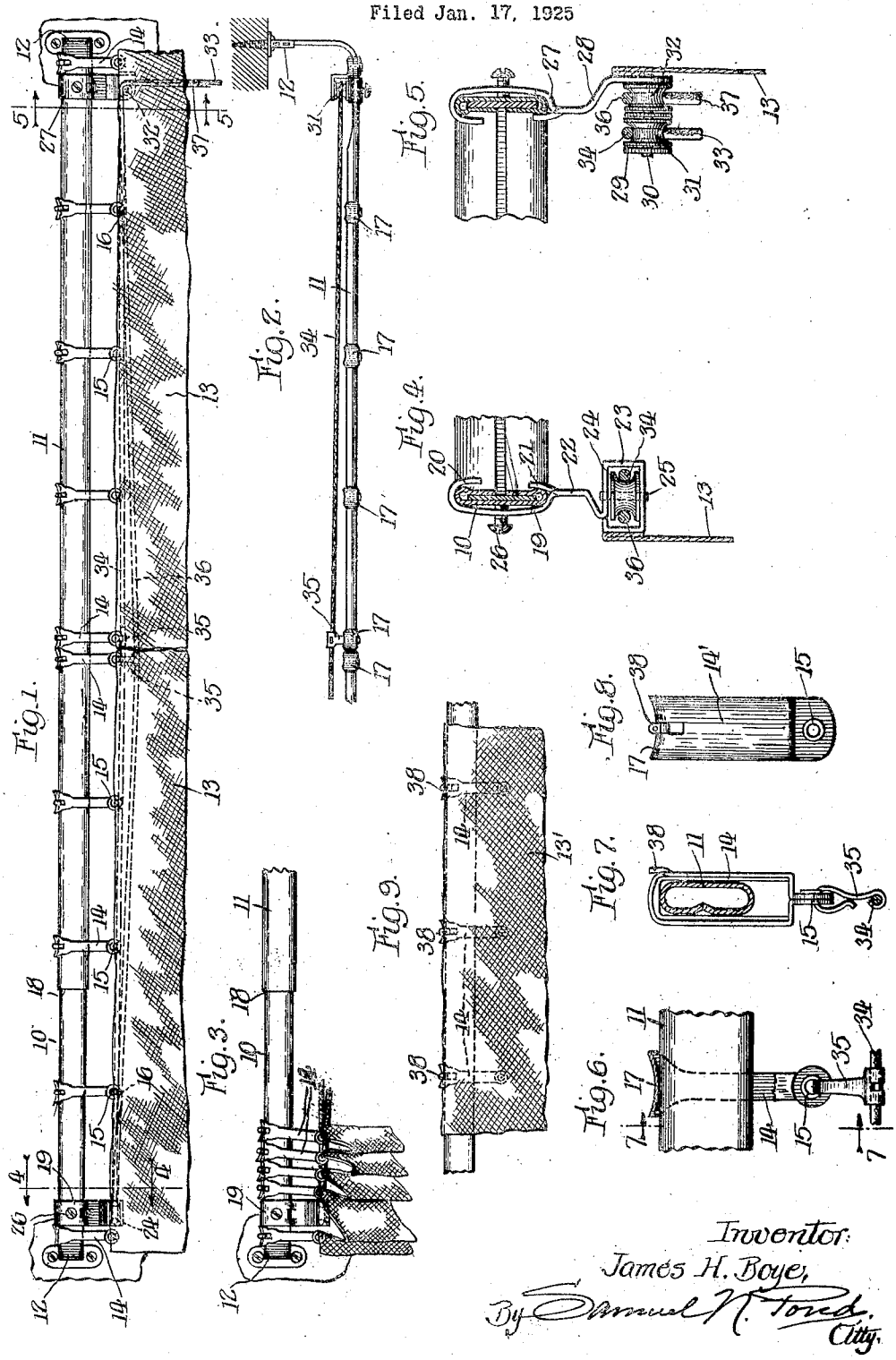
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J. H. BOYE

DRAW CURTAIN FIXTURE

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Inventor:
James H. Boye,
By Samuel N. Foreed.
Atty.

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JAMES H. BOYE, OF CHICAGO, ILLINOIS, ASSIGNOR TO JAMES H. BOYE MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

DRAW-CURTAIN FIXTURE.

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This invention relates to curtain fixtures of the draw curtain type, having reference more particularly to constructions wherein the curtain, portière or drape is suspended from the curtain rod by a series of sliding rings.

In draw curtain fixtures of this type employing extensible telescoping rod sections, considerable difficulty in drawing the curtains closed has heretofore been experienced due to the fact that, in drawing the curtains closed, the sliding rings riding over that section of the rod wherein the telescopic joint occurs, would catch and stick on the end of the outer rod and fail to properly ride thereover, frequently making it necessary to manually manipulate the rings over this point.

The principal object of my present invention is to provide a draw curtain fixture of the sliding ring type which may be successfully embodied in telescoping curtain rods and wherein the difficulty above-referred to of drawing the rings over the inner end of the outer telescoping rod section when closing the curtains will be avoided. Another object is to provide a draw curtain construction wherein, when the curtains are drawn to open position, the supporting rings may be very closely stacked in partly overlapping relation, thereby affording a maximum opening of the upper portion of the curtain directly beneath or in front of the rod.

Other objects and attendant advantages of the invention will be apparent to persons skilled in the art as the same becomes better understood from the following detailed description and by reference to the accompanying drawing wherein I have illustrated practical and preferred embodiments of the principle of the invention, and in which—

Fig. 1 is a front elevation of my improved curtain fixture showing the upper edge portions of the curtains suspended therefrom;

Fig. 2 is a top plan view of the right hand portion of Fig. 1;

Fig. 3 is a front elevation of the left hand portion of Fig. 1 showing the left hand curtain drawn to open position and illustrating the stacking of the rings on the rod;

Rig. 4 is an enlarged cross-section on the line 4—4 of Fig. 1;

Fig. 5 is an enlarged cross-section on the line 5—5 of Fig. 1;

Fig. 6 is a fragmentary front elevation, partly in vertical longitudinal section through one of the rings to which the draw cord is attached;

Fig. 7 is a cross-section on the line 7—7 of Fig. 6;

Fig. 8 is a side elevation of a modified form of ring; and

Fig. 9 is a fragmentary front elevation showing the curtain suspended from the upper front sides of the rings and concealing the latter.

Referring to the drawing, 10 and 11 designate respectively the inner and outer telescoping sections of a curtain rod of the well-known flat type, and 12 designates brackets in which the elbow-shaped ends of the rod sections 10 and 11 are mounted and supported. 13 designates each of the two halves of the curtain, which are suspended at their upper edges from the curtain rod by means of generally oblong flat rings or hangers 14 of greater length than the width of the rod, these hangers being formed with eyes 15 at their lower ends to which the upper edges of the curtains 13 are attached as by stitching 16.

As most clearly shown in Figs. 6 and 7, each of the hangers 14 is formed on its upper end with a shoe or skid 17 that slidingly rests on the upper edge of the rod and is formed with a longitudinally convex inner surface bearing on the rod. In the preferred embodiment of the invention, this shoe or skid 17 has a length considerably greater than the width of the sides of the hanger, the main purpose of which is to enable the convex bearing surface of the shoe to be formed with such a small degree of curvature that, when the hanger is drawn from the rod section 10 onto the rod section 11 by the pull cord it will readily mount and ride over the shoulder 18 formed by the inner end of the outer rod section 11. This it can readily do by reason of the fact that the loop of the hanger does not engage with the lower edge of the rod but is free to tilt edgewise on its top bearing as a center of swing. Ordinary round hanger rings which have heretofore been used in draw curtain

fixtures of this general type of course present a convex bearing surface to the upper edge of the rod; but in such round rings the incline is so steep that when the ring strikes the shoulder 18 it will not readily ride thereover, but frequently sticks and requires to be manually lifted over the shoulder. I have discovered that this fault can be completely cured by providing on the upper end of the ring or hanger a convex rod-bearing surface having a low inclination or degree of curvature and of such length that the advance end thereof, with reference to the direction of travel, will be at a greater height from the rod section 10 than the shoulder 18 formed by the end of the rod section 11, and also making the loop of the hanger sufficiently longer than the width of the rod that it can freely tilt edgewise without interference with the lower edge of the rod.

The same principle of a shoe or skid on the upper end of the curtain supporting hangers may be embodied in a hanger such as that shown at 14′ in Fig. 8, wherein the hanger is of uniform width throughout, the sides having a width equal to the length of the shoe or skid 17′.

Referring to the means for drawing the curtains open and closed along the curtain rod, 19 designates a hanger bracket mounted on the outer end portion of the rod section 10 and conveniently consisting of a strip of sheet-metal formed at its upper end with a downturned hook or flange 20 (Fig. 4) engaging over the upper edge of the rod 10 and an upwardly directed tongue 21 cut and bent rearwardly from the stock of the strip and lying behind the lower edge of the rod 10; together with a depending shank 22 at its lower end bent into a rectangular frame 23 to form a housing for a horizontal pulley 24 rotatably mounted on a vertical pintle 25 in said frame. The hanger bracket thus formed can be readily slipped over one end of the rod 10 and slid lengthwise thereof into proper position as shown in Fig. 1, and secured by a clamp screw 26. At the corresponding outer end of the rod section 11 is a mating hanger bracket 27 that is mounted and secured on the rod in the same way and by the same means as the hanger bracket 19; the depending shank 28 thereof being formed at its lower end into a rectangular frame 29 in which are journaled on a horizontal pivot pin 30 a pair of pulleys 31 and 32. A single draw cord folded on itself and trained over the pulleys 24, 31 and 32 and attached to the two central hangers serves to effect the opening and closing movements of the curtains. 33 designates one depending end portion of the cord which depends from the pulley 31. Continuous with the depending end portion 33 is a horizontal portion 34 that extends behind the upper edges of the curtains to and around the horizontal pulley 24, and attached to the cord 34 by a clip 35 (Figs. 6 and 7) is the right hand one of the two central hangers 14 shown in Fig. 1. Continuous with the cord portion 34 and extending from the pulley 24 to and over the pulley 32 is a second horizontal cord section 36, to which is attached by a similar clip 35 the left hand one of the two central hangers 14 shown in Fig. 1. Continuous with the cord section 36 and depending from the pulley 32 is the other end cord section 37. Manifestly, by pulling downwardly on the depending cord 33, the hangers 14 on opposite sides of the center of the rod are drawn along the latter toward the brackets 19 and 27, opening the curtains. Conversely, by pulling downwardly on the depending cord 37, the hangers and curtains are drawn in the reverse direction, closing the curtains. During this closing movement, the shoes or skids 17 of the hangers at the left hand end of the rod, as shown in Fig. 1, ride easily and without hitch or obstruction over the shoulder 18 formed by the end of the rod section 11. The outer vertical edges of the two curtains are prevented from being drawn inwardly during the closing movement by locating the two end hangers 14 outside the pulley supporting brackets 19 and 27, as clearly shown in Fig. 1.

When the curtains are drawn apart, the shoes or skids 17 are tilted or rocked, the foremost ends thereof relatively to the direction of movement being elevated, and the rear ends being substantially tangent to the upper edge of the rod, so that the shoes or skids partially overlap and internest in the manner shown in Fig. 3, thus enabling the curtain to be opened wider than is possible with the use of ordinary ring hangers. The same tilting of the skids 17 in the opposite direction occurs when the curtains are drawn closed, thereby facilitating the riding of the skids smoothly and without hitch over the shoulder 18.

Some users of draw curtain fixtures prefer that the curtains shall completely hide their suspending means; and this is provided for in a simple manner in the present invention by cutting and bending upwardly from the front side of each of the hangers 14 an integral tongue or hook 38, from which hooks the upper edge of the curtain 13′ is readily suspended in the manner shown in Fig. 9.

While I have herein shown and described practical and workable embodiments of the principle of the invention, it is manifest that the structural forms and details illustrated may be considerably varied and modified by persons skilled in the art without departing from the principle or sacrificing any advantages of the invention.

Hence, I do not limit the invention to the exact forms shown for purposes of illustration, but reserve such variations and modifications as fall within the spirit and purview of the appended claims.

I claim—

1. In a draw curtain fixture, the combination of a curtain rod formed of telescoping sections, and curtain hangers slidably mounted on the top edge and free from the bottom edge of said rod and formed on their upper ends with skids having inclined bearing surfaces of low inclination adapted to ride easily over the shoulder presented by the end of the outer rod section.

2. In a draw curtain fixture, the combination of a curtain rod formed of telescoping sections, and curtain hangers slidably mounted on the top edge and free from the bottom edge of said rod and formed on their upper ends with skids each having a rod-bearing surface inclined upwardly from its center to both ends, whereby said hangers swing freely edgewise from their bearing points as centers and ride easily over the shoulder presented by the end of the outer rod section when the curtain is drawn closed and overlap and stack up on each other when the curtain is drawn open.

3. In a draw curtain fixture, the combination of a curtain rod formed of telescoping sections, and curtain hangers slidably mounted on the top edge and free from the bottom edge of said rod and formed on their upper ends with skids having longitudinal convex rod-bearing surfaces of sufficient length and low degree of curvature to ride easily over the shoulder presented by the end of the outer rod section in edgewise canted position of said hangers.

4. In a draw curtain fixture, the combination of a flat curtain rod formed of telescoping sections, and substantially rectangular narrow curtain hangers formed with parallel sides of greater length than the width of the rod slidably mounted on said rod and formed on their upper ends with skids having elongated inclined rod-bearing surfaces of sufficiently low inclination from the upper edge of said rod to ride easily over the shoulder presented by the end of the outer rod section.

5. In a draw curtain fixture, the combination of a flat curtain rod formed of telescoping sections, and substantially rectangular narrow curtain hangers formed with parallel sides of greater length than the width of the rod slidably mounted on said rod and formed on their upper ends with skids having longitudinal convex rod-bearing surfaces of greater length than the width of said hangers and of sufficiently low degree of curvature to ride easily over the shoulder presented by the end of the outer rod section.

6. In a draw curtain fixture, the combination with a flat curtain rod, of a curtain hanger slidably mounted on said rod, said hanger comprising a substantially rectangular sheet-metal frame surrounding said rod formed at the upper end of one side thereof with a hook for suspending a curtain.

7. In a draw curtain fixture, the combination with a flat curtain rod, of a curtain hanger slidably mounted on said rod, said hanger comprising a substantially rectangular sheet-metal frame surrounding said rod and formed at the upper end of the front side thereof with a hook for suspending a curtain, and at its lower end with an eye, and a clip for attachment to a draw cord suspended from said eye.

JAMES H. BOYE.