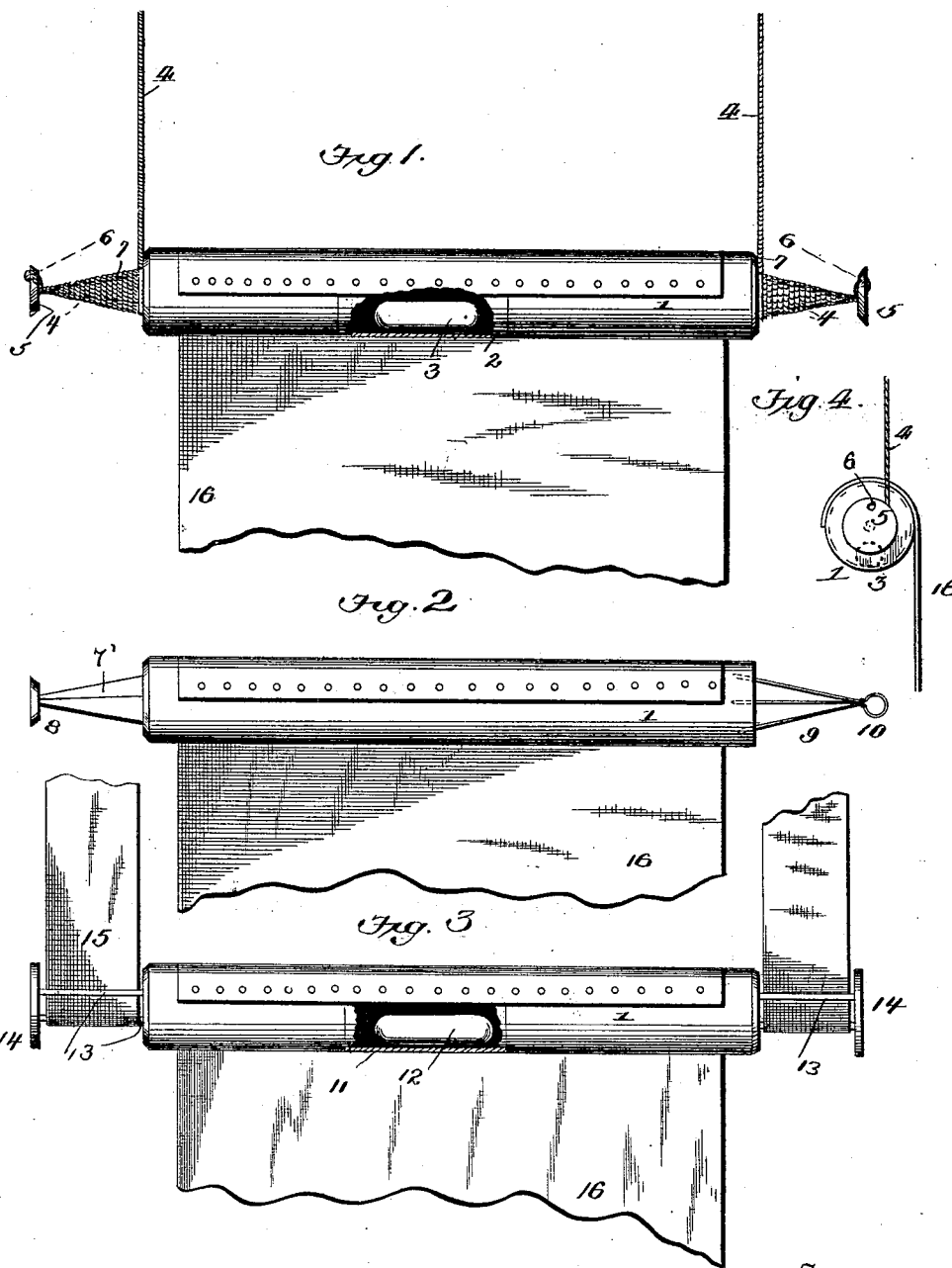


(No Model.)

M. E. REILLY.
SHADE ROLLER.

No. 520,863.

Patented June 5, 1894.



Witnesses

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UNITED STATES PATENT OFFICE.

MICHAEL E. REILLY, OF WALLACE, IDAHO.

SHADE-ROLLER.

SPECIFICATION forming part of Letters Patent No. 520,863, dated June 5, 1894.

Application filed May 6, 1893. Serial No. 473,276. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL E. REILLY, a citizen of the United States, residing at Wallace, in the county of Shoshone and State of Idaho, have invented a certain new, useful, and valuable Improvement in Shade-Rollers, of which the following is a full, clear, and exact description.

This invention relates to an improvement in shade rollers.

The object of the invention is to provide a shade roller of such construction that the act of lowering the shade will cause the roller to approach the top of the window casing, and vice versa, whereby the room may be thoroughly ventilated, and the entrance of light into the room regulated from two points instead of from one point as with the roller of the ordinary construction.

With these objects in view, the invention consists in the novel construction and combination of parts of a shade roller, as will be hereinafter fully described and claimed.

In the accompanying drawings forming a part of this specification, and in which like numerals of reference indicate corresponding parts, Figure 1, is an elevation partly in section, showing the shade roller and the curtain thereon. Fig. 2, is a similar view of a modified form of roller and support. Fig. 3, is a similar view showing the same elements. Fig. 4 is an end view of the roller showing the relative disposition of the curtain, the roller supporting cords and the counterbalancing weight, the latter being shown by dotted lines.

Referring to the drawings, 1 designates the roller which is constructed of two parts connected by a metallic tubing 2, and in the tubing works a cylindrical weight 3, which is adapted normally to occupy a position below a horizontal line drawn through the axis of the roller and thereby form a counter-balance for stopping the roller at any desired point, as will be obvious. Upon the outer ends of the roller are secured two cord pivots 4, which are preferably tapered outward from their point of attachment with the roller and carry on their outer ends circular disks 5 in which are cord-holes 6. Secured in these holes are cords 7 which are attached in any suitable manner to the window casing, and are designed to be wound upon the pivots 4 as the curtain

16 is pulled down, and be unwound therefrom on a reverse movement. By making the pivots tapered in form the weight of the curtain on the pins is equalized—that is, when the curtain is down the roller will be at the top of the window and the cords will then be upon the largest portion of the pins; but as the curtain is raised, and the roller descends the cord gradually approaches the small end of the pivot and thus prevents the weight of the counter-balance from overcoming the weight of the curtain 3 to allow the curtain to descend.

In Fig. 2, instead of employing the sectional roller, the same is made of a solid piece of wood or the like and is provided at one end with a cord pivot 7' which is rectangular in cross section and is also tapered and provided with the disk 8. The opposite end of the roller has its pivot pin constructed of four pieces of wire 9 which converge to a point and are bent to form a disk or flange 10 which subserves the same function as the disks 6 in Fig. 1. If desired, both ends of the roller may be provided with a pivot as shown at 7', or with a pivot constructed of four pieces of wire.

In Fig. 3, the roller is constructed in the same manner as that shown in Fig. 1—that is of two sections connected by a cylindrical tubing 11 in which works a weight 12, for the same purpose as that described in connection with Fig. 1. The pivot pins in this figure consist each of two nails or prongs 13 suitably secured to a head 14, which nails are designed to be driven into the end of the pole, and between the nails is secured a tape 15, which subserves the same purpose as the cord 7.

It is essential to the successful operation of the invention that the cord pivots and the roller be of different diameters, and that the cords and the curtain be reversely wound. Hence, it will be obvious that the unwinding of the cords will produce a simultaneous winding up of the curtain on the roller and a lowering of the latter, and a winding of the cords on the cord pivots an unwinding of the curtain and an elevation of the roller. The counterbalancing weight 3 is loose in the tubing and always occupies the lowermost position therein, being below the axis of the roller, thereby counterbalancing the curtain as will be readily understood.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. A shade roller provided with tapered square pivot pins at its ends, and cords connected at the small ends of the pins and attached to a suitable part of the window casing.
2. A shade roller consisting of two sections connected by a tube, a weight arranged in said tube and occupying normally a position below the axis of the roller, pivot pins carried by the ends of the roller, and cords connecting with the pivot pins.

3. A shade roller comprising two sections, a tube connecting the sections at the center, a weight arranged in said tube and adapted to act as a counter-balance, tapered pivot pins carried by the ends of the roller, and cords connecting with the said pins.

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

MICHAEL E. REILLY.

Witnesses:

R. KEYZER,
A. E. ANGEL.