J. BECKER.

CURTAIN FIXTURE.

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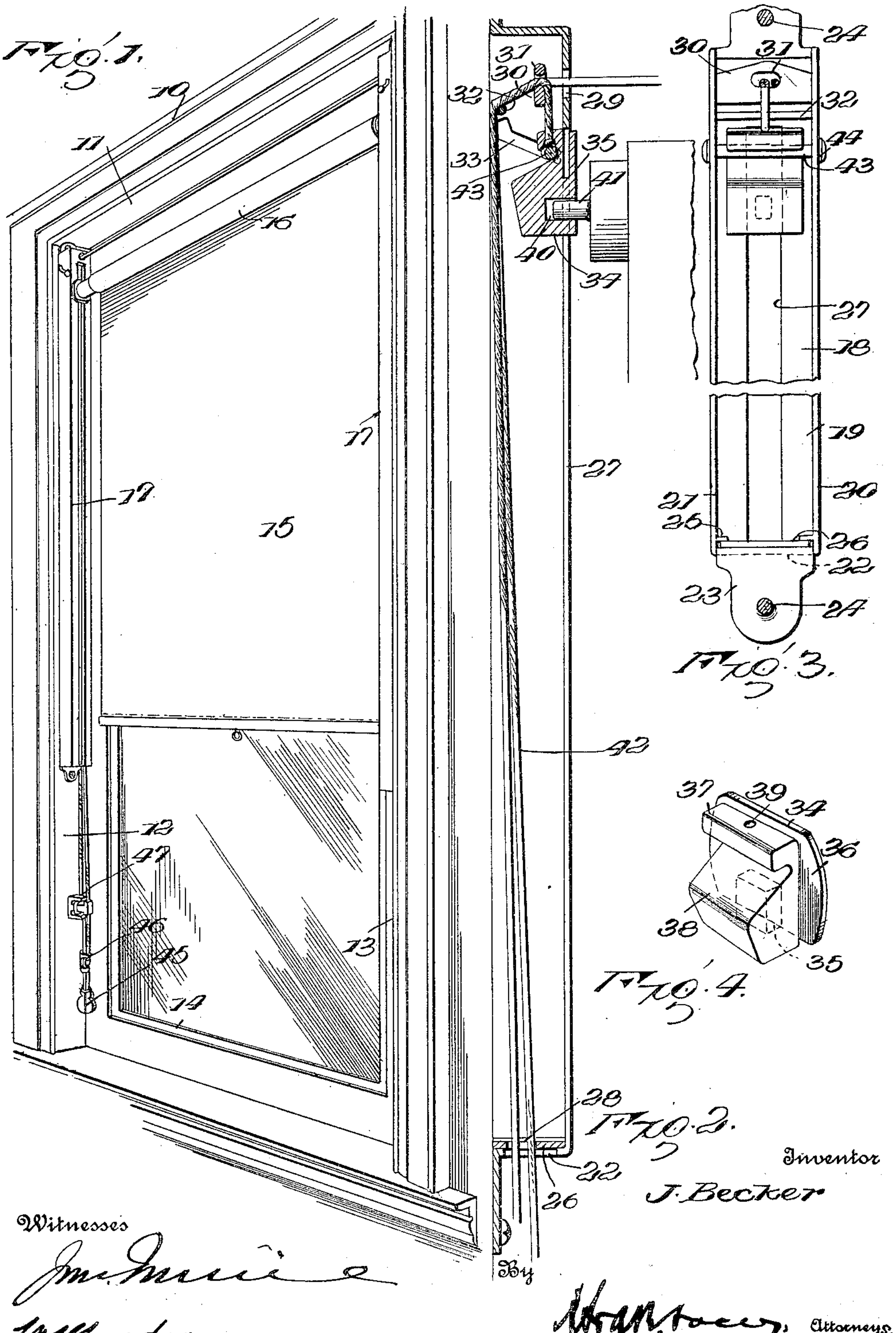
1,132,151. Patented Mar. 16, 1915.



UNITED STATES PATENT OFFICE.

JOSEPH BECKER, OF MONTCLAIR, NEW JERSEY.

CURTAIN-FIXTURE.

1,132,151. Specification of Letters Patent. Patented Mar. 16, 1915.

Application filed April 9, 1914. Serial No. 830,749.

To all whom it may concern:

Be it known that I, JOSEPH BECKER, citizen of the United States, residing at Montclair, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Curtain-Fixtures, of which the following is a specification.

My invention relates to new and useful improvements in window shade holders and more particularly to adjustable holders for shades of the spring roller type, the object of my invention being the provision of a shade holder by means of which the roller, together with its shade, may be raised or lowered to any desired height with respect to the window casing.

In many instances in which shades of the spring roller type are employed, it is frequently impossible to open the window at the top on account of wind which, blowing through the window so opened against the shade, continually rattles it about and oftentimes even tears it from its roller. Furthermore, in case of a storm, the wind or snow beating through the open upper portion of the window will ruin the shade.

The main object of my invention is therefore to adjustably mount the shade carrying roller in such a manner that it may be raised or lowered to the same extent as the window, or to any desired extent, to avoid the above suggested difficulties.

A further object of my invention is the provision of an adjustable supporting mechanism for the roller whereby the roller may be raised or lowered by the proper manipulation of cords which hang from the mechanism within easy reach of the operator, the mechanism supporting the shade being so arranged that under normal conditions, if the shade is raised to its highest point, it will be automatically locked in such raised position.

A further object of my invention is to provide means operable by the same cord employed in raising the shade for releasing the shade and lowering it.

In accomplishing the above objects, I employ a pair of casings or housings which I secure to the window casing one upon either side of the window and which have their opposed faces slotted to form guides or holders for the shade roller. A gravity actuated catch is mounted in the upper end of each housing in such a manner as to automatically engage the holders and secure them in elevated position if the latter are raised slowly, but in such a manner that if the holders are quickly raised and then released, the holders will pass below the catches before they engage them.

A still further object of my invention is the provision of means applicable to the window casing for securing the actuating cord of the shade supporting mechanism at any desired point to lock or support the shade in intermediate positions.

With these and other objects in view, my invention will be more fully described, illustrated in the accompanying drawings, and then specifically pointed out in the claims which are attached to and form a part of this application.

In the drawings:—Figure 1 is a perspective view of my improved shade holder applied to a conventional form of window casing; Fig. 2 is a central vertical sectional view through one of the casings housing the operating mechanism of my holder; Fig. 3 is a rear elevation of the housing, parts being broken away to permit showing of the structure upon an enlarged scale; Fig. 4 is a perspective view of one of the shade roller holders proper removed from its housing.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In order to insure a clear and full understanding of this invention I have shown it in connection with a conventional form of window casing 10 including an upper sill 11 and the customary side facing strips 12 and 13 which also form the inner parting beads for the lower window sash 14. A shade 15, carried by a spring shade roller 16, is supported at its ends in housings, each indicated as a whole by the numeral 17, which are secured to the inner faces of the facing strips 11 and 12 at the top of the window casing.

My present invention consists in the construction of these housings 17, the manner of mounting the shade roller in said devices and the means for adjustably raising and lowering the roller when so mounted. Each of these housings includes a body 18, preferably formed from sheet metal having its longitudinal edges bent at right angles to the body portion to provide a face plate 19 and side walls 20 and 21. The ends of the face plate are extended a considerable dis-

tance beyond the ends of the side walls in such a manner that they may be bent rearwardly between the free ends of the side walls to form bottom and top walls 22 and attaching ears 23. The casing thus formed is secured to its facing strip with its face plate outermost by means of screws 24 passed through the ears 23 and into the facing strip. The side walls immediately above the bottom 22 are provided with inwardly directed lugs or ribs 25 by means of which a closure plate 26 may be secured upon the bottom wall 22, for a reason which will be hereinafter apparent.

The face plate 19 of the housing is provided with a longitudinally extending slot 27 beginning near the upper end of the housing and extending downwardly throughout the remaining length of the face plate and also through that portion of the face plate which forms the bottom 22 of the housing. The closure plate 26, previously described, is provided centrally with an opening 28 registering with a portion of the slot 22. The face plate immediately above the upper end of the slot 27 is provided with an opening 29 and a transversely extending brace 30 connects the side walls 20 and 21 immediately at the rear of this opening, this brace being formed with an opening 31 in alinement with the opening 29. Slightly below this brace and near the rear edge of the walls 20 and 21 extends a transverse rod 32. The side walls of the housing are provided with parallel slots 33 extending almost entirely across such walls with their inner ends immediately below the rod 32 and with their outer ends at a lower level than their inner ends and somewhat below the upper end of the slot 27 of the face plate.

Slidably mounted in the slot of each housing 17 is a shade roller holder proper, indicated as a whole by the numeral 34. The construction of both these holders is substantially the same and a description of one will therefore suffice for both. Each shade roller holder proper includes a body having a neck portion 35 which extends through the slot of the housing and carries a flattened head 36 bearing against the outer face of the housing and extending at its sides considerably beyond the sides of the body, which in turn is considerably wider than the slot. The neck extends centrally from the lower portion of the body, being equal in width to the width of the slot and with its sides parallel to engage the edges of the slot, the body, neck and head of the holder being preferably cast or otherwise formed in a single piece. The body portion has its rear face slotted transversely adjacent its upper end to form a transverse locking shoulder 37 and below this slot is extended to form a downwardly and rearwardly inclined face and adjacent downwardly and forwardly inclined face, the extended portion defining these faces providing a latch releasing cam member 38.

The shoulder 37 is provided centrally with a vertically formed, cord receiving bore 39 tapering from its lower to its upper end. The head and neck of each holder is provided with a socket 40 to receive the trunnion 41 of the shade roller, it of course being understood that one of these sockets will be cylindrical to receive the cylindrical trunnion of the spring shade roller, while the socket of the other holder will be angular in cross section to receive the angular trunnion which is operatively connected to the spring of the roller.

An operating cord 42 has one end extended through the opening 29 of one housing and opening 39 of the rib of the holder mounted in such housing, said end being knotted to engage or seat in the larger end of the bore 39. The opposite end of the cord is extended through the opening 29 of the other housing and similarly secured in the bore 39 of the other holder. The resultant doubled portion of the cord is then passed through the opening 31 of the transverse brace 30 and downwardly behind the rod 32 and through the opening 28 of the closure plate 26 and that portion of the slot 27 in the bottom portion 22 of the housing.

From the foregoing description of the manner of attaching the cord, it will be apparent that the holders may be simultaneously and quickly raised or lowered by pulling upon or paying out the doubled or two strand portion of the cord which extends below one of the housings 17. In order to provide means for normally supporting the holders and consequently the shade roller in elevated position, I provide each housing with a latch rod 43, the ends of which extend through the slots 33 of the housing and terminate in retaining heads 44. These latch rods are preferably circular in cross section in order that they may roll or slide readily from the forward lower ends of the slots to the upper rear ends thereof or the reverse. When the holders are raised by properly manipulating the cord 42, the upper edges of the ribs 37 engage these latch rods, which then are seated in the lower forward ends of the slots and force them upwardly and rearwardly until the ribs have passed above them. The latch rods then immediately move downwardly and forwardly, through gravity, to seat beneath the locking ribs 37 and so support the holders in raised position. However, if a sharp downward pull is exterted upon the cord 42, the holders will be raised in such a manner that the cam portions 38 will cause the latch rods to move to the upper rear ends of the slots and if then the holders are suddenly released, they will move downwardly past

the slots before the latch rods have time to move forwardly sufficiently to engage with the shoulders. It will therefore be clear that while the holders, and consequently the curtain roller, may be locked in raised position by slowly raising the holders, they may at any time be released by slightly jerking the operating cord 42 to first further raise the holders and then immediately permit their downward movement. The combined weight of the holders and the curtain roller and curtain supported by the holders is, in all instances, sufficient to insure sufficient rapidity of downward movement, if the cord is quickly released, to insure passage of the holders beyond the slots 33, before they can be engaged by the latch rods 43.

Instead of using a single cord 42 doubled intermediate its length and secured at either end to the holders, two cords may be employed, each being secured to one of the holders and their ends below the housing through which they both extend secured to each other. The doubled portion of the cord or the end portions which are secured together, will, however, in either case, be provided with a weighted knob or handle 45 to prevent swaying of the cord because of wind blowing through the window and also to prevent fraying of the cord ends. The two cord sections immediately above this holder are secured together by any suitable form of clasp 46 in order that strain exerted upon the handle will always be exerted equally upon both sections of cord. The adjacent facing strip 12 of the window casing may be provided with any suitable form of cord retaining cleat 47 by means of which the shade holders may be secured in any intermediate positions within the housing.

Although I have illustrated and described my invention in all its details, it will of course be understood that I do not wish to be limited to the specific details of construction set forth, as various minor changes, within the scope of the appended claims, may be made at any time without in the slightest degree departing from the spirit of my invention.

Having thus described my invention, what is claimed as new is:

1. Shade roller supporting means including housings adapted to be secured to opposite sides of a window casing and having their opposed faces provided with vertically extending slots, shade roller holders slidably mounted in the slots, each holder within the housing having a latch engaging shoulder and a latch releasing cam portion spaced below the shoulder, latch members movably mounted in the housings, and means for raising and lowering the holders.

2. Shade roller supporting means including housings adapted to be secured to opposite sides of a window casing and having their opposed faces provided with vertically extending slots, and shade roller holders slidably mounted in the slots, each holder within the housing having a latch rod engaging shoulder and a latch releasing cam portion spaced below the shoulder, latch rods extending transversely of the housings and movable in diagonally extending slots formed in the walls of the housings, the slots being so proportioned that with the holders in elevated position, the latch rods will be passed beneath the shoulders.

3. Shade roller supporting means including housings adapted to be mounted at opposite sides of a window casing and including opposed vertically slotted faces and spaced side faces, the side faces adjacent their upper ends being provided with alined inwardly and downwardly inclined slots, latch rods extending transversely of the housings and extending at their ends through the inclined slots, being thereby movable by gravity toward the opposed faces of the housings, shade roller holders slidably mounted in the slots of the opposed faces of the housings, said holders having locking shoulders adapted for automatic engagement with the latch rods and cam portions adapted to disengage the latch rods from the shoulders, and means for raising and lowering the holders.

4. Shade roller supporting means including housings adapted to be mounted at opposite sides of a window casing and including opposed vertically slotted faces and spaced side faces, the side faces adjacent their upper ends being provided with alined inwardly and downwardly inclined slots, latch rods extending transversely of the housings and extending at their ends through the inclined slots, being thereby movable by gravity toward the opposed faces of the housings, shade roller holders slidably mounted in the slots of the opposed faces of the housings, said holders having locking shoulders adapted for automatic engagement with the latch rods and cam portions adapted to disengage the latch rods from the shoulders, and means for raising and lowering the holders, said means including stretches of cord secured at their ends to the holders, passed through a guide in the upper end of one of the housings and extending through the lower end of such housing.

5. Shade roller supporting means including housings adapted for attachment to opposite sides of a window casing and having their opposed faces provided with vertically extending slots, guides mounted in the upper portions of the housings, shade roller holders slidably mounted in the slots, a stretch of cord secured by one end to one of the holders and passed upwardly through

the guide of said holder housing, from said holder housing to the other holder housing, through the guide of said latter housing and downwardly through the bottom of the said housing, the other stretch of cord being secured to the holder in the last mentioned housing, passed through the guide in such housing and extended downwardly adjacent the first stretch of cord.

6. Shade roller supporting means including housings adapted to be secured to opposite sides of a window casing and having their opposed faces provided with vertically extending slots, shade roller holders slidably mounted in the slots, means for raising and lowering the holders, latches mounted in the housings to automatically engage the holders, and means operable by movement of the holders for releasing the latches

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

JOSEPH BECKER. [L. S.]

Witnesses:
HARRY ROSENBERG,
THOMAS F. ROCHE.