May 12, 1931. J. H. BOYE 1,805,233

CURTAIN SUPPORT

Filed May 21, 1930

Fig. 1.

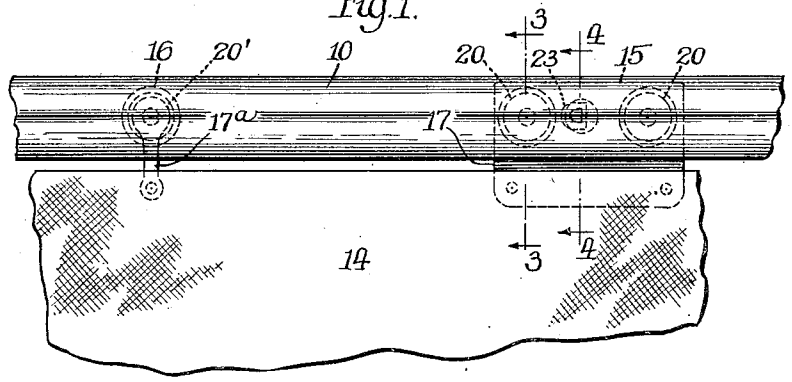


Fig. 2.

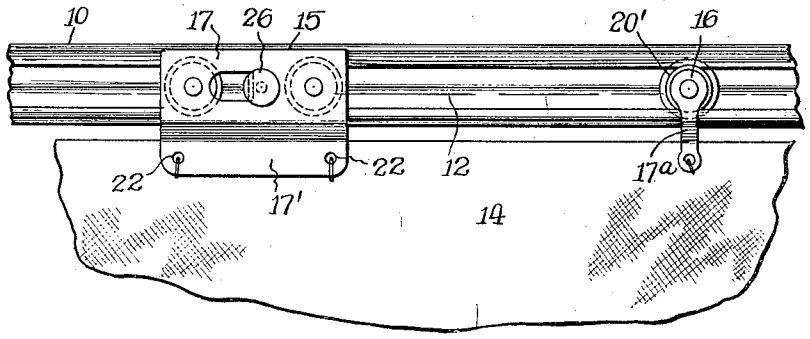


Fig. 4.

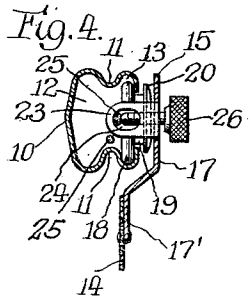


Fig. 3.

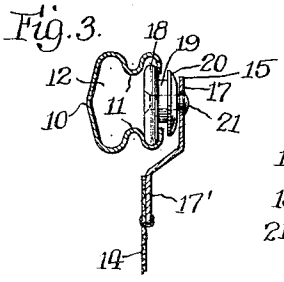
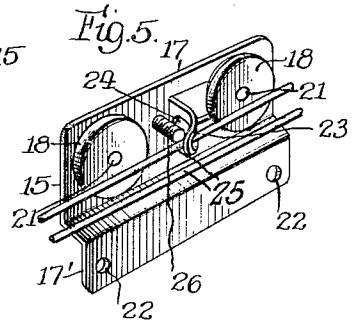


Fig. 5.



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UNITED STATES PATENT OFFICE

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CURTAIN SUPPORT

Application filed May 21, 1930. Serial No. 454,246.

This invention relates to curtain fixtures, having reference mainly to curtain supports known as the "pull cord" type, wherein mating right and left sections of the curtain or portière are suspended from a rod and are drawn together or apart at their upper ends by a cord trained over guide pulleys or sheaves in or on the rod, said cord being attached to and operating a pair of master hanger slides from which the upper ends of the inner marginal portions of the two curtains are suspended. The present invention relates more particularly to improvements in the curtain hanger slides; certain of the present improvements pertaining to the master slides of a pull cord type of curtain fixture, while other improvements are applicable to curtain suspension slides generally whether of the pull cord type or of the plain type wherein the curtain is manually drawn back and forth lengthwise of the rod.

One object of the present invention, insofar as the latter relates to the master slide, is to provide a very simple, inexpensive and efficient cord clamping device for connecting the slide to the cord and readily adjusting the slide to its proper position on the cord. Still another object of the invention, insofar as the latter relates to hanger slides generally, is to provide an improved construction which will prevent the suspension arm of the slide to which the upper edge of the curtain is attached from rubbing on the lower edge of the curtain rod itself, thus preventing the frictional drag which would otherwise occur and also avoiding the scratching and marring of the surface finish of the rod.

My present invention, in one approved form in which the same may be embodied, is illustrated in the accompanying drawings, in which—

Fig. 1 is a front elevational view of a fragment of a curtain rod and the upper portion of a curtain, showing my improved curtain hanger slide associated therewith.

Fig. 2 is a rear elevation of the parts shown in Fig. 1.

Figs. 3 and 4 are vertical sectional details taken on the lines 3—3 and 4—4, respectively, of Fig. 1.

Fig. 5 is a perspective elevation of one of the master slides.

Referring to the drawings, 10 designates as an entirety a fragment of the curtain rod. As shown in the sectional views, Figs. 3 and 4, this is a hollow sheet metal rod of the well known "flat" type of substantially C-form in cross section. In the present instance I have shown a modified form of such a rod wherein internal hollow ribs 11 are rolled in the top and bottom edges of the rod, thereby forming front and rear channels 12 and 13 having certain functions which are set forth in a companion application filed concurrently herewith, Serial No. 454,245. For the purposes of the present invention, however, this particular form of a rod is not essential, and may be substituted by the known plain C-type of rod.

At 14 I have shown a fragment of the upper portion of a curtain or portière that is suspended from the rod 10 by the improved hanger slides of the present invention; 15 designating as an entirety one of the central master slides to which the pull cord is attached, and 16 designating one of the plain follower slides.

Describing the improved master slide 15 in detail, and referring particularly to Fig. 5, 17 designates a flat plate, in the upper portion of which are mounted a pair of rollers 18 which ride in the bottom groove of the rear channel 13 of the rod; the rollers being of such diameter that their upper portions enter the upper grooved channel 13 so that the rollers are sustained laterally by the walls of said upper groove and thus maintained in a vertical position. Integral with each roller 18 is a short lateral hub or boss 19 that extends through the slot in the rear side of the rod but is out of contact with the edges of said slot, and on the outer end of the boss or hub 19 is a flange 20 of sufficient diameter to overlap the edges of the slot. Each roller 18 and its boss 19 are fast on a central spindle 21, which latter projects sufficiently beyond the boss 19 and its flange 20 to form a support for the hanger plate 17 that is loosely mounted and suspended thereon. The lower portion of the hanger plate 17 is forwardly

offset as shown at 17′ to a position beneath the rod and is formed with holes 22 by which it may be stitched or otherwise secured to the curtain 14. The purpose of the flange 20 is to act as a guard to prevent the hanger plate 17 from rubbing against the lower portion of the rear wall of the rod as the curtain is drawn lengthwise of the latter, thus avoiding the frictional drag and the wear on the rod that would result from such rubbing contact. Curtain fixtures of the pull cord type commonly employ a cord folded on itself to form a long narrow loop extending lengthwise of the curtain rod, and two end portions that hang from guide pulleys at one end of the rod. The closed end or bight of the loop is trained around a pulley at the other end of the rod, and the two limbs of the loop are respectively attached, either directly to the inner top corners of a mating pair of curtains, or to a pair of master slides that are attached to such inner top corners of the curtains; so that a pull on one of the depending end portions of the cord draws the curtains apart, and a pull on the other depending end portions of the cord draws the curtains toward each others. A good illustration of this type of pull cord curtain fixture may be seen in Figs. 6 and 7 of patent to Datter, No. 924,892, June 15, 1909. A tongue 23 is cut and bent forwardly on an incline from the plate 17, and this tongue is formed with a slot 24 extending lengthwise thereof for the passage of one limb only of the pull cord 25 therethrough; it being understood that the other limb of the pull cord passes below or in front of said tongue 23, as shown in Fig. 4, and passes through the slot of a similar tongue of the mating master slide (not shown), which is attached to the other curtain. In the plate 17 of each master slide adjacent to the base of the tongue 23 is a tapped hole, through which is entered a clamp screw 26, the free end of which is adapted to bite the cord between the inner end of the screw and the forward end wall of the slot 24 whereby the slide is securely attached to the cord, but may be readily adjusted lengthwise of the latter by backing off the screw 36, adjusting the slide to a new position on the slide, and retightening the screw 36.

The follower slide 16 is structurally identical with the master slide above described, except that it employs but a single roller, and a narrow hanger arm 17ª attached at its lower end to the upper end of the curtain, and omits the cord clamping means of the master slide. This arm 17ª is held from frictional engagement with the lower rod itself by a flange guard 20′ structurally and functionally similar to the flange guard 20 of the master slide hereinabove described.

By cutting and bending the tongue 23 out of the stock of the hanger plate 17, a considerable economy of labor and material is effected; although, within the purview of the invention, this tongue might be a separate member attached to the plate. The adjustment of the slide along the cord is very easily and quickly effected by simply loosening the screw 26, sliding the master slide to a new position, and then tightening the screw. And the provision of the guard flange 20 or 20′ between the hanger plate or arm 17 or 17ª and the lower rear edge of the rod makes the drawing of the curtain back and forth very easy by eliminating friction of the plate or arm on the rod; and this freedom from friction is further enhanced by the provision of rollers having a rolling fit in the channel of the rod.

I claim:

1. As an element of a draw curtain support, a curtain hanger slide comprising a plate, a roller mounted on one side of said plate to travel in a longitudinally slotted hollow curtain rod, a tongue on said plate adapted to project into the rod through the slot thereof, said tongue being apertured for the passage of a draw cord therethrough, and means mounted on said plate adapted to pinch the cord against a portion of said tongue.

2. As an element of a draw curtain support, a curtain hanger slide comprising a plate, a roller mounted on one side of said plate to travel in a longitudinally slotted hollow curtain rod, an inclined tongue on said plate adapted to project into the rod through the slot thereof, said tongue being apertured for the passage of a draw cord therethrough, and a clamp screw mounted in said plate adjacent to the base of said tongue adapted to pinch the cord against the free end portion of said tongue.

3. As an element of a draw curtain support, a curtain hanger slide comprising a plate, a pair of rollers mounted on one side of said plate to travel in a longitudinally slotted hollow curtain rod, a laterally extending tongue on said plate located between said rollers and adapted to project into the rod through the slot thereof, said tongue being apertured for the passage of the cord therethrough, and a clamp screw mounted in said plate adapted to pinch the cord against the free end portion of said tongue.

4. As an element of a draw curtain support, a curtain hanger slide comprising a plate, a pair of rollers mounted on one side of said plate to travel in a longitudinally slotted hollow curtain rod, an inclined laterally extending tongue on said plate located between said rollers and adapted to project into the rod through the slot thereof, said tongue being longitudinally slotted for the passage of the cord therethrough, and a clamp screw mounted in said plate adjacent to the base of said tongue adapted to pinch the cord against a wall of the slot of said tongue.

5. As an element of a curtain support, a curtain hanger slide comprising a roller adapted to travel in a longitudinally slotted hollow curtain rod and formed with a hub portion extending through the slot of said rod, a roller spindle projecting outwardly beyond said hub, a curtain suspension member loosely pivoted on and depending from the projecting end of said spindle, and a guard flange on the outer end of said hub serving to prevent sliding contact of said suspension member with the slotted wall of said rod as the curtain is drawn back and forth.

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