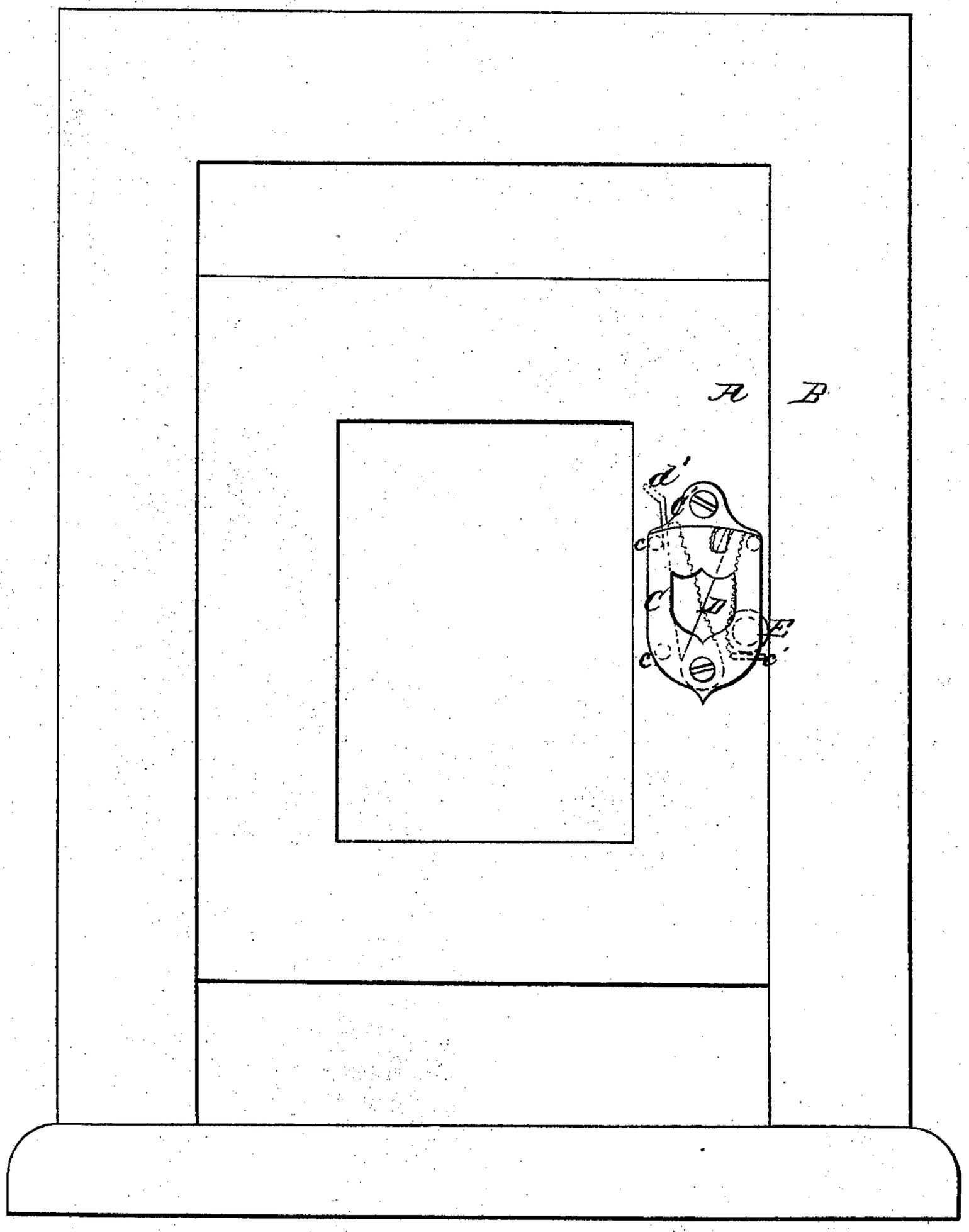
J. Slingerland,

Sash Holder.

No. 36,823. Patented Oct. 28, 1862.



Witnesses.

Thomas J. Stetson

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UNITED STATES PATENT OFFICE.

JOHN SLINGERLAND, OF GREEN POINT, ASSIGNOR TO HIMSELF AND JOHN H. KELLY, OF NEW YORK, N. Y.

IMPROVED WINDOW-STOP.

Specification forming part of Letters Patent No. **36,823,** dated October 28, 1862.

To all whom it may concern:

Be it known that I, JOHN SLINGERLAND, of Green Point, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Window-Stops; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, which is an elevation of a window and frame with my improved stop attached.

The nature of my invention consists in the combination of a movable incline and stop with an elastic roller, so arranged that the roller shall bind between the incline and the side of the casing, to prevent the sash from falling when raised, and that the same may be released at will by adjusting the position of the inclined surface, and, also, in combination therewith, the employment of teeth or equivalent roughened surface upon the said incline, for the purpose of causing the said elastic roller to roll up said incline and bind the window, when the latter commences to fall. Without these said teeth the roller would be liable, to slip back upon the incline and allow the window to fall, particularly if the incline were at a sufficient angle to operate with rapidity.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and arrangement by the aid of the drawing.

A represents the sash, and B the casing, of a window, C C′.

c is a metallic frame-work of a proper form to retain the working parts of the invention, screwed fast to the sash A. It is composed of two plates, C and C′, one behind the other, supported at a little distance apart by studs or posts *c c c c′*. Within this frame-work a piece, D, is so hung upon the screw *d* as to be capable of assuming the position shown in red outline. A swing-catch, *d′*, is hinged to D at its upper end, and fitted to either stand up, as shown in red lines, and allow D to be turned on its pin *d*, or turn down and enter a slot or notch in C, as shown in full black lines, to hold D in its forward position. The face of D is toothed or notched, as represented, and when in its forward position it stands inclined to the edge of the casing B, as shown.

In the space formed between the two plates C and C′, the piece D, and the casing B a roller, E, is placed of such size that when it rests upon the ledge or shelf formed by the post *c′* it shall fill the space between D and B, as represented. This roller is formed with a metal core surrounded by a cylinder of india-rubber, so that while it is hard and strong it is elastic upon the surface sufficiently to conform to the irregularities of the surfaces of D and B, and to maintain a close contact therewith. If, when the parts are in this position, with the sash A at any height desired, the effort to hold up the sash by the hand be relaxed, the sash sinks a very little distance and then stops, because the roller E is caused to roll between D and B, and thus to assume a position where it is more tightly compressed, owing to the inclination of D, and thus the sash is pressed against the opposite side of the casing. By the friction thus engendered the sash is supported. The greater the weight or strain upon the sash the more powerful is the resistance to its motion.

When it is desired to lower the sash, the catch *d′* is lifted from its notch in C, and D is moved into the position shown in red outline, when all resistance to the motion of the sash is removed, and it can be raised or lowered at pleasure. When it is desired again to confine it in any position, the piece D is again pushed forward to the position shown in black lines, and fastened there by means of the catch *d′*. The resistance to the raising of the sash will depend upon the tightness with which E is held between D and B when at its lowest position, and may be increased or diminished, as desired, by setting the frame C nearer to or farther from the casing B; but it is evident that by making the ledge *c′* inclined downward, or by so shaping D that it shall have an incline in the other direction below the roller E, the same mechanism may be made to hold the sash down as well as up with considerable force. The roller E, being coated with india-rubber, produces no injurious effect upon the casing, and the action of the stop is always to take up any play there may be in the parts, and thus prevent rattling—a function of considerable importance, especially in railroad-cars, and which by proper manage-

ment it may be made to perform efficiently while the sash is entirely down, as well as when in any desired stage of elevation.

Among the advantages due to my invention are, great simplicity and little liability to get out of order, there being no springs or other easily-deranged parts employed, and the stop may be rendered entirely inoperative at will, or the window may be not only supported but fastened without rattling at any place desired.

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

1. The combination and arrangement of the movable inclined piece D and the stop *d'*, or its equivalent, with the elastic roller E, substantially as and for the purpose herein described.

2. In combination therewith, the employment of teeth or of equivalent roughened surface on the face of D, for the purpose herein set forth.

In testimony whereof I have hereunto set my name in presence of two subscribing witnesses.

JOHN SLINGERLAND.

Witnesses:

THOMAS D. STETSON,

G. H. BABCOCK.