S. W. COX.

Improvement in Window-Sashes and Fasteners.

No. 129,654. Patented July 23, 1872.

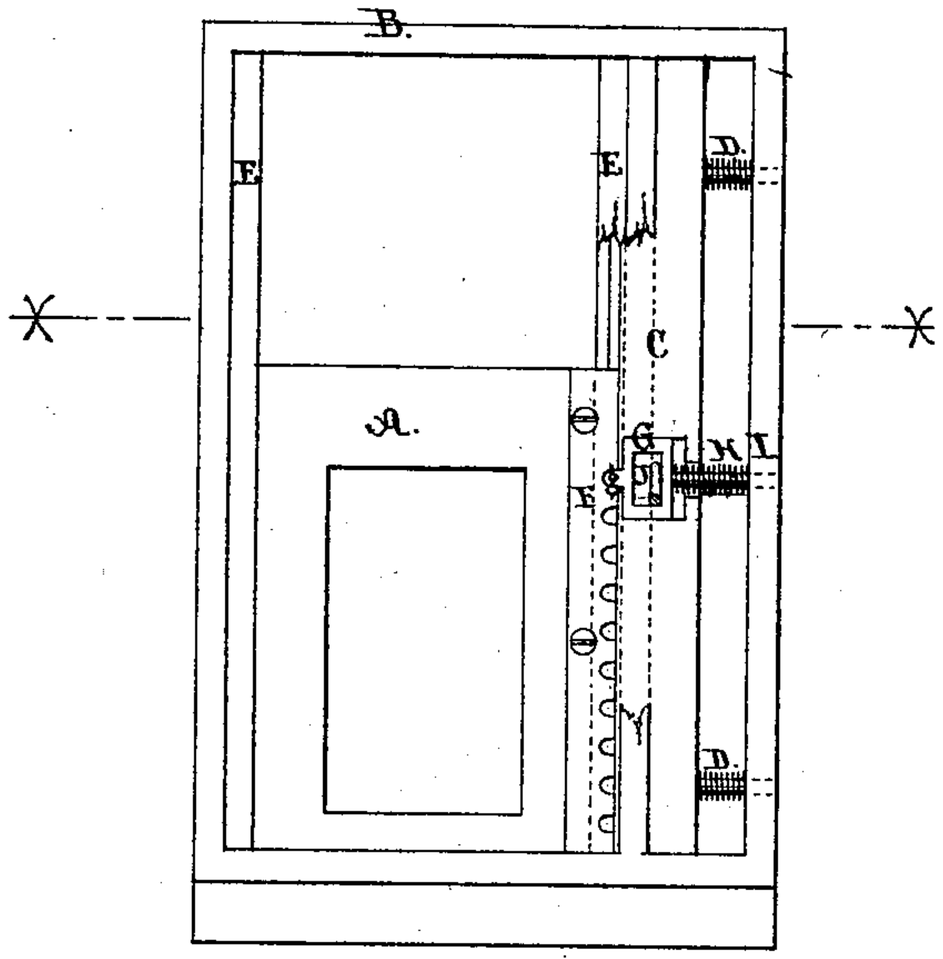

Fig. 1.

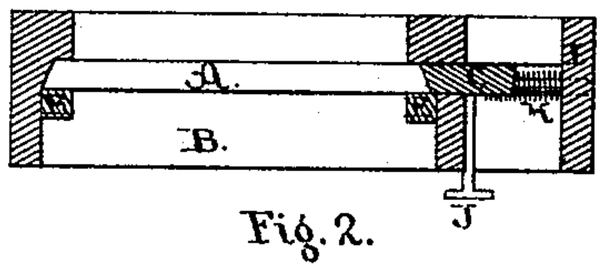

Fig. 2.

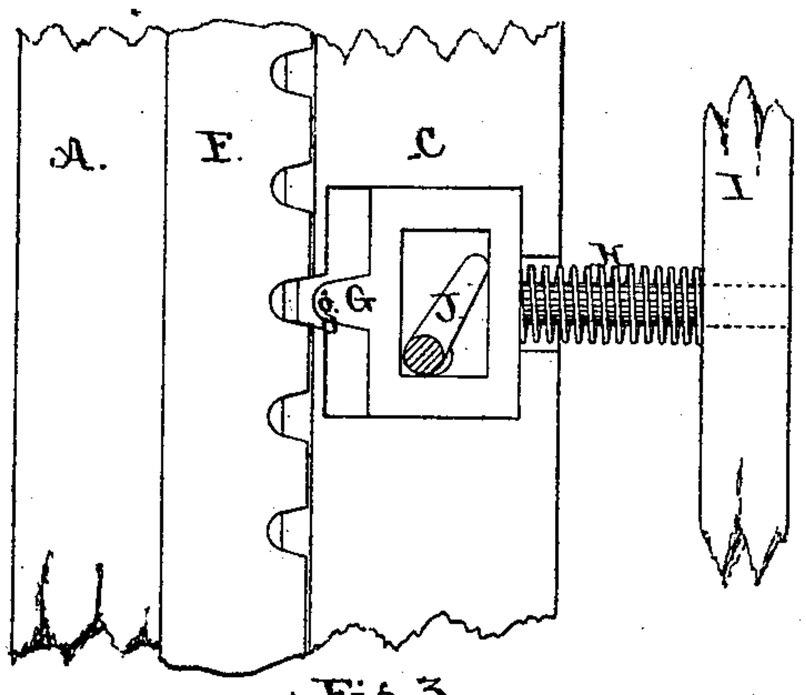

Fig. 3.

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Witnesses.

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UNITED STATES PATENT OFFICE.

SILAS W. COX, OF ALBANY, NEW YORK.

IMPROVEMENT IN WINDOW SASHES AND FASTENERS.

Specification forming part of Letters Patent No. **129,654**, dated July 23, 1872.

To whom it may concern:

Be it known that I, SILAS W. COX, of the city and county of Albany and State of New York, have invented certain Improvements in Window-Sashes and their Fastenings, of which the following is a full and exact description, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a front elevation of my invention, a portion of the casing being removed to more clearly show its construction. Fig. 2 is a transverse section through the line *x x;* Fig. 3, an enlarged and detached view of the fastening when disengaged.

The nature of my invention relates to that class of sashes where no counterbalance-weights are used, and is more particularly designed for use on railway cars. It consists in the peculiar construction of the sash and frame, and the device for securing the sash in any desired position. The object of my invention is to overcome the difficulty and annoyance usually encountered in the windows of cars from the rattling of the sash, and the admission of dust and cinders through the joints, when they are made loose enough to open and close easily, and to secure a tight joint around the sash, free from any difficulty of opening or closing.

A is the sash, the two opposite sides of which, where they slide in the grooves of the frame, are made with beveled edges, as shown in Fig. 2. B is the frame, the side grooves of which are made to conform to the angle of the sides of the sash, ample space being left around it to insure the sliding of the sash with perfect freedom; in one of the grooves a mortise, extending nearly from the bottom to the top of the frame, is made, into which is inserted the sliding piece C, having its edge that bears against the sash cut to a corresponding angle. Bearing against the back edge of this sliding piece are the springs D D for the purpose of pressing it against the sash. E E are "stop-beads" against the inside face of the sash. F is a strip of metal secured to the edge of the sash, having a series of indentations cut into it, into which the point *g* of the sliding bolt G engages. The sliding bolt, as shown in the drawing, is placed in an opening made in the sliding piece C, and is forced forward by the spring H interposed between it and the side piece I of the frame. J is a turn-key for working the sliding bolt G; the handle of it passing through the casing may be made of any ornamental design required.

The operation of my improvement is as follows: When the sash is in a fixed position, either opened or closed, the springs D D and H press against the sliding piece C and force it against the sash A, and, through the effect of the angular edges, presses the face of the sash firmly against the "stop-beads" E E, thereby effectually preventing any rattling of the sash against the frame. This pressure, when the sash is closed, forms a close joint between the sash and the stop-beads, and prevents the admission of dust and cinders. Upon turning the turn-key J backward the point *g* of the sliding bolt G is withdrawn from the indentations in the strip F; a further movement of the turn-key carries the sliding bolt G back against the sliding piece C, carrying it back, relieving the sash from the pressure of the springs D D and permitting it to slide with perfect freedom. Upon releasing the turn-key J the springs D D and H force the sliding piece C and sliding bolt G forward into contact with the sash A and secure it in any position required, either fully or partially opened, or closed.

I do not claim the sliding piece C and springs D D, where these devices are simply used for the purpose of creating a pressure against the edge of the sash so as to hold it in any desired height; but

What I claim as my invention is—

1. The sash A and frame B, constructed as herein described, in combination with the angular-edged sliding piece C and springs D D, for the purpose of forcing the face of the sash against the stop-beads E E, as and for the purposes specified.

2. The combination of the sash A, frame B, sliding piece C, and springs D D with the sliding-bolt G, spring H, and turn-key J, (working in the opening of the bolt,) when constructed and arranged to operate substantially as and the purposes set forth.

SILAS W. COX.

Witnesses:

WILLIAM H. LOW,

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