A. ROSE.

SELF ADJUSTING SHADE ROLLER.

APPLICATION FILED MAR. 5, 1913.

1,078,466. Patented Nov. 11, 1913.

Fig 1

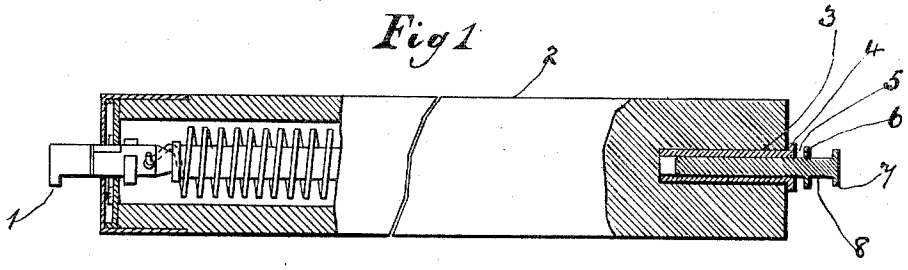


Fig 2

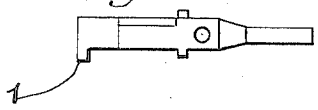


Fig 3

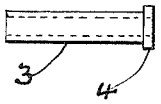


Fig 4

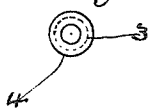


Fig 5

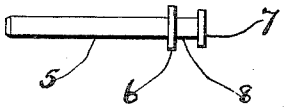
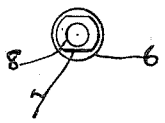


Fig 6



WITNESSES:

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SELF-ADJUSTING SHADE-ROLLER.

1,078,466. Specification of Letters Patent. Patented Nov. 11, 1913.

Application filed March 5, 1913. Serial No. 752,238.

To all whom it may concern:

Be it known that I, ARTHUR ROSE, a citizen of the United States, residing at 56 North Sixth street, in the city of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Self-Adjusting Shade-Rollers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in a self adjusting shade roller.

The object of my invention is to provide a shade roller that will be simple and economical in construction and slidably self adjusting to the varying conditions in width of the inside of window casings, thereby eliminating the annoyance of the shade roller falling from its brackets while in operation, through insufficient bearing of the pivot pins in their said brackets.

With the foregoing object in view, my invention consists of certain novel features of construction that will be hereinafter more fully explained in the accompanying drawings and specification.

Figure 1 is a plan view of the shade roller partly in section showing a small L extension or lug formed on the end of the spear; on the opposite end of the roller a metal sleeve is rigidly inserted with its stud pin slidably mounted. Fig. 2 is the spear showing the lug or L extension. Fig. 3 is the metal sleeve, Fig. 4 is an end view of the same. Fig. 5 is the sliding stud pin, Fig. 6 is an end view of the same.

Similar numerals of reference designate corresponding parts in all the figures of the drawing.

At 1 is shown a lug or small L projection formed integral with the spear and at right angles with its extremity which, when inserted within its bracket forms a locking piece against disengagement by lateral movement. This lug is of especial significance, and possesses peculiar functions in the operation of the roller when mounted in the cast iron brackets, which preceded the sheet metal stampings of similar design, now in general use. These cast brackets, of which many are still in use, contain a draft, somewhat tapering, through the entire thickness of the slotted aperture. The flat pintle when mounted therein, when normally at rest, lies somewhat diagonally in the slotted aperture, caused by the weight of the unrolled portion of the shade. The point of the lug having a very small surface beds itself in the corner of the draft with a clinging tendency. At any impact given the roller while in operation, or sudden release, this lug rides rearward in the draft of its bracket. The sliding stud-pin in the opposite end of the roller allows it this freedom of adjustment and distribution of any discrepancy in the length of the roller.

2 is the roller with the metal sleeve rigidly inserted therein as shown at 3 Fig. 1. This sleeve has a collar or flange as at 4, the stud pin 5 is journaled in the sleeve and is slidably self adjusting to suit varying conditions in width between window casings; the collar or washer 6 being driven upon the stud pin 5 leaving a space between it and the head of the pin 7 at which point the said stud pin engages within its bracket at 8. The head of the stud pin at 7 is somewhat flattened upon two of its sides to allow it to pass freely by a side movement through the hole in its bracket, the collar 6 prevents the stud from working out of the sleeve should the roller be used within brackets mounted upon the outside of the window casings. By this means of adjustment the shade roller cannot fall from its brackets through becoming loose, shrinkage of casing or miscut rollers and insufficient bearing of pivot pins.

I am aware that prior to my invention shade rollers have been made with a straight spear or polygonal stud and rigid pivot pins on the opposite end of the roller without retaining projections and slidably mounted. I therefore do not claim such a combination broadly; but

I claim:

1. In combination with a shade roller of the character described, comprising a rotatable roller recessed at one end, a nonrotative spindle extending into the said recess, a coiled spring encircling the said spindle, a spear attached thereto containing a lug or small L shaped projection formed integral therewith on its outer extremity and at right angles with the said spear.

2. In combination with a shade roller of the character described, comprising a rotatable roller recessed at one end, a nonrotative spindle extending into the said recess, a coiled spring encircling the said spindle, a spear attached thereto containing a lug or

small L shaped projection formed integral therewith on its outer extremity and at right angles with the said spear, a metal sleeve with a flange attached thereto rigidly inserted in the opposite end of the roller, a stud pin slidably mounted in the said sleeve containing a head, two sides of which are slightly flattened, a collar or washer driven upon the said pin leaving a space between it and the head of the said pin for engaging with its bracket, all substantially as shown and described.

In testimony whereof, I have affixed my signature in the presence of two witnesses.

ARTHUR ROSE.

Witnesses:

JARED D. PIERSON,

CARL FREDERICK METZGER.