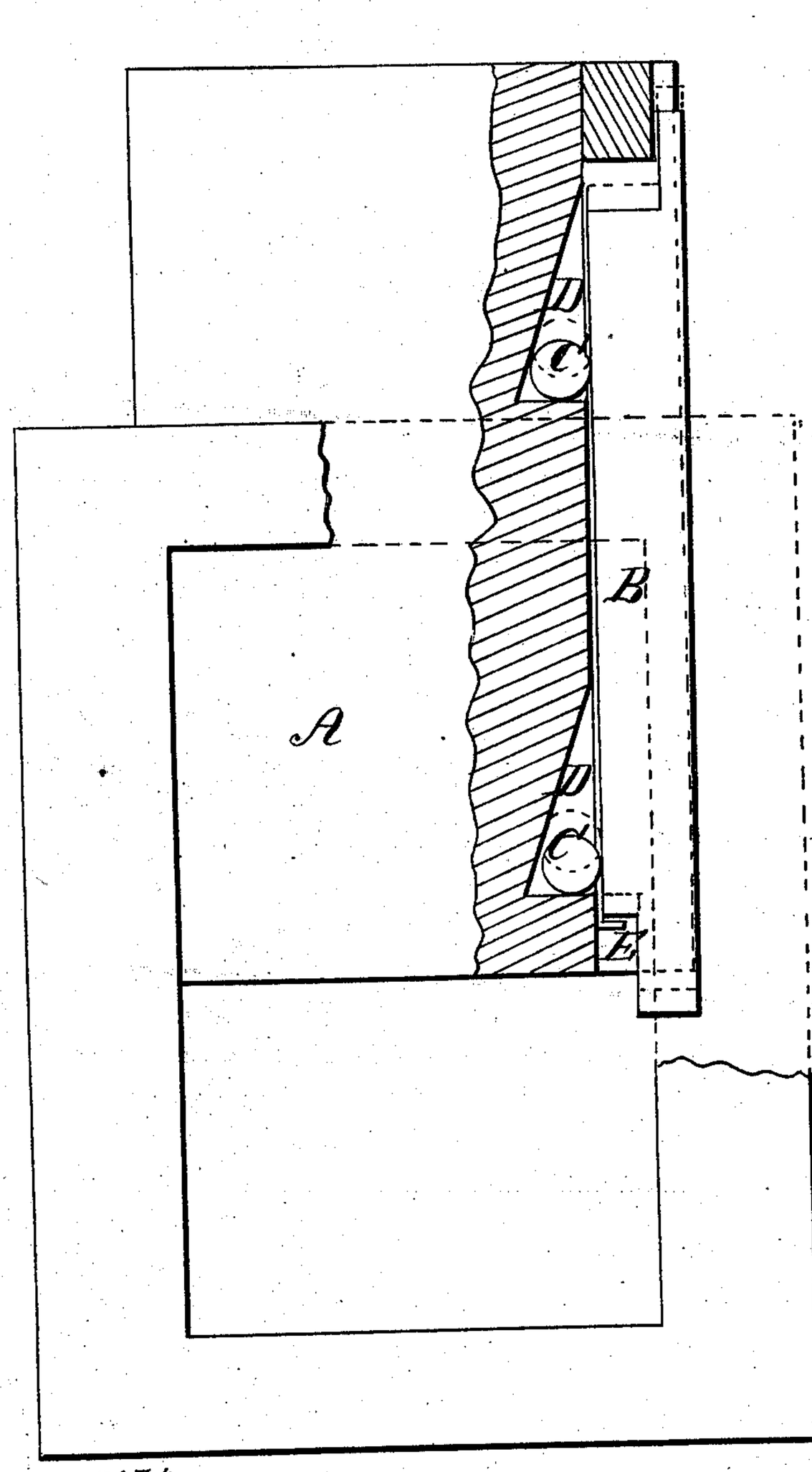
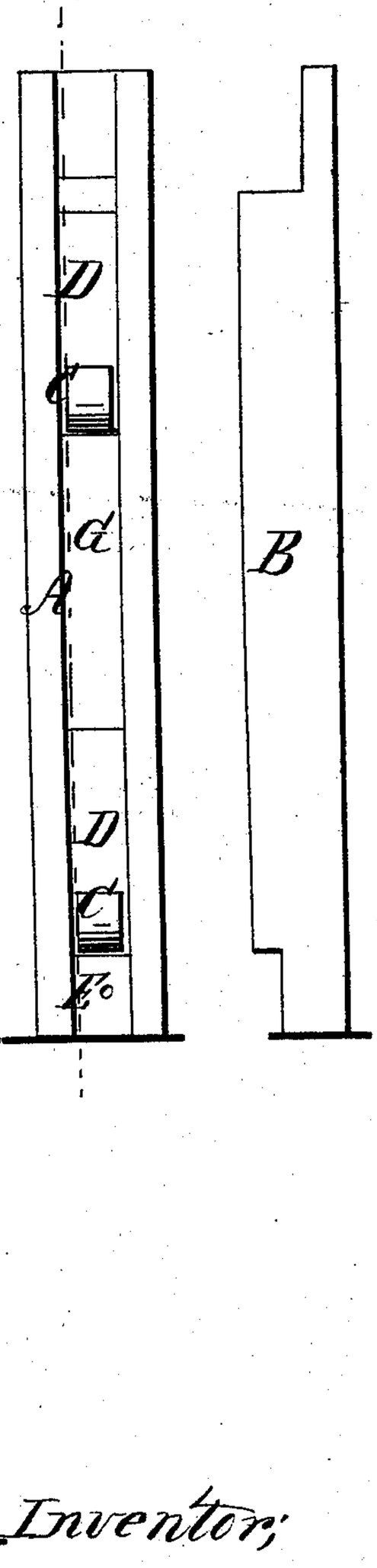
S. L. Loomis,

Sash Holder.

No. 83,292. Patented Oct. 20, 1868.





Inventor;

Witnesses;
Wm. Dennis
Daniel Breed

Samuel L Loomis
By his Atty J. Dennis Jr

United States Patent Office.

SAMUEL L. LOOMIS, OF BYRON, NEW YORK, ASSIGNOR TO HIMSELF AND CHARLES E. WALTER, OF SAME PLACE.

Letters Patent No. 83,292, *dated October* 20, 1868.

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, SAMUEL L. LOOMIS, of Byron, Genesee county, State of New York, have invented a new, useful, and improved Sash-Tightener and Holder; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The nature of my invention and improvements consists in arranging a traversing slide in a groove in the outside edge of the sash or shutter, resting against elastic rollers placed in recesses in the bottom of the groove, the bottom of said recesses being inclined, so that when the sash or shutter is raised, the rollers will descend to the deepest part of the recess, which is at the lower end; but when the sash begins to descend, the rollers move up the incline by the traversing of the slide, are compressed into a narrower space, react upon the slide, and press it against the side of the frame in which the sash traverses.

In describing my improved device, I shall refer to the accompanying drawings, forming part of this specification—

Figure 1 being a front view or elevation of a shutter or blank sash, with my improved holder and tightener attached to one side, a part of the frame (indicated by dotted lines) being broken out, and a portion of the sash shown in section, at the depth indicated by the red line on fig. 2;

Figure 2 is a view of the sash as seen edgewise, the slide being removed from the groove; and

Figure 3 is a view of the slide, as placed in fig. 1.

In fig. 1, the sash A is represented as in the act of being raised, and the slide B, in the groove G, rests upon the elastic rollers C C, in the bottom of the inclined recesses D D; the diameter of the rollers and the width of the slide being so adjusted that in this position the slide will be gently pressed against the frame in which the sash traverses.

As soon as the sash begins to descend, the slide B is raised, relatively to the sash, by friction against the frame, and the rollers being thus turned, move up the incline, both the slide and the rollers taking a position like that indicated by red lines. The elastic rollers will consequently be compressed, and reacting against the slide, will press it against the frame with sufficient force to support, by friction, the weight of the sash or shutter. This, however, may be readily overcome by the strength of one's hand, and the sash raised or lowered at pleasure, being supported by this device at such height as may be desirable. The pressure of the elastic rollers will, at the same time, prevent vibration or the rattling of the sash or shutter, and form, between it and the frame, a tight joint, excluding cold air, dust, noise, &c.

The lower shoulder of the slide B, striking against the pin E in the groove of the sash, and the upper shoulder against a fixed block in the upper end of the groove, confines the traversing of the slide within the narrow limits necessary for its successful operation.

It is obvious that when the sash is pressed entirely down, the rollers and slide will have a position like that indicated by the red lines, or somewhat higher, but as soon as it begins to rise, the slide, being held by friction against the frame, will descend relatively to the sash, or fall behind, and the rollers descend to the lower ends or deepest parts of the recesses. There will then be but a slight resistance from the friction of the slide to the raising of the sash.

If the sash or shutter be very heavy, the groove may be made wider, and the length of the rollers increased, to give greater pressure, or if this be inconvenient, the number of rollers and recesses may be increased.

The slide B should be made of such wood, harder or softer, as may be best adapted to produce the proper amount of friction in contact with the frame in which the sash or shutter operates.

What I claim as my invention and improvement in the above-described self-adjusting sash-holder and tightener, is—

The traversing slide B, arranged in a groove in the side or edge of the sash, with the mortises D in said groove, with inclined bottoms, and the rubber or elastic rollers, arranged in the mortises, as described.

SAMUEL L. LOOMIS.

Witnesses:

J. DENNIS, Jr.,

EDM. F. BROWN.