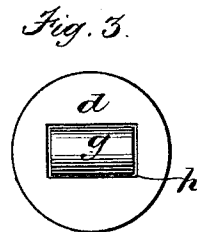
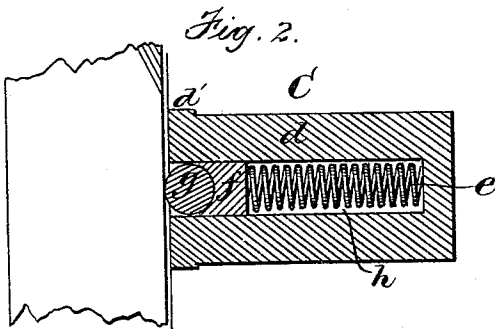
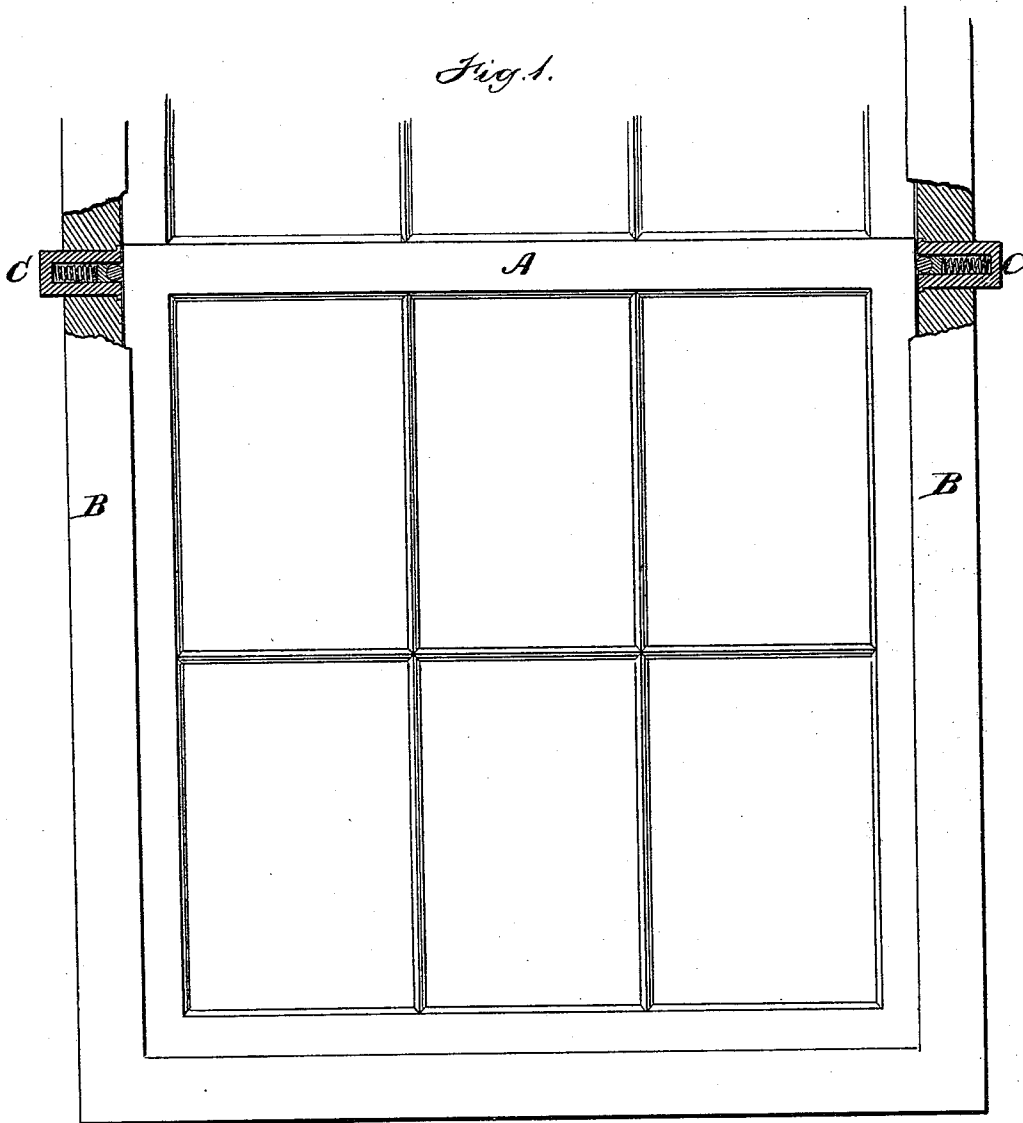


O. ROCK.
Sash-Holders.

No. 165,759.

Patented July 20, 1875.



Witnesses.
A. E. Devison
Sam'l M. Barton.

Inventor.
Olinus Rock
by his attys
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UNITED STATES PATENT OFFICE.

OLIVER ROCK, OF HUDSON, MASSACHUSETTS.

IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. **165,759**, dated July 20, 1875; application filed June 2, 1875.

To all whom it may concern:

Be it known that I, OLIVER ROCK, of Hudson, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Window-Sash Supporters, of which the following is a specification:

In the accompanying drawing, forming a part of this specification, Figure 1 is a view of the lower sash of a window and its casing, showing the application of my invention in section. Fig. 2 is an enlarged sectional view of my invention, and Fig. 3 an end view of the same.

This invention relates to that class of sash-supporters in which a friction-roller is held by spring-pressure against the edge of the sash, thereby supporting the sash at any desired height, and preventing it from rattling; and it has for its object to provide cheap, simple, and convenient means for applying supporters of the above-named class to a window-casing. To this end my invention consists in a recessed cylindrical holder, having a spiral spring, a concave-faced pressure-block, and a loose friction-roller, and adapted to be inserted into an auger-hole bored into the window-casing in such manner as to cause the friction-roller to bear against the edge of the window-sash, as I will now proceed to describe.

In the drawing, A represents the lower sash of a window, and B the casing. C C represent the sash-supporters, each of which is composed of a cylindrical recessed holder, *d*, a spiral or other spring, *e*, a sliding pressure-block, *f*, and a friction-roller, *g*, these parts being arranged in the recess *h* of the holder *d*, as shown in the drawings. The holder *d* has a bead or flange, *d'*, on its outer end, and is inserted into a circular orifice bored in the window-casing B, said orifice being preferably reamed out at its outer end to receive the bead or flange *d'*, which prevents the holder from entering the orifice too deeply.

Two of the supporters C are supplied for each sash, and they are located one on each side of the sash, with their rollers bearing against the latter, as shown in Fig. 1. The

supporters of the lower sash are preferably applied to the window-casing on the same horizontal plane as the upper rail of the sash, as shown in Fig. 1, the supporters of the upper sash being on the same plane as the lower rail thereof. The inward pressure of the rolls supports the sashes at any point, as will be readily understood.

The recess *h* of the holder *d* is of such size as to permit the free movement of the pressure block and roller, and these parts, together with the spring, are merely inserted in the recess without being attached in any way to the holder or to each other; consequently, each or all of them can be removed from the holder in case the roller and pressure-block become worn, or the spring weakened or broken.

This device can be applied by an ordinary mechanic to a window-casing without difficulty or nicety of adjustment, it being only necessary to bore holes in the casing for the reception of the cylindrical holders.

Different springs can be applied to the same holder proportioned in strength to the weight of the sash, and the holder with its attachments can be sold ready for application by the hardware trade.

The invention is applicable particularly to car-windows, as it is adapted to prevent the sash from rattling, as well as to support it.

If desired, the supporter can be applied to the sash instead of the casing, without departing from the spirit of my invention.

I claim—

In a sash-holder, the combination of recessed holder *d*, spring *e*, concave-faced pressure-block *f*, and loose friction-roller *g*, substantially as shown and described, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

OLIVER ^{his} + ROCK.
mark.

Witnesses:

C. F. BROWN,
O. METLIEW.