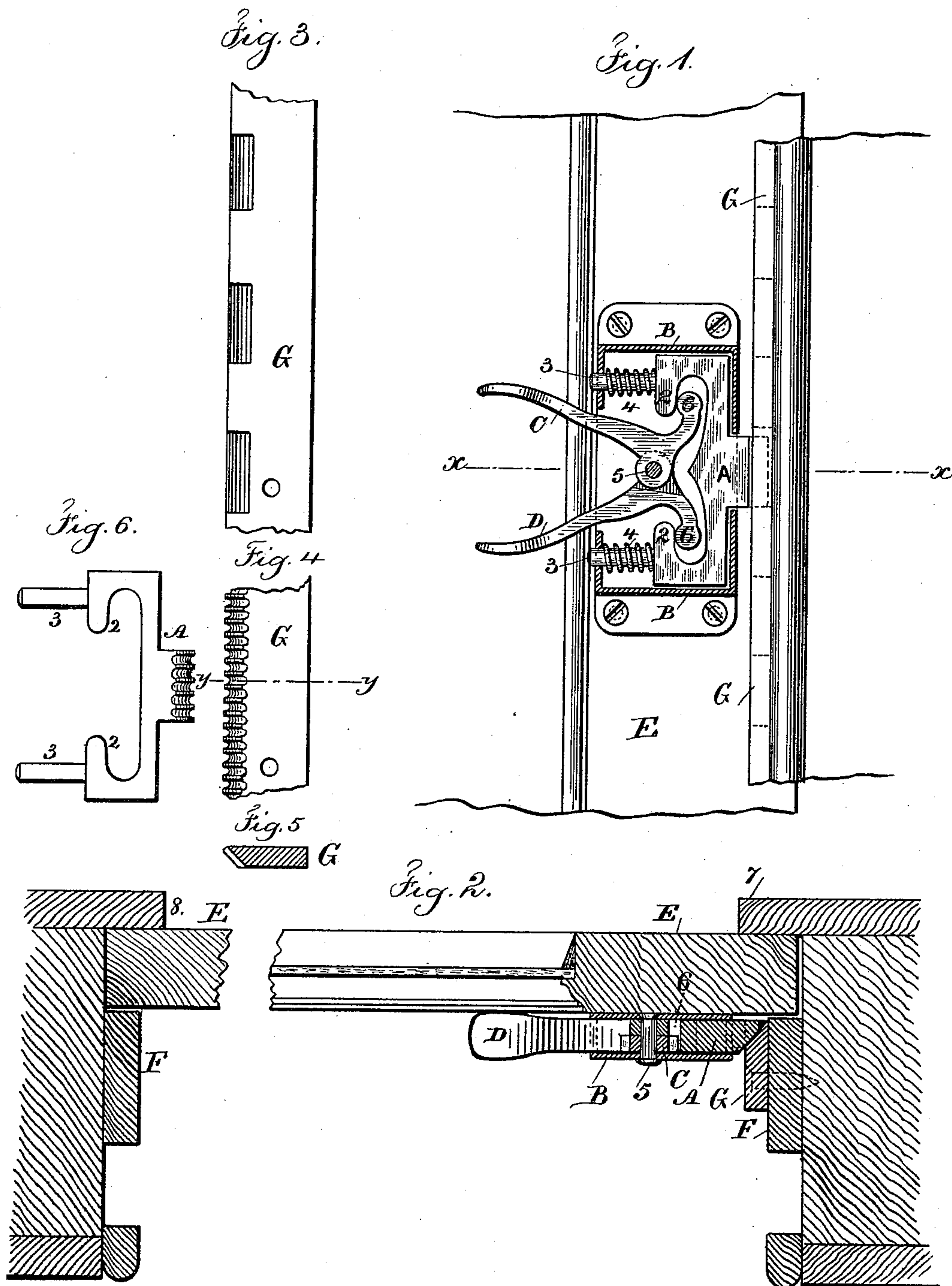


(No Model.)

J. C. HOWE.  
SASH FASTENER.

No. 448,882.

Patented Mar. 24, 1891.



Witnesses  
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J. Stair

Inventor  
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# UNITED STATES PATENT OFFICE.

JOHN C. HOWE, OF WORCESTER, MASSACHUSETTS.

## SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 448,882, dated March 24, 1891.

Application filed July 17, 1890. Serial No. 359,078. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN C. HOWE, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented an Improvement in Sash-Governors, of which the following is a specification.

Devices have heretofore been made that are especially adapted to supporting the windows of railway-cars by a bolt that is projected by a spring and retracted by a lever, and in some instances a beveled strip has been made use of upon one edge of a sash to press the sash outwardly and cause the same to set firmly and bind against the rabbet of the frame.

My improvement is adapted to supporting the window-sash at any desired elevation and to so tightening it in the frame thereof as to make it firm and to exclude dust, yet when the supporting device is drawn back the sash shall be free and may be loose or have sufficient play within the frame to move freely up or down, thus avoiding the difficulties heretofore experienced from the sash sticking or binding within the frame, especially under the changes due to atmospheric influences.

In the drawings, Figure 1 is an elevation of the sash-supporting catch with its case in section, part of the window-sash and frame being shown in this figure. Fig. 2 is a sectional plan view at the line *xx*. Fig. 3 is a detached view of the rack-plate, and Fig. 4 represents a modification of the supporting-plate upon the sash-frame. Fig. 5 is a section at the line *yy* of the rack-plate, Fig. 4. Fig. 6 is an elevation of the latch detached.

The latch A is received within the case B, and such case B is adapted to being screwed or otherwise fastened upon or let into the window-sash, and it is box-shaped, so as to receive the latch and the parts that give motion to the same. This latch A is provided with a T-head and horns or projections 2, sliding within the latch-case, and there are studs 3, around which are expansive helical springs 4, that serve to project the latch when not otherwise acted upon, and these studs 3 may project through the back edge of the box or case when the latch is retracted, and there is a pin or pivot 5 for the two levers C and D, which levers are bent or angular, so that

the shorter ends 6 act against the projections or horns 2, and when the levers C and D are pressed toward each other the latch A is withdrawn bodily, and when the pressure upon the levers C and D is released the latch A is projected by the springs 4. The end of this latch A is beveled, as seen in Fig. 2, the longer flat side of the latch coming next to the sash and the bevel being at the end, the object of this construction being to cause the bevel of the latch to act as a wedge to press the sash E forward against the rabbet 7 of the sash-frame, and I provide upon the stop-bead F a rack-plate G, in which notches are cut of a width sufficient for receiving the beveled end A of the latch, and these notches are at suitable or convenient distances apart vertically, so as to support the sash when the latch A passes into either one of the notches in the rack-plate. This rack-plate G, as shown in Fig. 2, is applied upon the face of the stop-bead F and at right angles to the sash E; but such rack-plate may be applied upon the inner face of the stop-bead F and parallel with and adjacent to the inner surface of the sash. It is now to be understood that the beveled end of the latch A acts like a wedge between the rack-plate G and the sash to force the sash outwardly against the rabbet 7 of the window-frame, and thereby render the sash tight against such rabbet, and there may be considerable looseness of the sash in the frame when the latch A is drawn back, so that the sash may move freely and will not become bound by reason of expansion caused by moisture or atmospheric changes, and the springs 4 tend to push the latch A in one direction and the sash-frame E in the opposite direction. Hence the opposite edge of the sash-frame will be pressed into the groove of the frame and rendered tight at that side, even though the sash may be loosely fitted into the frame, and the springs pressing on the latch will tend to throw the sash at said opposite edge outwardly against the rabbet 8, especially under the jarring action to which the sash is subjected in a car. When the levers C and D are pressed together and the latch A withdrawn, the sash is entirely free to be moved up or down with little or no friction.

If desired, the rack-plate may have small



notches or grooves upon its beveled edge, as shown in Figs. 4 and 5, and the beveled end of the latch be similarly channeled, as shown in Fig. 6, whereby the parts will interlock and hold the sash at any desired point.

I claim as my invention—

1. The combination, with the case B, of the latch A, having inwardly-projecting horns 2, studs 3, and springs 4, acting to project the latch, and the two curved or angular levers C D, pivoted at 5 and having heads that act against the horns 2 for withdrawing the latch, substantially as set forth.

2. The latch-case B, in combination with the latch A, having a beveled end and the inwardly-projecting horns 2, the studs 3, and springs 4 for projecting the latch, the two curved or angular levers C D, pivoted at 5 and acting upon the horns 2 for withdrawing the latch, and the rack-plate G, against which the beveled end of the latch acts for pressing

the sash outwardly and tightening the same, substantially as set forth.

3. The window governing and supporting latch having an end that is beveled in a vertical plane at an inclination to the window, in combination with the spring to project the latch, and a plate upon the sash-frame against which the latch acts to press the sash outwardly, substantially as specified.

4. The window governing and supporting latch having a beveled and channeled end, in combination with a plate upon the sash-frame, having an edge notched to correspond to the channels upon the beveled end of the latch, substantially as specified.

Signed by me this 9th day of July, 1890.

JOHN C. HOWE.

Witnesses:

GEO. T. PINCKNEY,  
WILLIAM G. MOTT.