May 30, 1944. L. A. YASHAN 2,350,085

ROLLER SHADE

Filed Feb. 1, 1943

Fig. 1.

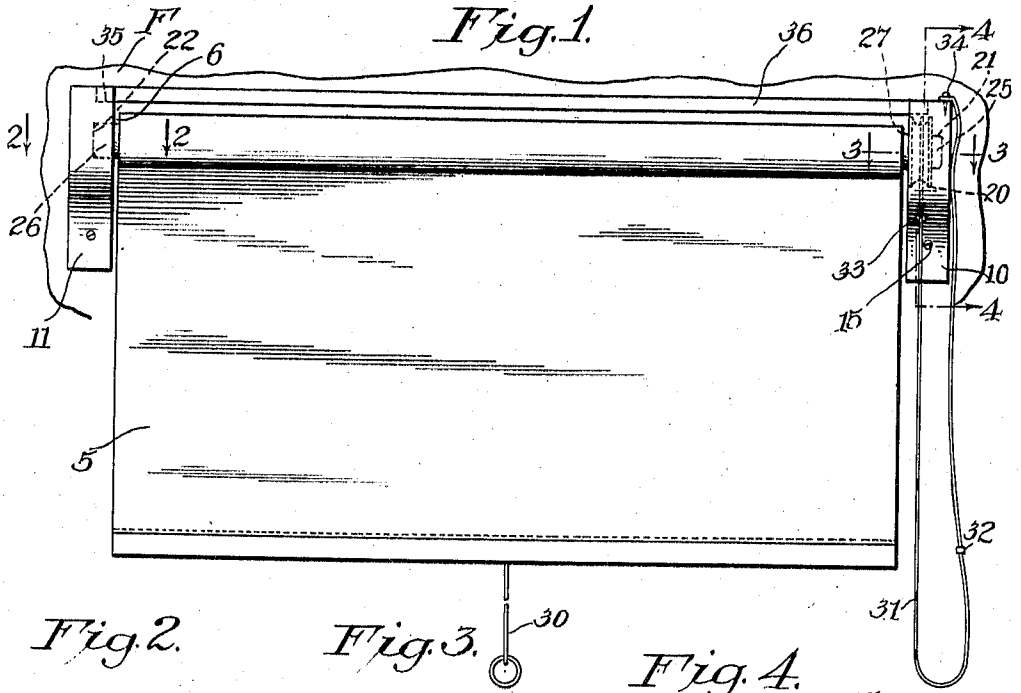


Fig. 2.

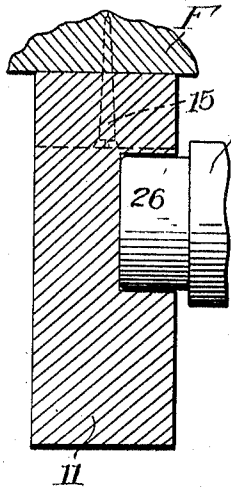


Fig. 3.

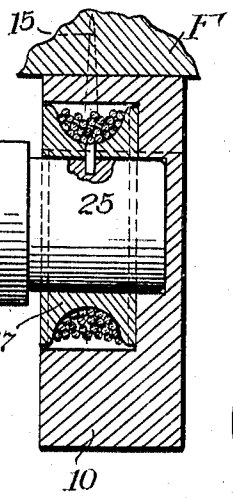
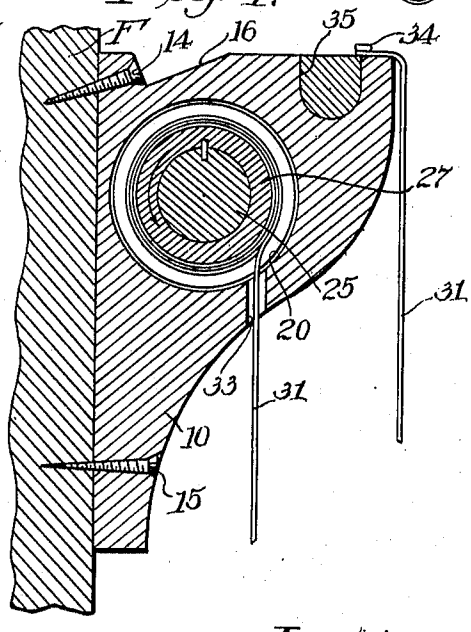


Fig. 4.



Inventor:
Leonard A. Yashan,
By Collins Myron
Atty.

Patented May 30, 1944 2,350,085

UNITED STATES PATENT OFFICE

2,350,085

ROLLER SHADE

Leonard A. Yashan, Portland, Oreg., assignor to L. D. Reeder, doing business as L. D. Reeder Co., Los Angeles, Calif.

Application February 1, 1943, Serial No. 474,308

1 Claim. (Cl. 160—293)

This invention has to do with roller shades and it is among the major objects of the invention to provide a shade roller wherein the use of springs is eliminated.

It its another aim to provide a roller shade in the use of which the shade may be easily stopped in any desired intermediate position during lowering or raising.

My invention also contemplates a roller shade in which there are no parts liable to get out of order; in which the shade cannot be accidentally released to roll up and which provides means for preventing the accidental pulling of the shade from the roller.

Still further and subordinate advantages are inherent in my invention and how those as well as the objects hereinabove specifically enumerated are attained will become apparent from the following detailed explanation of one presently chosen adaptation of the invention, for which purpose reference will be made to the accompanying drawing, in which:

Fig. 1 is a front elevation showing my roller shade installed on a window;

Fig. 2 is an enlarged section on line 2—2 of Fig. 1;

Fig. 3 is an enlarged section on line 3—3 of Fig. 1; and

Fig. 4 is an enlarged section on line 4—4 of Fig. 1.

Referring now to the drawing, the window shade 5 is shown in partially lowered position, being rolled about a roller 6 here shown as being made of wood, although other materials may be used.

To rotatably mount the shade carrying roller 6 on a window frame F, for instance, I provide a pair of mounting brackets, 10, 11.

Bracket 10 is secured to the window frame by screws 14, 15, the top of the bracket being cut away at 16 to provide access to screw 15. Bracket 11 is secured to the frame in like manner.

As best shown in Fig. 4, a recess 20 having a reduced diameter portion 21 is provided in the side of bracket 10, opening through the inner face thereof, and bracket 11 has a coaxial recess 22 opening through its inner face.

The end portions 25, 26 of the roller 6 project into the respective recesses and are rotatable therein, a sheave 27 being secured on end 25 and being rotatable in recess 20.

As the shade is manually pulled down, by pull 30, to unroll the shade from the roller 6, the sheave 27 is rotated counterclockwise, as shown by the arrow in Fig. 4, thus winding about the sheave a flexible cord 31. A stop member 32 is secured to the cord at a point which will abut the periphery of the cord passing hole 33 provided in bracket 10 when the shade has been unrolled to a safe extent, so as to arrest the unrolling of the shade before it reaches a point at which the shade may be pulled or torn from the roller.

To raise, or re-roll, the shade it is only necessary to pull downwardly on the cord 31 sufficiently to cause the sheave 27 to rotate in the reverse direction, which rotates the roller 6 to which it is secured. The free end of cord 31 is anchored to bracket 10 as by a pin 34.

A recess 35 is provided in the top of each bracket to receive the ends of a bracing rod 36, which bracing rod may also be utilized to hang a curtain if desired.

From the foregoing description, it will be observed that the shade may be stopped at any desired point simply by releasing the pull on member 30, during unrolling, or releasing the pull on cord 31 during raising of the shade. The shade will then remain in such position until manually moved since the weight of the curtain and rod will cause such limited frictional engagement of the rod ends 25, 26 with the bottom wall portion of the recesses 21, 22 to sufficiently resist accidental unrolling of the curtain. The elimination of springs eliminates the shortcoming of accidental release inherent in spring operated curtains, and also obviates the necessity of employing metal parts.

While I have resorted to considerable detail for the purpose of making my invention understood, I wish it understood that within the broader scope of my invention, as defined by the appended claim, various modifications and adaptations may be made without departing from the spirit of the invention.

I claim:

The combination of a rotatable shade roller, a shade windable about and unwindable from the roller, a cord windable about and unwindable from the roller in a direction opposite that of the shade, a stop member on the cord and means engageable by the stop member after the shade has been unwound from the roller to a predetermined extent whereby to arrest unwinding of the shade.

LEONARD A. YASHAN.