

(No Model.)

2 Sheets—Sheet 1.

J. WEATHERS.  
SASH HOLDER.

No. 460,413.

Patented Sept. 29, 1891.

*Fig. 1.*

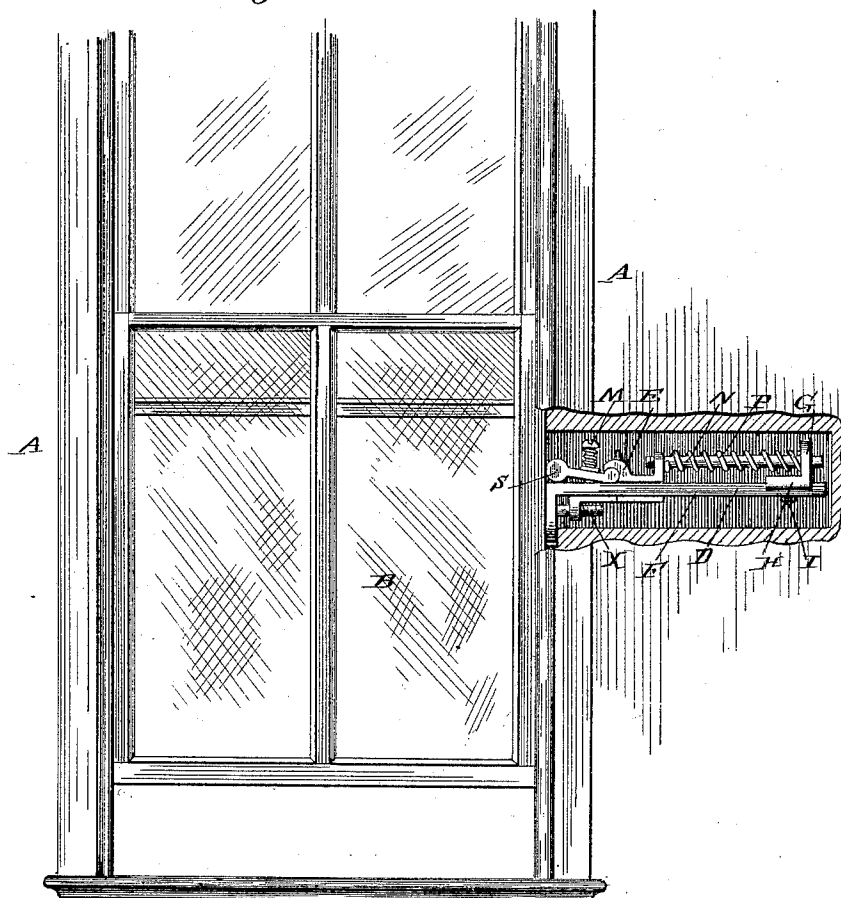
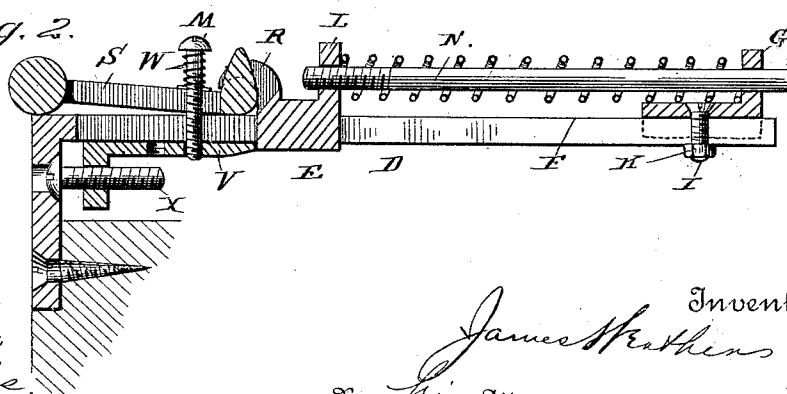


*Fig. 2.*



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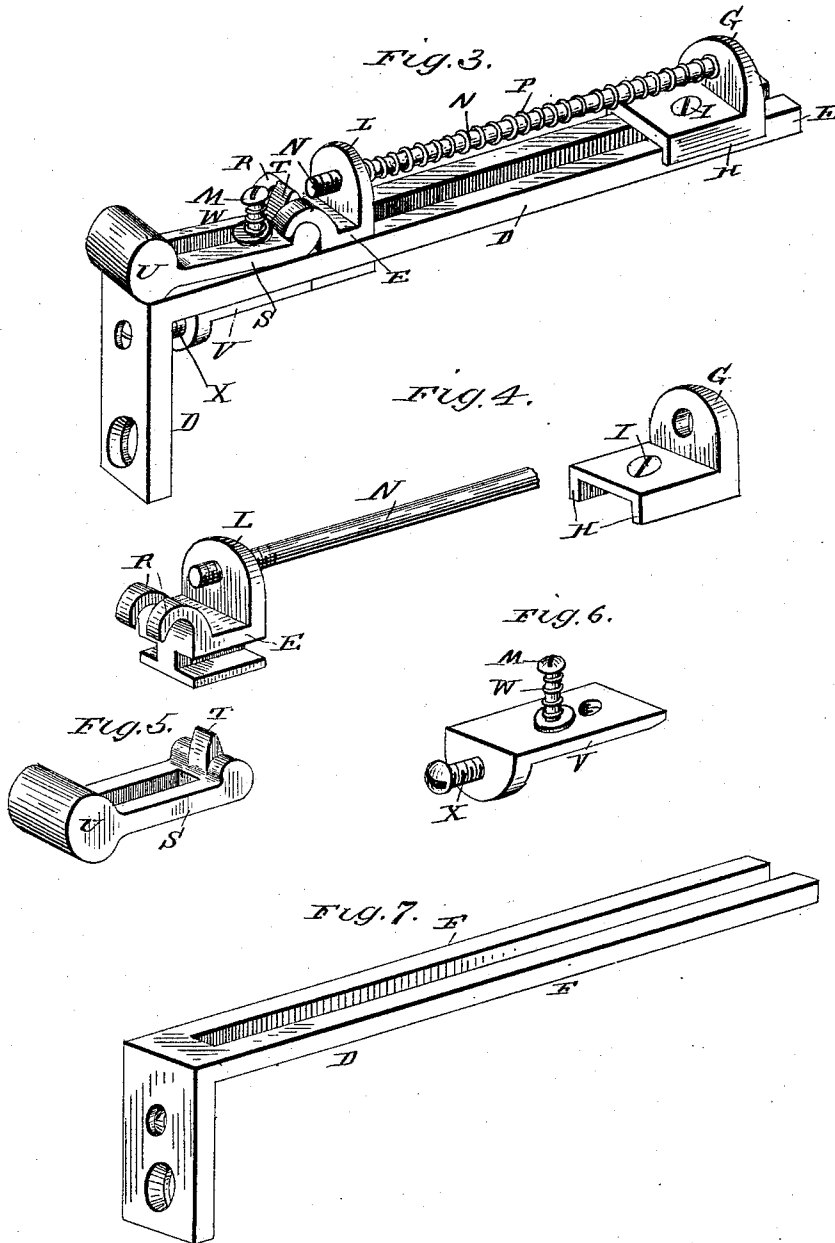
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# UNITED STATES PATENT OFFICE.

JAMES WEATHERS, OF INDIANAPOLIS, INDIANA.

## SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 460,413, dated September 29, 1891.

Application filed June 5, 1891. Serial No. 395,235. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES WEATHERS, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Sash-Holders, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in sash-holders, and is designed to furnish an effective substitute for the ropes and weights usually employed for balancing window-sashes and to produce a device which will be simple in construction, easily applied, and which may be accurately adjusted without removing it from the window-frame after it is properly seated therein, so that it can be used in connection with sashes of different weights and made to hold them with the proper force, while at the same time it will permit the sash to be moved easily.

The above-mentioned objects are attained by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a portion of a window-frame with a part broken away, showing my device applied so as to operate in connection with the lower sash thereof. Fig. 2 represents a longitudinal sectional view of the device detached. Fig. 3 represents a perspective view of the same. Fig. 4 represents a detached perspective view of a movable slide, a guide-bar, and stationary stud forming parts of my device. Fig. 5 represents a detached perspective view of a pawl or dog forming part of the device. Fig. 6 represents a detached perspective view of an angle-plate forming part of the device, by means of which the pressure upon the sash is regulated; and Fig. 7 represents a perspective view of an angle-plate which supports the working parts of the device.

Referring to the drawings, the letter A indicates the frame of the window, and B an ordinary vertically-movable sash.

The letter D indicates a narrow right-angled plate of metal, the longer portion of which is slotted longitudinally, forming ways F, the slot being open at its rear for the purpose hereinafter explained.

The letter E indicates a slide, which is provided with rectangular grooves on opposite sides of a size corresponding to the cross-section of the ways F, upon which the slide is adapted to move.

G indicates a stud having flanges H at its base, which embrace the sides of the longer portion of the angle-plate D, and which is adjustably clamped in place by means of a screw I, passing through the slotted portion of the plate D, and a binding-nut K, bearing against the lower face of said slotted portion.

The slide is formed with a right-angled vertical lug or extension L, which is provided with an internally-threaded aperture, in which is fitted the screw-threaded end of a rod N, the rear end of which passes loosely through an aperture in the stud G. The bar is surrounded by a spiral spring P, which bears against the rear of the lug L and the forward face of the stud G, so as to press the slide normally forward. The forward end of the slide E is formed with an upwardly and forwardly curved bifurcated lug R, which rises above the upper face of the plate D and extends downwardly toward the plate for a short distance.

The letter S indicates a dog or pawl, which is essentially a lever having its rear end turned upward and rounded, the upper portion of said rounded end setting under the curved lug, which, in connection with the upper face of the angle-plate, forms a movable fulcrum-bearing for the said pawl or dog. The rear end of said pawl or dog is also formed with an angular lug T, which works in the slot of the bifurcated lug and serves as a stop to limit the upward movement of the pawl or dog. The pawl or dog is slotted longitudinally, and at its forward end is formed with a rounded or cylindrical enlargement or bearing U, which is pressed with more or less force against the edge of the sash when the device is in place. Through the slot in the dog or pawl and also the slot in the angle-plate passes a set-screw M, the lower end of which is fitted in a threaded aperture in a small right-angled plate V. The said screw is surrounded by a spiral spring W, which sets between the head of the screw and the upper face of the pawl or dog, holding the same normally downward.

The shorter or forward portion of the angle-plate D is provided with an aperture having a rounded countersink at the inner side, in which is fitted and adapted to turn the rounded head of a set-screw X, which works through a threaded aperture in the forward portion of the angle-plate V. The rear end of said angle-plate V abuts against the forward lower edge of the slide E, limiting the forward movement thereof.

The forward portion of the angle-plate D is provided with an outwardly-countersunk aperture for the fastening-screw by means of which the device is secured in its socket or seat.

In assembling the parts of the device the dog or pawl is secured at its rear under the curved lug of the slide E and the slide entered at the open end of the slot in the angle-plate D and pushed forward therein. The guide-bar and surrounding spiral spring are then secured in place and the rear stud clamped in position, so as to cause the spring to bear with proper force against the slide and press it and the dog forward. The angle-plate V is then secured in place by the vertical set-screw, the spiral spring surrounding the said screw having been placed thereon. The rounded head of the set-screw in the forward part of the plate V naturally enters and rests in its rounded socket or countersink.

To apply the device to the window-frame, a horizontal recess or socket is formed therein at onese for the reception of the longer portion of the angle-plate D and a vertical recess for the shorter portion of said plate, so that its forward portion will be flush with the inner edge of the window-frame. The device is fastened in its seat by means of a suitable screw inserted through the lower aperture in the angle-plate D. By turning the round-headed adjusting-screw the forward movement of the slide and pawl may be adjusted so as to bear with more or less pressure against the edge of the sash, so as to adapt the device to use with sashes of different weights, and also to permit of adjustment for wear, expansion, or contraction of the sash while in use without removing the device.

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

1. In a sash-holder, the combination of a longitudinally-slotted angle-plate, a slide adapted to move in said slot and pressed normally forward therein, and a pawl having an enlarged rounded head to bear against the edge of the sash, the rear of said pawl having a movable fulcrum bearing between the slide and the upper face of the angle-plate, substantially as specified.

2. In a sash-holder, the combination, with the longitudinally-slotted angle-plate, of the movable slide, the stud adjustably secured to the rear of the angle-plate, the guide-bar, and the surrounding spring by which the slide is pressed normally forward, the dog or pawl having a rounded head at its forward end and having its rear fulcrumed under a bifurcated lug at the front of the slide, the pawl having a stop setting in the slot of said bifurcated lug to limit the upward movement of the pawl, substantially as specified.

3. The combination, with the slotted angle-plate, rear stud, guide-bar, slide, and pawl, of the angle-plate V, the vertical set-screw, the spiral spring surrounding the same, and the round-headed set-screw setting in a rounded countersunk opening in the front of the slotted angle-plate and passing through a threaded aperture in the front of the angle-plate V, whereby the movement of the slide and pawl may be adjusted, substantially as specified.

4. In a sash-holder, the combination of a horizontal supporting-plate, a slide mounted on said plate, means for normally pressing it forward, a pawl pivoted on the slide so as to move with it, said pawl being provided with a head at its forward end, and a spring normally pressing said pawl downwardly, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES WEATHERS.

Witnesses:

I. G. HEMERLY,  
CHAS. ENNERS.