May 3, 1966 I. V. WILLIAMS 3,248,749

HANGING DRAPERY SUPPORT

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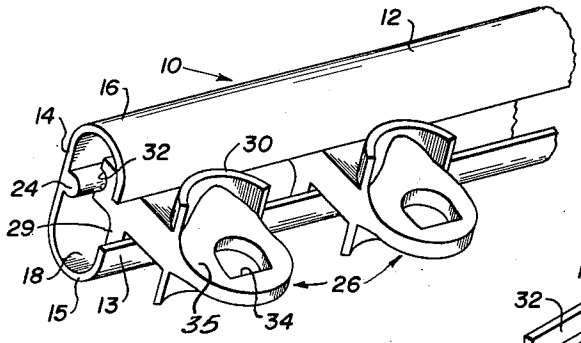


Fig. 1.

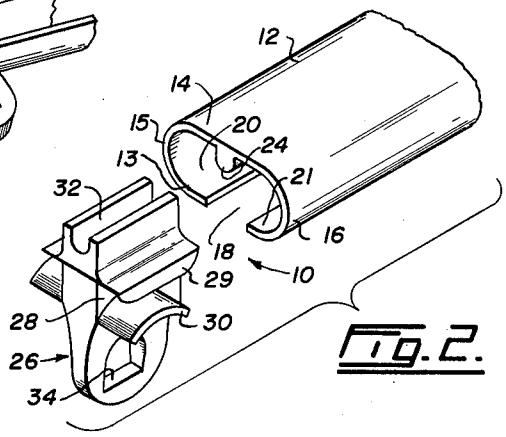


Fig. 2.

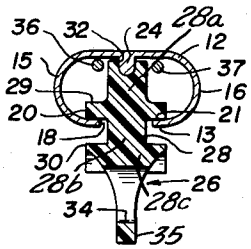


Fig. 4.

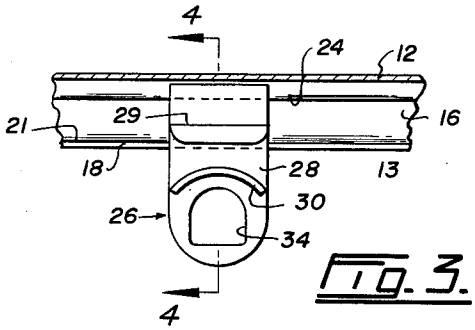


Fig. 3.

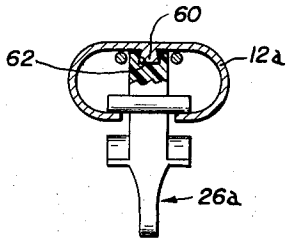


Fig. 6.

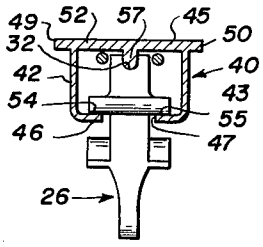


Fig. 5.

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HANGING DRAPERY SUPPORT

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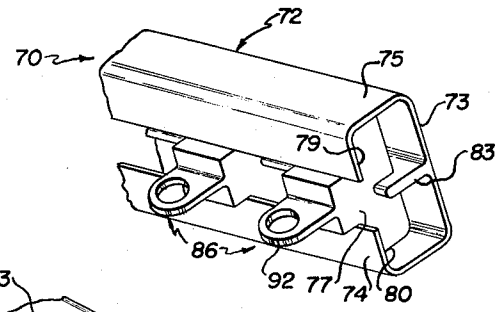


Fig. 7.

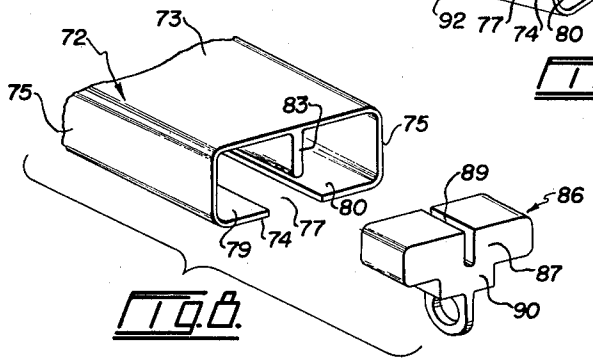


Fig. 8.

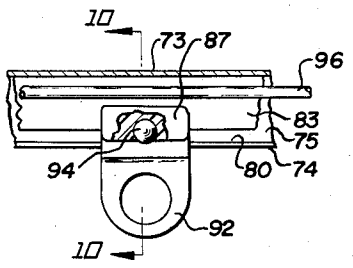


Fig. 9.

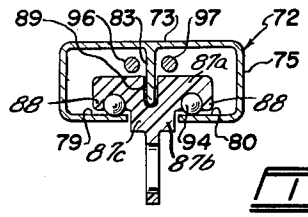


Fig. 10.

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HANGING DRAPERY SUPPORT

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4 Claims. (Cl. 16—93)

This is a continuation-in-part application from application Serial Number 245,594, filed December 18, 1962, now abandoned.

This invention relates to hanging drapery supports of the type generally comprising a track with a plurality of slides mounted on and movable along said track.

An object of the present invention is the provision of drapery supporting track which is very similar to track now in common use but which is a decided improvement over the known track.

Another object is the provision of a drapery support in the form of a track with slides mounted therein with both the track and the slide similar to those in common use, but which are an improvement over the known track and slide arrangements.

Another object is the provision of a drapery support track and slides therefor so constructed and arranged that the slides cannot twist and bind in the track during movement along said track.

A further object is the provision of a novel track in which the slides used therewith may be made a better or closer fit than is possible with the tracks on the market.

A still further object is the provision of a drapery support track having means for keeping drapery draw cords extending therethrough away from each other in order to prevent rubbing therebetween.

Yet another object is the provision of a drapery support track and slide combination which makes it possible to draw drapes supported by the slides back and forth without binding, and yet said combination is substantially no more costly to manufacture than similar drapery supports in common use.

Embodiments of the present invention are illustrated in the accompanying drawings, in which:

FIGURE 1 is a perspective view of a drapery support track with two slides according to the present invention;

FIGURE 2 is an exploded perspective view of the track and one slide;

FIGURE 3 is a longitudinal section through a track, showing a slide in full therein;

FIGURE 4 is a cross section taken on the line 4—4 of FIGURE 3.

FIGURE 5 is a cross section similar to FIGURE 4 showing an alternative form of track;

FIGURE 6 is a view similar to FIGURE 4 illustrating still another form of track;

FIGURE 7 is a perspective view of another alternative form of drapery support track;

FIGURE 8 is an exploded perspective view of the track and a slide of the alternative of FIGURE 7;

FIGURE 9 is a longitudinal section through the track of FIGURE 7, showing a slide in full therein; and

FIGURE 10 is a cross section taken on the line 10—10 of FIGURE 9.

Referring to FIGURES 1 to 4 of the drawings, 10 is a preferred form of drapery support including a tubular track 12 having a bottom wall 13, a top wall 14 spaced from said bottom wall and side walls 15 and 16. A

slot 18 is formed in bottom wall 13 centrally thereof and extends longitudinally of the track. Sliding surfaces 20 and 21 are formed on bottom wall 13 in track 12 and extend longitudinally thereof, one on each side of slot 18. A third sliding surface is formed in track 12, and is spaced from and extends generally parallel to both of the sliding surfaces 20 and 21. This third sliding surface is preferably in the form of an elongated rail 24 formed on the inner surface of top wall 14 projecting cross sectionally inwardly of the track and substantially equally spaced from sliding surfaces 20 and 21, and over slot 18. Rail 24 may be formed integrally with track 12, as shown, or it may be formed separately and secured thereto in any convenient manner.

Sliding surfaces 20, 21 and 24 form three-point contacts extending longitudinally of track 12 and parallel to each other for one or more identical slides 26. Slide 26 consists of a vertical body 28 having an inner portion 28*a*, a neck portion 28*b* extending from said inner portion through slot 18 with clearance from the latter, and an outer portion 28*c* beyond or outside track 12. Slide 28 includes wings or wing portions 29 projecting laterally therefrom and respectively engaging sliding surfaces 20 and 21. Wings or wing portions 30 spaced outwardly from wings or wing portion 29 project laterally from outer portion 28*c* formed with a groove 32 in its upper or inner edge, said groove having the same cross sectional configuration as rail 24 and slidably receives said rail in a snug fit. Thus, slide 26 rides on track 12 with its wings 29 bearing against the sliding surfaces 20 and 21, and its upper end spanning the sliding surface or rail 24. This rail prevents the slide from twisting or binding in the track. As the rail extends longitudinally through and snugly fits in slide groove 32, it prevents the slide from twisting around a vertical axis, and from tipping back and forth in a longitudinal direction relative to rail 12.

Slide 26 is provided with means for receiving standard curtain or drapery hooks, and in this case, the slide is formed with an aperture 34 in an extension 35 of outer portion 28*c* of body 28.

As is well known, a person moves a curtain or drape either by grasping it directly by hand or by pulling either end by a draw cord. In drapery rods or tracks which are used with cords, two cords extend longitudinally thereof, and these are indicated at 36 and 37 in FIGURE 4. In standard tracks, these cords tend to rub against each other, thereby causing wear and some obstruction to the movement of the drapes. One of the advantages of the present drapery support is that rail 24 separates the cords 36 and 37 so that they cannot rub against each other.

As each slide 26 cannot twist, turn or tip within track 12, it cannot bind on the track during movement of the drapes supported thereby. This not only makes it easier to draw the drapes, but it reduces damage to the drapes which sometimes happens when a slide unexpectedly jams in the track. In addition to this, the track may be made smaller than usual for a given job since it is not necessary to allow room for the slides to tip and twist, as is the case with drapery tracks now on the market.

FIGURE 5 illustrates a track 40 which is slightly different from track 12 of FIGURES 1 to 4. Track 40 is formed with straight sides 42 and 43, a top wall 45 and a bottom wall 46 having a central longitudinal slot 47 therein. Top wall 45 extends laterally from side walls 42 and 43 to form side flanges 49 and 50. These flanges

and top wall 45 provide a comparatively large bearing surface 52 in a lateral direction which lends stability to track 40 when it is mounted in place for use.

Bottom wall 46 is formed with sliding surfaces 54 and 55 thereon on opposite sides of slot 47. The track also has a central rail or sliding surface 57 on the inner surface of top wall 45 and extending longitudinally of the track.

Slides 26 ride in track 40 in the same manner as they do in the previously-described track 12. The groove 32 of each slide accommodates rail 57 so that the slide cannot twist or tip within the track during movement therealong.

FIGURE 6 illustrates a track 12*a* which is a slight variation from track 12. The difference is that track 12*a* is formed with a rail 60 which is of dovetail shape in cross section. Slide 26*a* is formed with a groove 62 in its inner end which corresponds in shape to the cross section of rail 60. Rail 60 provides a little more bearing surface for the slide at the upper end thereof than the rails of the previously-described track.

FIGURES 7 to 10 illustrate a further alternative form of drapery support 70. This support includes a tubular track 72 having a top wall 73 and a bottom wall 74 joined by side walls 75. A slot 77 is formed in bottom wall 74 centrally thereof and extends longitudinally of the track. Sliding surfaces 79 and 80 are formed in track 72 by the inner surfaces of bottom wall 74, one on each side of slot 77. A third sliding surface is formed within track 72 by a rail 83 which cross sectionally projects inwardly of the track and extends longitudinally thereof. Rail 83 is substantially equally spaced from sliding surfaces 79 and 80, and is located directly over slot 77.

Sliding surfaces 79 and 80 and the surfaces of rail 83 form three-point contacts extending longitudinally of track 72 and parallel to each other for one or more identical slides 86. Each slide consists of a body 87 having an inner portion 87*a* and a neck portion 87*b* projecting from said inner portion freely through slot 77 and forming an outer portion 87*c* beyond the track. The inner portion 87*a* of the slide body forms laterally projecting wings or wing portions 88 lying over sliding surfaces 79 and 80. The inner portion 87*a* of the body has a groove 89 in the upper surface thereof into which rail 83 slidably and snugly fits, said groove being of the same cross sectional configuration as the rail. A ring or loop 92 is secured to and hangs downwardly from the outer portion 87*c* of the slide.

Although wing portion 88 may slidably engage sliding surfaces 79 and 80, it is preferable to provide said wing portions with balls 94 rotatably held thereby and projecting downwardly to ride on said surfaces 79 and 80, there being one ball on each side of slot 77.

Curtains or drapes are secured to loops 92 of slides 86 by means of hooks in the usual manner. If draw cords are used, these extend through tracks 72, one on each side of rail 83, as shown at 96 and 97 in FIGURE 10. Balls 94 if used, or the lower surfaces of wing portions 88, of each slide bear against slide surfaces 79 and 80, while rail 83 slidably fits in grooves 89 of the slides. Thus, rail 83 and surfaces 79 and 80 act as three-point contacts to prevent the slides from rocking and binding within track 72. Rail 83 snugly fits within each groove 89 of the slides so that the latter cannot rock to any extent forwardly and rearwardly in a direction longitudinally of the track, and they cannot rotate laterally relative to the rail.

The advantage of a drapery support according to the present invention will be readily seen. As drapes are suspended from the slides carried by the tracks, the movement of the slides along the track is produced through the drapes, and this has a tendency to cause the slides to rock back and forth longitudinally of the track. Furthermore, there must be sufficient play to enable the slides to move freely so that there is a tendency for the slides to twist around the vertical axes thereof. The third sliding surface or rail prevents this twisting or tipping of the slides without interfering with the free movement thereof. Each slide rests on two side contacts, one on each side of the longitudinal slot of the rail, and a central contact so that the twisting and rocking is prevented without creating other binding conditions within the track. Furthermore, with this arrangement, the slides may be made a better fit for their respective rails than has heretofore been possible. Another advantage incident to the construction of this support track is that the longitudinal runs of draw cords are separated from each other within the track so that they do not rub against each other as they move in opposite directions during the manipulation of the drapes by means of said draw cords.

What I claim as my invention is:

1. A hanging drapery support comprising in combination, a tubular track having a top wall, a bottom wall spaced from said top wall, said bottom wall having a slot therein extending longitudinally of the track, said bottom wall having two sliding surfaces extending longitudinally thereof one on each side of the slot, an elongated rail spaced equally from and extending generally parallel to both of the sliding surfaces and projecting cross sectionally inwardly of the top wall, a slide member having an inner portion and a neck portion extending from said inner portion with clearance through said slot, said slide member having in engagement with said sliding surfaces, respectively, a pair of wing portions projecting laterally from the inner portion thereof, a groove formed in said inner portion and having the same configuration as said rail and slidably receiving the rail in a snug fit, and connecting means secured to said neck portion outside the rail.

2. A hanging drapery support comprising in combination, a tubular track having a top wall, a bottom wall spaced from said top wall, said bottom wall having a slot therein extending longitudinally of the track, said bottom wall having two sliding surfaces extending longitudinally thereof one on each side of the slot, an elongated rail spaced equally from and extending generally parallel to both of the sliding surfaces and projecting cross sectionally inwardly of the top wall, a slide member having an intermediate neck portion extending with substantial clearance through said slot, said slide member having beyond said track an outer portion connected to said neck portion and having an inner portion extending across and beyond said slot and having in engagement with said sliding surfaces, respectively, a pair of wing portions, a groove formed in said inner portion and having the same configuration as said rail and slidably receiving the rail in a snug fit, and connecting means secured to said outer portion.

3. A hanging drapery support comprising in combination, a tubular track having a top wall, a bottom wall spaced from said top wall, said bottom wall having a slot therein extending longitudinally of the track, said bottom wall having two sliding surfaces extending longitudinally thereof one on each side of the slot, an elongated rail spaced from and extending generally parallel to both of the sliding surfaces and projecting cross sectionally inwardly from the top wall, a slide member having an inner portion with laterally projecting wing portions respectively in engagement with said sliding surfaces, a groove formed in said inner portion and having the same cross sectional configuration as said rail and slidably receiving the rail in a snug fit, and a neck portion extending from said inner portion of the slide freely through said slot.

4. A hanging drapery support comprising in combination, a tubular track having a top wall, a bottom wall spaced from said top wall, said bottom wall having a slot therein extending longitudinally of the track, said bottom wall having two sliding surfaces extending lon-

gitudinally thereof one on each side of the slot, an elongated rail spaced from and extending generally parallel to both of the sliding surfaces and projecting cross sectionally inwardly from the top wall, a slide member having an inner portion with laterally projecting wing portions respectively lying over said sliding surfaces, balls rotatably mounted in said wing portions and projecting therefrom and riding on the two sliding surfaces, a groove formed in said inner portion and having the same cross sectional configuration as said rail and slidably receiving the rail in a snug fit, and a neck portion extending from said inner portion of the slide freely through said slot.

References Cited by the Examiner

UNITED STATES PATENTS

1,650,496	11/1927	Day	16—88 X
2,538,755	1/1951	Bradley	16—87.8 X
2,786,522	3/1957	Weber	160—345
3,064,304	11/1962	Weber	16—93

FOREIGN PATENTS

1,056,801	5/1959	Germany.
560,150	4/1957	Italy.

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