

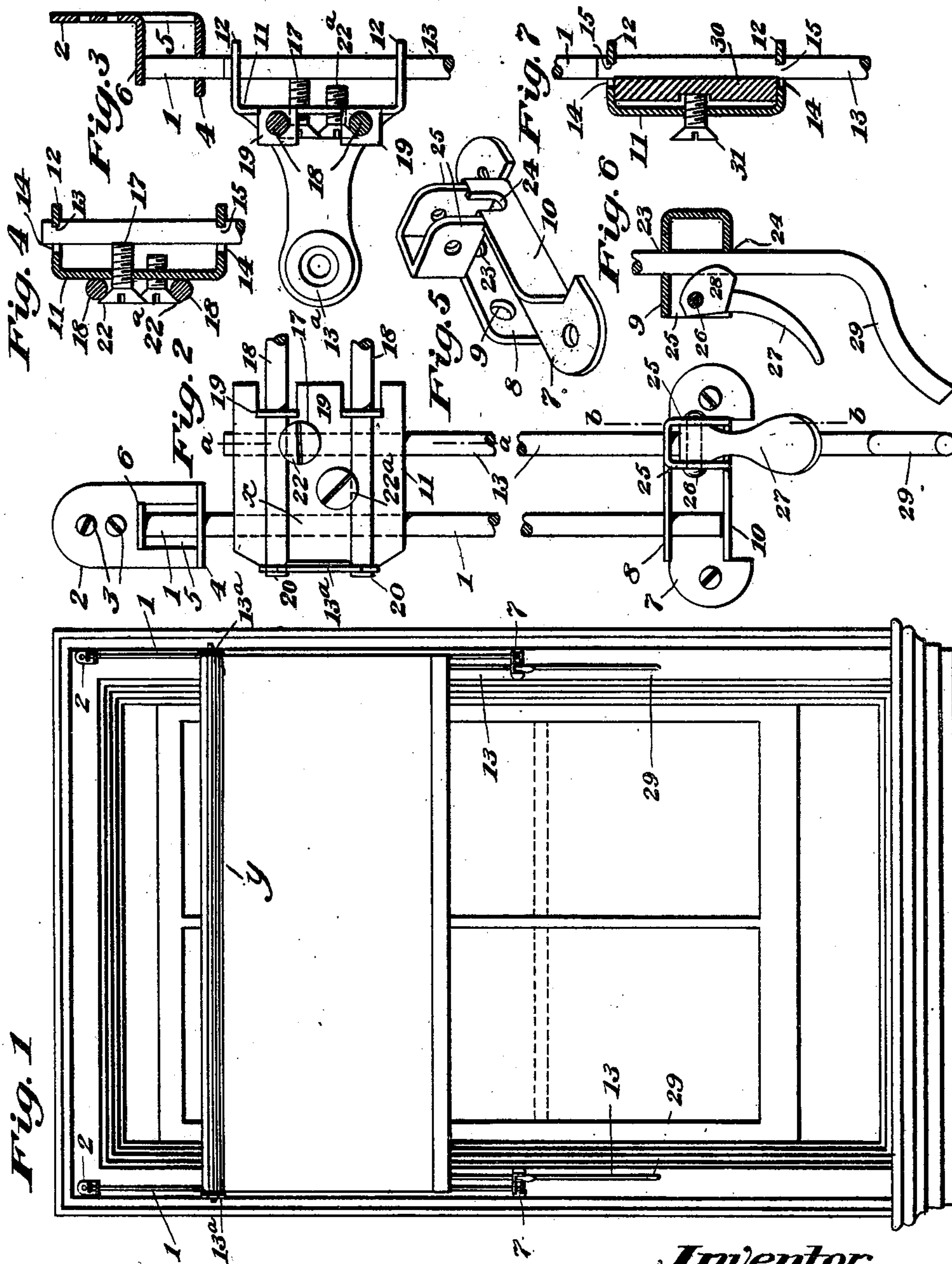
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Patented May 28, 1901.

W. J. SCHULTZ.
WINDOW SHADE HANGER.

(Application filed Sept. 8, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

WILLIAM J. SCHULTZ, OF CINCINNATI, OHIO.

WINDOW-SHADE HANGER.

SPECIFICATION forming part of Letters Patent No. 675,169, dated May 28, 1901.

Application filed September 8, 1900. Serial No. 29,363. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. SCHULTZ, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Window - Shade Hangers, of which the following is a specification.

This invention relates to certain improvements in window-shade hangers, and has for its object to provide a device of this character of simple and inexpensive construction adapted for use in supporting the shade in place upon the window frame or casing and of a nature to permit the shade-roller to be readily raised or lowered or adjusted vertically, so as to shade and ventilate either the upper or lower part of the window.

The invention consists in certain novel features of the construction, combination, and arrangement of the several parts of the improved shade-hanger, whereby certain important advantages are attained and the device is made simpler, cheaper, and otherwise better adapted for use, all as will be hereinafter fully set forth.

The novel features of the invention will be carefully defined in the claims.

In the accompanying drawings, which serve to illustrate the invention, Figure 1 is a view showing the inside of a window frame or casing having my improved shade-hanger applied thereto. Fig. 2 is an enlarged partial view showing portions of the improved shade-hanger at one side of the window frame or casing, portions of the guide and operating rods and braces being broken away for lack of space. Fig. 3 is a side view, partly in section, showing parts of the improved shade-hanger at the upper part of the window. Fig. 4 is a sectional view taken vertically through one of the shade-carrying slides in the plane indicated by the line *a a* in Fig. 2. Fig. 5 is a perspective view showing the construction of the bracket-frame employed for holding the lower parts of the guide and operating rods of the device. Fig. 6 is a sectional view taken vertically through the bracket-frame in the plane indicated by the line *b b* in Fig. 2. Fig. 7 is a sectional view similar to Fig. 4, but showing a modified arrangement of the parts.

In the views, 1 1 indicate guide-rods extended vertically along opposite sides of the window frame or casing, being secured at their upper ends in brackets 2 2, held by means of screws 3 or the like to said frame or casing and formed from pieces of flat or sheet metal, the lower end portions 4 of which are bent outwardly at right angles and are perforated for the passage of the upper end portions of the guide-rods 1. Above the bent portions 4 the plates of which the brackets are formed are, as shown at 5 in Figs. 2 and 3, cut or punched out to produce tongues or projections 6, alined with the openings in the portions 4, through which the guide-rods 1 pass, and adapted to engage the upper extremities of said guide-rods to limit or prevent endwise movement thereof.

The lower ends of the guide-rods 1 are held in place by means of bracket-frames 7, also formed from pieces of plate or sheet metal and held to the window frame or casing by means of screws or the like. The bracket-frames have their upper portions 8 bent over outwardly at right angles and perforated, as shown at 9 in Fig. 5, for the passage of the lower end portions of the guide-rods 1. The lower portions 10 of said bracket-frames are also bent out at right angles below and parallel to the portions 8 to form tongues to be engaged by the lower extremities of the guide-rods to limit or prevent endwise movement thereof. Thus it will be seen that in essential construction and function the upper brackets 2 and the lower bracket-frames 7 are exactly similar, although they vary somewhat in form and detail.

11 indicates one of the shade-carrying slides, there being one of these parts mounted for vertical movement upon each guide-rod 1 to support the opposite ends of the shade-roller *y*, for which purpose each slide 11 has an angular arm 13^a at its outer edge and provided with means to support the shade-roller. The slides 11 are also formed from pieces of sheet or plate metal bent over along their upper and lower edge portions to produce angular flanges 12, extended toward the window-frame and provided with openings for the passage of the guide-rods 1, which extend through said openings, as shown in dotted lines at *x*, and are adapted to guide the slides in their vertical movements. To the slides 11 are also secured

the upper ends of operating-rods 13, which are extended vertically parallel to and just inside the guide-rods 1. For the passage of the upper end of the rod 13 each flange 12 of the slide is provided with an opening 14, larger in diameter than the rod, and the end portion of the rod is formed at points corresponding in position with the flanges 12 with transverse kerfs or recesses 15, adapted to be entered by the metal at the edges of said openings 14 and forming shoulders or stops to hold the rod 13 locked securely to the slide against endwise movement. Screws 17 passed through each slide 11 and engaged with the outer surfaces of the rods 13, opposite to said kerfs or recesses, act to hold the engaging portions of the rods and flanges in relation and also act to hold the rods 13 themselves against rotation or turning movement.

To brace and connect the slides 11 at opposite sides of the window frame or casing, so as to cause the opposite ends of the shade-roller to move in unison, I provide transverse braces 18 18, extended between the two slides 11 and secured at their ends to the said slides. Two of said braces are herein shown, although it is obvious that one of them might, if desired, be dispensed with where great rigidity or stiffness of the connection between the slides is not requisite. The extremities of the braces 18 18 are each passed through an opening in the shade-carrying arm 13^a of one slide 11, so as to project somewhat beyond said arm, as shown at 20 in Fig. 2, to prevent disengagement from said opening when thin metal is employed in making the slides 11. The braces are also passed through perforated lugs 19, formed on the inner ends of the slides 11 by slitting said slides and bending the metal between the slits outwardly, as shown in Fig. 3.

To hold the brace-rods 18 securely attached to the slides 11, I employ screws, as shown in Figs. 2, 3, and 4, the heads of said screws bearing on the outer faces of the brace-rods, as shown at 22 22^a, in such a way as to securely lock the same to the slides. The screw 17, which serves to lock the operating-rod 13 to the slide, is also employed to lock one of the brace-rods 18 to the slide, as shown at 22.

The upper bent part 8 of the bracket-frame 7 is also perforated, as shown at 23, for the passage of the operating-rod 13, which plays through said perforation when the shade-roller is raised or lowered, and the lower bent part 10 of said bracket-frame is notched, as shown at 24, in its forward part for a similar purpose. The part 8 of the frame is extended outward beyond the opening 23, and the side portions 25 of said extension are bent down parallel with each other and are perforated for the passage of a pin or stud 26, whereon is held to turn a cam 28, having a thumb-piece 27 and adapted for engagement with the outer face of the operating-rod 13, as shown in Fig. 6, in such a way as to press the same forcibly upon the lower bent part 10 of

the frame at the notch 24 therein to lock the rod 13 against vertical movement.

The lower extremity 29 of each operating-rod 13 is bent or curved outwardly or away from the window frame or casing to form a handle, by means of which the rod may be readily grasped by the operator in sliding the rod up or down for adjusting the position of the shade-roller.

In using the improved shade-hanger the operator grasps one of the handles 29, and after having moved the cams 28 in such a way as to free or unlock the operating-rods 13 the other handle 29 is also grasped, and the rods 13 are moved up or down to adjust the shade-roller to the position desired, after which the cams 28 are again moved into position to lock the rods 13 against movement, and thereby hold the shade-roller in adjusted position.

The improved shade-hanger constructed according to my invention is of an extremely simple and inexpensive nature and is of a very neat and attractive appearance, comparatively little of the guide and operating rods being exposed, since the shade itself when lowered serves to cover and conceal said rods, as shown in Fig. 1. The device is also capable of being readily taken apart and assembled to permit of conveniently packing and shipping it, and when assembled the construction is notably strong and rigid, so as to render it very desirable and not likely to become deranged or broken. It is also readily adjustable to windows of different dimensions and affords no obstruction at the lower part of the window, since the guide-rods 1 1 extend but half-way down the frame or casing.

It will also be obvious from the above description that the improved shade-hanger is capable of considerable modification without departure from the principles and spirit of the invention, and for this reason I do not wish to be understood as limiting myself to the precise form and arrangement of the several parts of the device herein set forth. For example, in certain cases it may be desired to employ a wooden slat or brace in lieu of the metal brace-rods 18 18. A construction in which this is accomplished is shown in Fig. 7, wherein 30 indicates the wooden slat or brace, held at its ends on the back of the slide 11 between the flanges 12 and in front of the operating-rod 13. A screw 31 is carried by the slide 11 and has engagement against the front side of the slat 30 in such a way as to press the same forcibly against the operating-rod 13, whereby not only is the slat or brace securely locked to the slide, but the engaging devices of the rod 13 and flanges 12 above referred to are also held in secure engagement.

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

1. A window-shade hanger comprising guides adapted for attachment at their upper ends to a window-casing or the like, shade-carrying slides movable on the guides, operating-

rods extended down from the slides, bracket-frames adapted for attachment to the window-casing and having means to support the lower ends of the guides, said bracket-frames having their upper and lower edge portions bent outward, the upper edge portions being formed into arms, cams pivoted between said arms and adapted to bear on the outer faces of the operating-rods, and the lower edge portions being notched for the passage of said operating-rods, substantially as set forth.

2. A shade-carrying slide for window-shade hangers and the like having means to receive a guide-rod, an operating-rod and a brace and provided with a single device arranged to lock both the operating-rod and the brace to the slide, substantially as set forth.

3. In a window-shade hanger, the combination of a shade-carrying slide having bent portions provided with perforations, an operating-rod passed through said perforations of the bent parts and having devices adapted for engagement with said bent parts, and means for pressing the rod laterally to engage its devices with the said bent parts, substantially as set forth.

4. In a window-shade hanger, the combination of a shade-carrying slide having bent and perforated parts, an operating-rod passed through the perforations of the bent parts and having notches to engage to edges of said perforations and a screw carried by the slide and having engagement with the operating-rod to hold the notches thereof engaged with the edges of the perforations, substantially as set forth.

5. In a window-shade hanger, the combination of a shade-carrying slide having bent and perforated parts, an operating-rod having shoulders adapted for engagement at the edges of the perforations of the bent parts and means for pressing the operating-rod laterally to engage said shoulders with the edges of the perforations, substantially as set forth.

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

WILLIAM J. SCHULTZ.

Witnesses:

JOHN ELIAS JONES,
JAMES F. LUDDON.