

H. O. BALL.

Improvement in Sash-Holders.

No. 128,276.

Patented June 25, 1872.

Fig. 1.

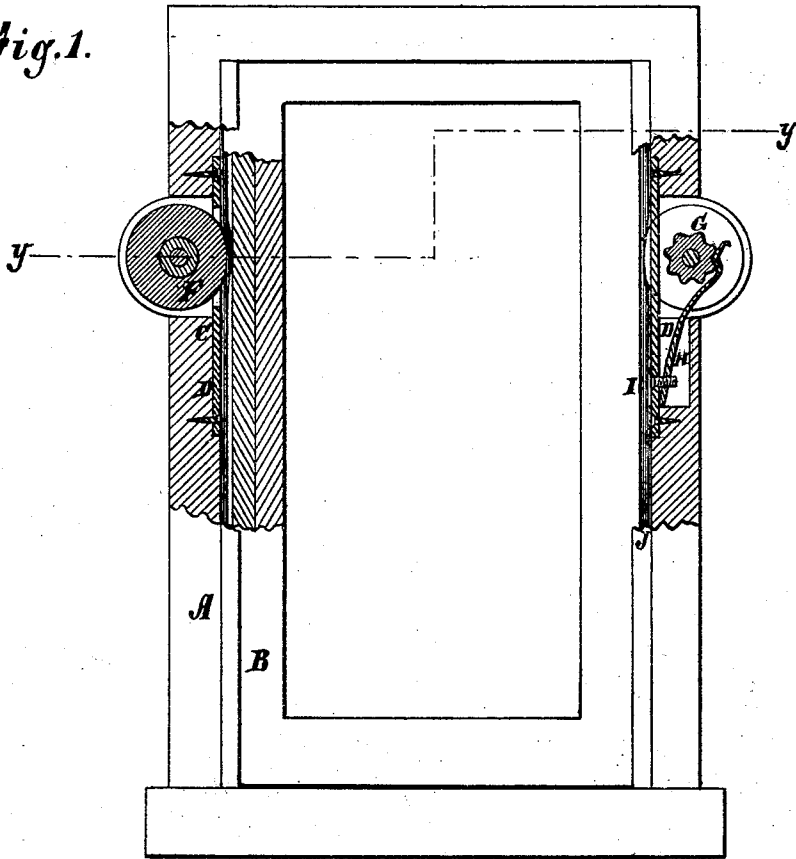
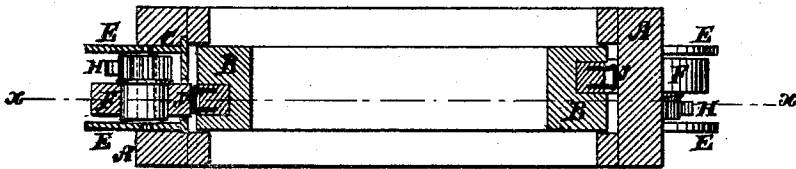


Fig. 2.



Witnesses:

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HAZEN O. BALL, OF SIOUX CITY, IOWA.

IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. 128,276, dated June 25, 1872.

Specification describing a new and Improved Device for Supporting Window-Sash, invented by HAZEN O. BALL, of Sioux City, in the county of Woodbury and State of Iowa.

The object of this invention is to provide convenient and efficient means for supporting the sashes of windows in any desired position. The invention consists in the mode of combining a rubber-roll, corrugated journal, adjustable spring, and rubber strip, as hereinafter fully described.

In the accompanying drawing, Figure 1 represents a sectional front view of a window provided with my improved device, the section being taken on the line *xx* of Fig. 2. Fig. 2 is a horizontal section of Fig. 1 taken on the line *yy*.

Similar letters of reference indicate corresponding parts.

A represents the window-frame. B is the sash, (one or more.) C is a metallic frame placed in the window-frame A, on one or both sides, arranged as seen in the drawing. The frame C consists of a plate, D, and two flanges E E, the latter being cut through the window-frame and the former let into it, so that it is flush with the sash-groove of the window-frame. F represents a roll made either entirely or in part of rubber, which revolves on an arbor in the flanges E E. The roller is of such a diameter that it projects through the sash-groove and engages with the edge of the sash. On the arbor, besides the roll, is a small wheel, G, with a fluted face, as seen in Fig. 1. H is a spring, which bears against this wheel at one

end, and is connected with the plate D by the screw I at the other end. The tension of the spring is increased or diminished by means of this screw, thereby varying the friction on the wheel and allowing the rubber-roll to revolve with more or less freedom, according to the weight of the sash. In the edges of the sash (one edge or both) I insert a piece of rubber, J, attached to strip of wood, as seen in the drawing, or in any other suitable manner. This rubber strip being doubled, as seen, fills the space between the sash and the window-frame, and excludes air and dampness while it forms a bearing for the roll and increases the friction thereof, and prevents the slipping of the sash. With this arrangement the sash or sashes of a window may be supported and balanced by friction in any desired position, while wind and water from without is excluded.

I do not confine myself to the precise form or arrangement of any of the parts described, as variations may be made without departing from my invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination of rubber-roller F, fluted or corrugated journal G, and adjustable spring H with the rubber strip J, all constructed, arranged, and operating as and for the purpose set forth.

HAZEN O. BALL.

Witnesses:

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