No. 609,810. Patented Aug. 30, 1898.

A. J. INGLET.

SASH HOLDER.

(Application filed Jan. 24, 1898.)

(No Model.)

Fig. 1.

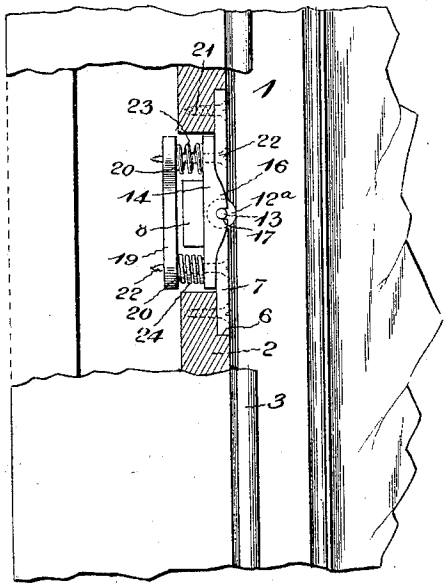
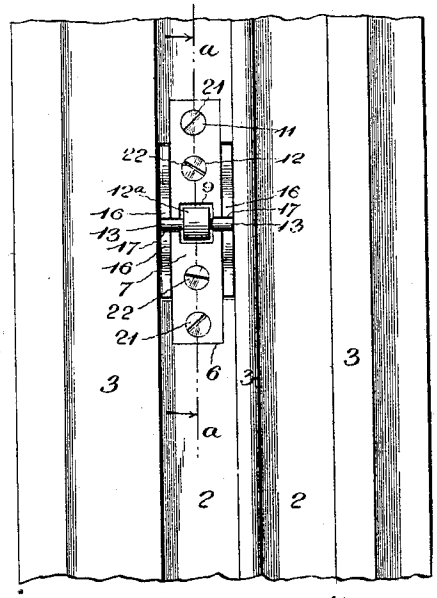


Fig. 2.



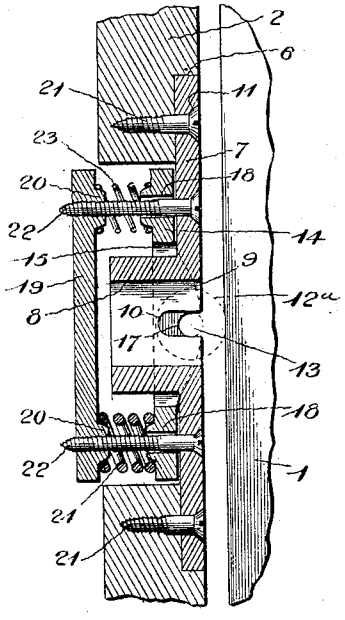


Fig. 3.

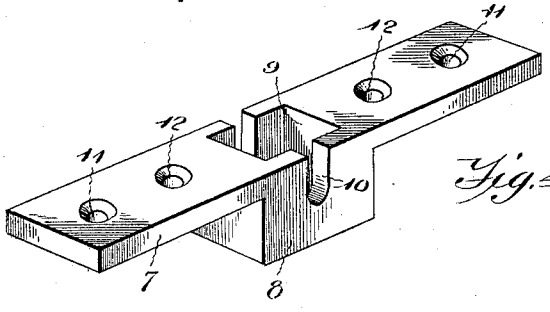


Fig. 4.

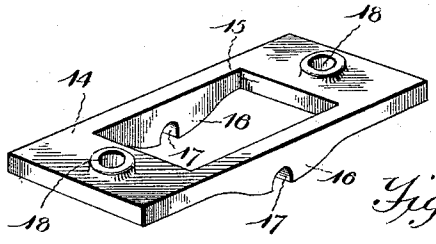


Fig. 5.

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UNITED STATES PATENT OFFICE.

ANDREW JACKSON INGLET, OF WINNFIELD, LOUISIANA.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 609,810, dated August 30, 1898.

Application filed January 24, 1898. Serial No. 667,777. (No model.)

To all whom it may concern:

Be it known that I, ANDREW JACKSON INGLET, a citizen of the United States, residing at Winnfield, in the parish of Winn and State of Louisiana, have invented a new and useful Sash-Holder, of which the following is a specification.

This invention relates to improvements in sash-holders of that class which employ spring-pressed rollers adapted to have contact with the edge of the sash; and the object that I have in view is to provide an improved construction by which pressure is applied to a roller on opposite sides of the line of the journals thereof and also to secure variable pressure to said roller on opposite sides of its journal, so as to maintain the sash in its raised position to the best advantage.

A further object is to simplify the construction with a view to increasing the durability and efficiency of the holding device and enable it to be readily applied to ordinary sashes.

A further object that I have in view is to provide an improved construction and arrangement of parts by which provision is made for varying the tension of the springs and the pressure of the roller against the sash, so as to provide for expansion of the sash in wet or damp weather and shrinkage thereof in dry weather.

With these ends in view the invention consists in the novel construction and arrangement of parts, which will be hereinafter fully described and claimed.

To enable others to understand my invention, I have illustrated the preferred embodiment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a side elevation of part of a window frame or casing with a sash therein and showing my improvement in operative relation to said sash. Fig. 2 is an enlarged view, in front elevation, looking at the face of the holding appliance. Fig. 3 is a vertical sectional elevation on the plane indicated in the dotted lines *a a* of Fig. 2. Fig. 4 is a detail perspective view of the face-plate. Fig. 5 is an inverted perspective view of the pressure-plate.

Like numerals of reference denote like and corresponding parts in each of the several figures of the drawings.

A part of an ordinary sash is indicated by 1, the jamb at 2, and the stop-beads at 3. No novelty for these devices is claimed herein, and they may be of the usual or any preferred construction known to those skilled in the art to which the invention relates.

My improvement relates to the improved construction of the holder by which the sash may be maintained in its raised or partly-raised position within the window frame or casing, and in the preferred embodiment of the invention I provide a fixed face-plate, a movable pressure-plate, springs arranged to exert variable pressure against opposite ends of the pressure-plate and on opposite sides of the line of bearing of a pressure-roller, and means for varying the tension of said pressure-springs.

To adapt my improvement in connection with an ordinary jamb or casing of a window, I provide a recess 6 in said jamb opposite to the edge of the sash with which it is desired to have the holding device engage. The face-plate 7 is adjusted in this recess to have its exposed face lie flush with the face of the jamb, and said face-plate is secured rigidly in place to occupy normally a fixed relation to the vertically-movable sash. The face-plate is cast in a single piece of metal with an integral boxing 8 on its rear side, and said face-plate is provided with a slot or opening 9, which is coincident with the boxing 8 on the rear side of said face-plate. To accommodate the journals of the roller, the face-plate is provided in its exposed side or face with transverse notches or grooves 10, which are in alinement with each other and open into the sides of the slot 9 therein, and the said face-plate is also provided with the screw-holes 11 and with the holes 12 for the tension-regulating screws, to be hereinafter referred to. The holes 11 are provided in the plate 7, at or near the ends thereof, and through said holes are passed the fastening-screws 21, adapted to embed themselves in the jamb of the window-casing to hold the face-plate in a fixed position flush with said jamb. The notches or recesses 10 in the face-plate are made quite long or deep to

provide for the desired play of the pressure-roller 12^a, which is fitted in the slot 9 and boxing 8 of the face-plate to play or move in a horizontal direction therein toward or from the edge of the sash 1. The roller 12^a has the axial journals 13, which are elongated sufficiently to extend beyond the notches or recesses 10, that constitute in part the bearings for said roller-journals, and by providing said roller with the extended journals 13 I am enabled to fit them in the bearings provided for their reception in the pressure-plate 14. This pressure-plate is cast in a single piece of metal to fit snugly to the sides and back of the face-plate and the boxing 8 thereof. Said pressure-plate is slotted centrally at its middle, as indicated at 15, to receive the boxing 8 of the face-plate in a manner to guide the pressure-plate on said boxing 8, and said pressure-plate has its side bars formed with the flanges or lugs 16, the latter being notched or recessed centrally, as at 17. The pressure-plate is constructed to have its flanges 16 fit snugly against the side edges of the fixed face-plate, and the notches or recesses 17 in said pressure-plate are arranged to coincide or aline with the notches 10 of the face-plate, whereby the pressure-plate is guided by the boxing 8 and its notches are adapted to form bearings for the journals 13 of the pressure-roller 12.

The pressure-plate 14 is provided near its ends with transverse apertures 18, arranged to aline with the holes 12 in the fixed face-plate, and through the alined openings 12.18 in said face and pressure plates pass the tension-screws 22. In rear of this pressure-plate is arranged a tension-plate 19, which occupies a vertical position substantially parallel to the face and pressure plates, and this tension-plate is provided with tapped bosses 20, arranged to receive the inner ends of the tension-screws 22, said screws serving to support the tension-plate in proper relation to the pressure and face plates and also provide for the adjustment of said tension-plate toward or from the pressure-plate to vary the tension of the springs 23 24. The holes 12 in the fixed face-plate are countersunk to receive the heads of the tension-screws 22, thus arranging the tension-screws flush with the exposed face of the plate 7, and said heads of the tension-screws are notched to receive a screw-driver or other implement, which may be applied to the screws or either of them to rotate the same and adjust the plate 19 toward or from the pressure-plate 14. The springs 23 24 are fitted on the adjusting-screws 22 to encircle the latter loosely, and each spring is seated at one end against the pressure-plate 14 and at its other end against the tension-plate 19, the rear end of the spring encircling the boss 20 to be held thereby against lateral displacement.

In the preferred embodiment of my invention I employ a strong spring for the lower end of the pressure-plate and a comparatively weak spring for the upper end of the pressure-plate. By employing the strong lower spring and comparatively weak upper spring I am enabled to apply variable pressure against the opposite ends of the pressure-plate, and this variable pressure is important in my improved device, because the tension of the springs is so transmitted by the movable plate 19 to the pressure-roller 12 that the pressure of the strong lower spring is exerted to the best advantage on the sash when the latter is raised to maintain it in its raised position and also permit the raising of the sash to be effected to the best advantage, because the comparatively weak upper spring offers minimum resistance to the upward movement of the sash. I am thus enabled to provide means which operate to the best advantage to maintain the sash in its raised position; but at the same time the adjusting-screws 22 and the plate 19 enable me to vary the tension or pressure of the springs 23 24 to compensate for expansion and shrinkage in the sash during wet and dry weather.

It will be readily seen by reference to the drawings that when the sash is raised the lower screw is exposed below the lower edge of the sash for permitting access to said screw for rotating the latter and adjusting the tension of one spring; but when the sash is lowered the upper screw is exposed for a like purpose, thus enabling the adjustment of the screws and springs to be effected without removing the sash from the window-casing.

If desired, I may employ a roller which has its tread or working face covered with rubber or other suitable material to secure good frictional contact between the roller and the edge of the sash; but this is a minor feature and may be varied within the province of a skilled mechanic.

It will be understood that I employ two holding devices for each sash and that such holding devices are arranged in opposite sides of the jamb or casing to have contact with the respective side edges of the sash, thereby confining the sash between the rollers and insuring free movement of the sash within the jamb or casing, while effecting the proper holding of the sash in its raised or partly-raised position.

It will also be understood that my improved holding device may be applied to the upper as well as to the lower sash of the window-casing, and in this event I arrange the holding devices for the lower sash in position to engage therewith near its upper part when lowered, while the holding devices for the upper sash are positioned within the casing to engage with the lower part of said upper sash when the latter is raised.

One of the important features of my improved sash-holding device is the arrangement of the pressure-spring to have engagement with the pressure-plate on opposite sides of the line of bearing of the journals of a pressure-roller in said pressure-plate, and an-

other important feature is the employment of pressure-springs of unequal strength or force to apply greater pressure to the lower part of the pressure-plate than to the upper part thereof.

It is thought that the construction and operation of my improvements will be readily understood from the foregoing description, taken in connection with the drawings.

It is evident that changes in the form and proportion of parts may be made by a skilled mechanic without departing from the spirit or sacrificing the advantages of the invention.

Having thus described the invention, what I claim is—

A sash-holder comprising a face-plate having a slotted boxing, a pressure-plate slidably fitted to the boxing to be guided thereon and provided with bearings, a roller having its journals supported in said bearings and slidably fitted in the slotted boxing to be sustained and guided horizontally therein, a tension-plate arranged in rear of said face and pressure plates, adjusting-screws fitted to the face and tension plates to support the latter and having the pressure-plate slidably fitted thereon, and coiled springs interposed between the tension and pressure plates, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ANDREW JACKSON INGLET.

Witnesses:

J. E. DELOOCH,

GEO. W. BECK.