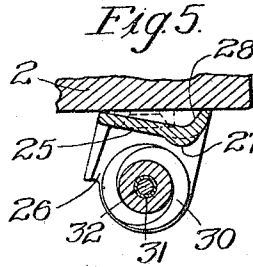
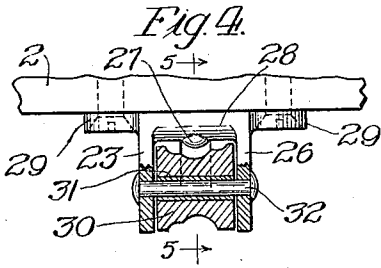
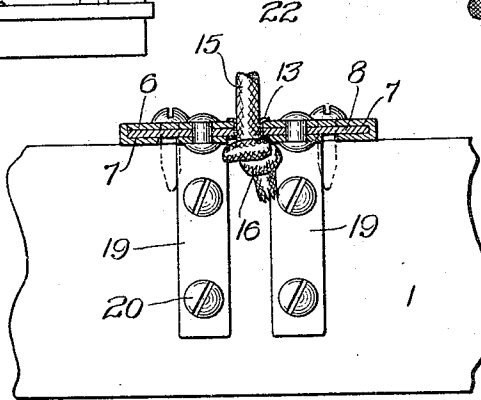
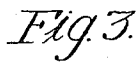
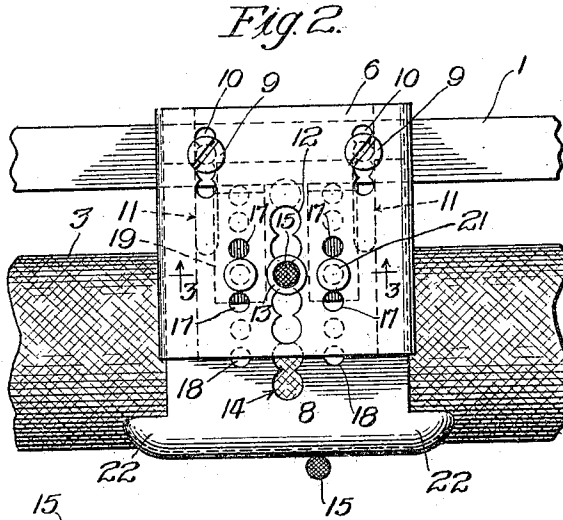
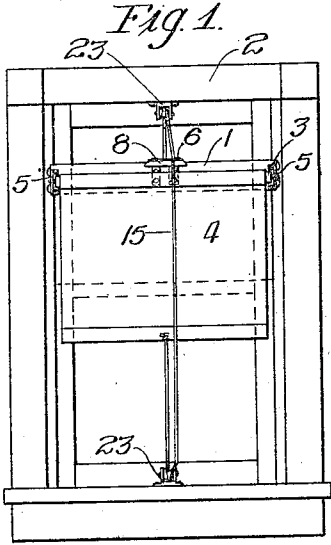


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1,212,354.



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UNITED STATES PATENT OFFICE.

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SHADE-FIXTURE.

1,212,354.

Specification of Letters Patent.

Patented Jan. 16, 1917.

Application filed September 13, 1915. Serial No. 50,287.

To all whom it may concern:

Be it known that I, ALBERT H. HOVER, a citizen of the United States, residing at Chicago, county of Cook, State of Illinois, have invented a certain new and useful Improvement in Shade-Fixtures, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates primarily to shades of the type wherein the roller is mounted upon a bar which is in turn suspended from the middle and it has for its object to produce a simple and novel suspending device which will afford a wide range of adjustment so as to permit shades of many different sizes to be properly balanced.

A further object of my invention is to produce a fixture of the character specified in which wear on the suspending cord or on the shade due to the rubbing of the cord on the fixture or against the shade is entirely avoided.

Shades of the character to which the present invention relates, as well as other types of shades and curtains, require locking pulleys and, viewed in one of its aspects, my invention may be said to have for its object to produce a simple and novel pulley which may be used successfully in any position in which pulleys of this kind are employed without fraying the cord or cable, and without danger of locking or binding the cord or cable so as to prevent it from being readily manipulated.

As a subsidiary object my invention may be said to contemplate the production of a simple form of anti-friction pulley.

The various features of novelty whereby my invention is characterized will hereinafter be pointed out with particularity in the claims; but, for a full understanding of my invention and of its objects and advantages, reference may be had to the following detailed description taken in connection with the accompanying drawing, wherein:

Figure 1 is an elevation of a window provided with a shade whose fixtures are arranged in accordance with the present invention; Fig. 2 is a top plan view on an enlarged scale with the middle portion of the supporting bar and the curtain and roller, showing the suspending fixture; Fig. 3 is a section taken approximately on line 3—3 of Fig. 2; Fig. 4 is an enlarged view of one of the pulleys, shown partly in section; and Fig. 5 is a section taken approximately on line 5—5 of Fig. 4.

Referring to the drawing, 1 represents a bar adapted to extend transversely across a window in a frame, 2; 3 is a shade roller having thereon a shade, 4; and 5 are brackets at the end of the bar for supporting the shade roller. All these parts are old and may take any desired forms. Arranged on top of the bar, at the middle thereof, is a flat plate, 6, having its side edges bent inwardly on the under side thereof so as to form guides or ways, 7, into which may be slipped a plate, 8, which is conveniently but not necessarily made of material of about the same thickness as the plate 6. In other words, the plates 6 and 8 are telescoped upon each other. The plate 6 is secured upon the bar by means of screws, 9, which pass through slots, 10, arranged near one end of the plate and elongated in a direction parallel with the guides or ways 7. Each slot 10 is preferably made in the shape which it would have if produced by boring a row of intersecting holes through the plate, each hole being of the proper diameter to receive one of the screws 9. With this arrangement the plate 6 can be adjusted bodily forward or backward and be held positively against displacement. The rear end of the plate 8 is provided with slots, 11, opening out at the rear end of the plate and adapted to register with the slots 10, so that the plate 8 may be adjusted in and out without being interfered with by the screws 9. In the center of the plate 6 and extending rearwardly from the front end thereof is an elongated slot, 12, preferably shaped like the slots 10 so that an

eyelet, 13, placed at any point along the slot will be held against displacement lengthwise thereof. The plate 8 is provided with a slot, 14, similar to but preferably somewhat longer than the slot, 12, and lying directly beneath the latter and ordinarily the eyelet, 13, will extend through both of the slots 12 and 14. The suspending cord, 15, for the shade passes down through the eyelet 13 and is provided on its lower end with a knot, 16, which prevents it from pulling out. The plate 6 is provided with two series of holes, 17, lying on opposite sides of and parallel with the slot 12, and the plate 8 contains two similar but longer rows of holes, 18, adapted to register with the holes 17. Two angles, 19, are each placed with one arm lying against the front face of the bar 1 and the other arm engaging with the bottom of the plate 8 in alinement with the rows of holes 18. The longer irons are fastened to the bar by means of screws, 20, or other similar fastening means and are fastened to the fixture by means of rivets, 21, or other devices passing through registering holes in the rows 17 and 18.

The front end of the member 8 is bent downwardly along a gradual curve and laterally projecting ears, 22, at the front corners are also bent downwardly along gradual curves so that the front end the plate 8 takes the form of a long rounded shoe the ends of which are rounded so that there are no sharp corners or edges. The purpose of this rounded shoe is to protect the depending portion of the cable 15 which passes up from the fixture over a pulley, 23, at the top of the window frame and also to protect the shade.

In assembling the fixture on the bar, the plate 8 is withdrawn far enough so that the rounded shoe at the front end will project slightly beyond the front of the shade when the latter is fully wound upon the roller; the proper adjustments to secure the balancing of the shade being obtained by adjusting the fixture as a whole by means of the slots, 10, and fastening devices, 9, and by shifting the supporting cord along the slot, 12, or by combining both methods. After the parts are properly adjusted to secure the desired balance and place the rounded shoe in the proper location, the angles, 19, are attached in the manner heretofore described so as to fasten the fixture rigidly to the bar.

It will be seen that by using the two simple telescoping plates a wide range of adjustments is obtained and by providing the rounded shoe the supporting cord is prevented from rubbing against any sharp metal edge or corner and is therefore protected against wear, while at the same time the cord is held away from the shade and

roller and therefore does not rub against and wear the shade as now happens with the old types of fixtures.

The second feature of my invention is the pulley, this being best illustrated in Figs. 4 and 5. The casting in which the rotating member is supported consists of a back member, 25, and two arms, 26, the inner surfaces being quite smooth and flat except where the hump, 27, necessary in some forms of devices is employed. The back member, 25, has its forward edge rounded as at 28, the same idea that is incorporated in the rounded shoe of the fixture being also present in the pulley frame. In certain locations, that is when the back of the pulley frame is upright, I have found that the cord that passes over the rotating member sometimes catches on the side arms so that the cord cannot be manipulated in the proper manner. I have found that by forming a wedge on the rear face of the back member, so that the entire pulley frame is tilted forward when the back is placed against a vertical surface, the upper edges of the arms may be given such a downward inclination that the cord will not catch and bind thereon. In the arrangement shown, I have placed at the front end of the back member a rearwardly projecting lip, 28, which merges at the sides of the frame into the ears, 29, by which the frame is held in place; the rear face of the ears being in a plane which passes from the outer rear edge or corner of the back 25 to the rear edge of the lip 28, thus forming part of the wedge.

Another feature of my invention consists in a feature which makes the pulley noiseless and practically frictionless. To this end the rotary wheel, 30, is provided with an antifriction bushing, 31, through which the holding pin or shaft, 32, passes. The bushing may be loose on the pin or shaft and also loose in the member 30.

While I have illustrated and described with particularity only a single preferred form of my invention, I do not desire to be limited to the exact structural details thus illustrated and described; but intend to cover all forms and arrangements which come within the terms employed in the definitions of my invention constituting the appended claims.

I claim:

1. In combination, two telescoped plates, the outer end of one of said plates being adapted to be attached to a bar for supporting a shade roller, the outer end of the other plate being formed into a rounded shoe adapted to lie parallel with said bar, said plates having registering elongated slots extending through the same and contracted in width at a plurality of points for the purpose of receiving a supporting cord

having one end passing through the slots in both directions and being bent down-wardly into the form of a rounded shoe 10 and its other end extending down past the shoe.

2. In combination, two flat telescoped plates, the outer end of one of said plates 5 being adapted to be attached to a bar for supporting a shade roller, the outer end of the other plate being extended laterally in both directions and being bent down-wardly into the form of a rounded shoe 10 having rounded ends, and means for connecting said plates together in any one of a plurality of positions.

In testimony whereof, I sign this specification.

ALBERT H. HOVER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."