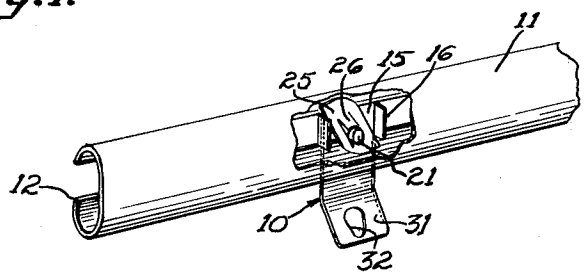
June 5, 1962 M. W. LICKLIDER ETAL 3,037,731

LOCKABLE DRAPERY FITTING

Filed May 13, 1960

Fig. 1.



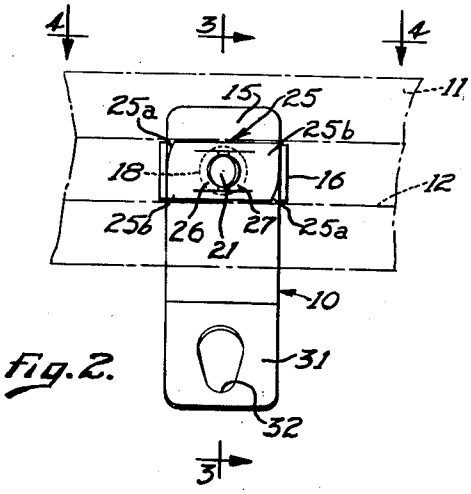


Fig. 2.

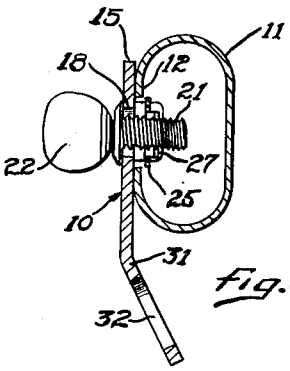


Fig. 3.

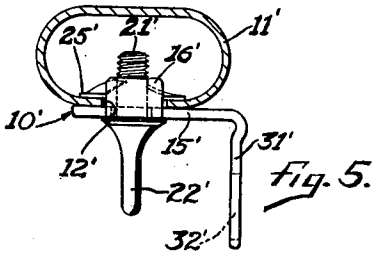


Fig. 5.

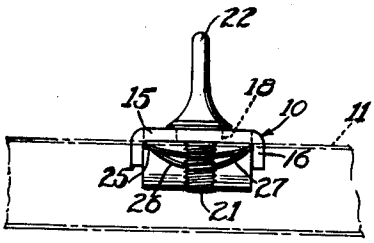


Fig. 4.

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United States Patent Office 3,037,731 Patented June 5, 1962

3,037,731

LOCKABLE DRAPERY FITTING

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Filed May 13, 1960, Ser. No. 28,910
6 Claims. (Cl. 248—205)

This invention relates to improvements in drapery fittings of the type which are adapted to be locked in the trackway of a drapery rod at a selected point therealong.

It is necessary in certain drapery installations to install and lock a drapery fitting to the trackway at a preselected point therealong. For example, in addition to the customary slides for movably supporting a drapery panel on a rod, it is frequently necessary to provide one or more stationary fittings, referred to as lock slides, for securing a drapery panel at a preselected point along the rod. Heretofore, the lock slides had to be inserted into the slot or trackway in the rod from the end of the rod and then moved to the desired location along the rod. This necessitated removal of the pulley housing from the end of the rod and in some installations required removal and reinsertion of some of the movable slides from the trackway in order to enable positioning of the lock slide at the proper point along the rod. Moreover, the prior lock slides were such that they could not be readily locked in the desired position after the drapery rod was installed, particularly if the rod was mounted close to a wall or in a double rod installation.

An important object of this invention is to provide a fitting which can be readily inserted and removed from a trackway of a drapery rod at any selected point therealong and which does not require prior removal of the pulley housing or any of the drapery slides from the rod to enable positioning of the fitting at the desired point along the rod.

Another object of this invention is to provide a drapery fitting in accordance with the foregoing object which can be readily locked in position along the drapery rod after the rod has been installed and without requiring any special tools or skills.

Still another object of this invention is to provide a fitting which is of simple construction; which can be economically fabricated, and which is simple to use and reliable in operation.

These, together with various ancillary objects and advantages of this invention will be more readily appreciated as the same becomes better understood by reference to the following detailed description when taken in connection with the accompanying drawings wherein:

FIGURE 1 is a fragmentary view of a drapery rod with parts broken away and shown in section to illustrate the mounting of the lock slide on the rod;

FIG. 2 is a front view of the lock slide in its unlocked position and with the drapery rod shown in phantom;

FIG. 3 is a transverse sectional view through the drapery rod and lock slide taken on the plane 3—3 of FIG. 2 and showing the lock slide in its unlocked position;

FIG. 4 is a top plan view of the lock slide in its unlocked position with a portion of the drapery rod shown in phantom; and

FIG. 5 is a transverse sectional view through a drapery rod and illustrating a modified form of lock slide showing the same in its locked position.

The drapery rod fitting **10** of the present invention is designed for use on a hollow drapery rod **11** having an elongated slot **12** therein defining a trackway. In the embodiments illustrated, the fitting is in the form of a

lock slide and is adapted to secure a drapery panel (not shown) at a desired position along the rod.

The fitting **10** includes a plate **15** which overlies the outer face of the track **11** at opposite sides of the slot **12**. Spaced ears **16** extend laterally from opposite side edges of the plate and project into the slot **12** in the trackway. The ears have a height measured in a direction crosswise of the trackway which is slightly less than the width of the trackway to be receivable therein and the ears extend generally parallel to each other and are spaced apart a distance greater than the width of the trackway, for reasons set forth more fully hereafter. The plate **15** has an opening **18** formed therein medially between the ears **16** and a screw **21** having a diameter appreciably smaller than the opening **18** extends therethrough and has a flattened head **22** to enable hand manipulation of the screw.

A nut **25** is threaded on the screw **21** and is arranged to frictionally engage the screw so as to normally turn therewith. The nut **25** herein shown is of the type formed of a resilient arched plate having oppositely facing tongues **26** and **27** struck from the arched side thereof and formed with thread engaging end faces on the adjacent ends thereof. The tongues frictionally engage the threads on the screws **21** so that the nut normally turns with the screw. The nut has a generally trapezoidal configuration and has a width measured between the relatively parallel side edges thereof which is such that the nut can be inserted into the trackway in the rod, when the longitudinal axis of the nut parallels the trackway. The nut herein shown has a width slightly less than the width of the trackway **12** to facilitate insertion and removal of the nut laterally into and out of the trackway, it being understood that the nut could have a width the same as, or even slightly greater than the width of the trackway and still be insertable therein by lateral shifting of the nut **25** and bolt **21** in the opening **18**. The nut has a length appreciably greater than its width and substantially equal to the spacing between the ears **16** so that the end edges of the nut engage the ears when the longitudinal axis of the nut parallels the trackway. The screw **21** herein illustrated has a right hand thread and, when the screw is turned in a clockwise direction as viewed in FIG. 2 to loosen the nut **25**, the end edges of the nut engage the ears **16** to stop the nut in a position with its longitudinal axis paralleling the trackway **12**. However, diagonally opposite corners **25***a* of the nut are cut away to enable the nut to clear the ears, when the screw and the nut **25** are turned in a counterclockwise direction as viewed in FIG. 2 to tighten the nut. As the screw is turned in a counterclockwise direction from the FIG. 2 position, the nut **25** rotates therewith until the other corners **25***b* of the nut engage the ears **16** to stop the nut in a position with its longitudinal axis extending crosswise of the trackway, as shown in FIGURE 1. Further turning of the screw **21** in the same direction tightens the nut and firmly locks the fitting **10** to the track. When the screw is turned in a direction to loosen the nut, the nut rotates with the screw until the corners **25***b* engage the ears **16** to drop the nut in a position extending longitudinally of the track. At that time, the lock slide can either be moved longitudinally of the trackway, or can be laterally withdrawn from the trackway, as desired.

The lock slide in the embodiment of FIGS. 1–4 is arranged for use on a drapery rod in which the trackway **12** is located at the rear of the rod. In this form the slide has a pendant portion **31** on the lower edge of the plate **15**, and which pendant portion is inclined downwardly and forwardly and has an opening **32** for the reception of a drapery hook.

The construction of the modified form of lock slide shown in FIG. 5 is similar to that of the embodiment of FIGS. 1–4 and like numerals following by the subscript

(') are utilized to designate corresponding parts. This embodiment differs from the embodiment of FIGS. 1–4 in that it is designed for use on a rod 11' in which the trackway 12' is located at the underside of the rod. Accordingly, the plate 15' of the fitting underlies the rod and the lateral ears 16' extend upwardly through the trackway. As in the preceding embodiment, the screw 21' threadedly engages the generally trapezoidal nut 25' to selectively lock the fitting to the rod. In this embodiment, however, the pendant portion 31' of the lock slide extends generally perpendicular to the plate portion 15'. A drapery hook opening 32' is formed in the pendant portion of the lock slide.

From the foregoing it is though that the operation and construction of the slide will be readily understood. The lock slide can be inserted and removed from the drapery rod at any point therealong. When the screw 21 is turned in a direction to loosen the nut, the nut turns with the screw until the end edges of the nut engage the ears 16 to align the longitudinal axis of the nut with the trackway. The nut can then be inserted through the trackway by limited shifting of the screw relative to the plate to cause the side edges of the nut to clear the edges of the trackway. When the screw is thereafter turned in a direction to tighten the nut, the nut turns with the screw until the corners 25*b* of he nut engage the ears 16 to stop the nut in a position extending crosswise of the trackway. Further tightening of the screw locks the nut and fitting to the trackway. Since the screw has a flattened portion for manipulation between the thumb and forefinger, the screw can be readily tightened or loosened after the rod has been installed, and without requiring any special tools. Removal of the nut is achieved by merely turning the screw in a direction to loosen the nut, at which time the nut turns to a position extending longitudinally of the trackway and can be laterally removed from the track.

We claim:

1. In combination with a hollow traverse rod having an elongated slot therein defining a trackway, a drapery rod fitting comprising a plate overlying the rod at opposite sides of the trackway and having transversely extending ears projecting into said trackway, a screw extending through said plate between said ears, an elongated nut threaded on the inner end of said screw and frictionally engaging the same to normally turn with said screw, and means on said nut engageable with said ears for stopping said elongated nut in a position extending longitudinally of said trackway when the screw is turned in a direction to unthread the nut and for stopping the elongated nut in a position extending crosswise of said trackway when the screw is turned in a direction to tighten the nut whereby to lock the plate to the track.

2. In combination with a hollow traverse rod having an elongated slot therein defining a trackway, a drapery rod fitting comprising a plate overlying the outer face of the rod at opposite sides of the trackway and having transversely extending ears projecting into said trackway and laterally spaced apart a distance greater than the width of said trackway, a screw extending through said plate between said ears, an elongated nut threaded on the inner end of said screw and frictionally engaging the same to normally turn with the screw, said nut having spaced side edges and a length to be receivable between the ears on the plate when the side edges extend generally lengthwise of the trackway, said nut having the end edges thereof shaped such that the nut has a length across one diagonal which is greater than the spacing between the ears and a length across the other diagonal which is less than the spacing between the ears whereby the nut engages the ears to stop the nut in a position with the side edges extending generally lengthwise of the trackway when the screw is turned to unthread the nut and the nut engages the ears to stop the nut in a position extending crosswise of the trackway when the screw is turned to tighten the nut whereby to lock the plate to the track.

3. In combination with a hollow traverse rod having an elongated slot therein defining a trackway, a drapery rod fitting comprising a plate overlying the outer face of the rod at opposite sides of the trackway and having transversely extending ears projecting into the trackway and spaced apart a distance greater than the width of the trackway, said plate having an opening therein medially between said ears, a screw extending through said opening, an elongated nut threaded on said screw and frictionally engaging the same to normally turn with the screw, said nut being insertable through said trackway when the nut extends generally leingthwise of the trackway, said nut having the end edges thereof shaped to engage said ears and stop the nut in a position extending generally lengthwise of said trackway when the screw is turned in a direction to unthread the nut and to engage said ears and stop the nut in a position extending crosswise of the trackway when the screw is turned in a direction to tighten the nut whereby to lock the plate to the slide.

4. In combination with a hollow traverse rod having an elongated slot therein defining a trackway, a drapery rod fitting comprising a plate overlying the outer face of the rod and engaging the same at opposite sides of the trackway, substantially parallel ears on said plate extending transverse to said plate into said trackway and spaced apart a distance greater than the width of said trackway, said plate having an opening between said ears, a thumb screw having a finger engaging portion at one side of the plate and a shank portion extending through said opening into said trackway, an elongated nut threaded on said screw and frictionally engaging the same to normally turn with the screw, said nut having a width substantially equal to the width of said slot and being insertable therethrough and a length greater than the width of said slot and substantially equal to the spacing between said ears to be receivable therebetween, said nut having end edges engageable with said ears to stop the nut in a position extending longitudinally of the slot between the ears when the screw is turned in a direction to loosen the nut, said nut having one pair of diagonally opposite corners cut away to clear the ears and permit the nut to turn relative to the plate to a position crosswise of the slot when the screw is turned in a direction to tighten the nut.

5. A lock slide for use on a drapery rod comprising a plate having spaced ears extending laterally of opposite side edges thereof and adapted to be received in the trackway of a drapery rod, means on said plate for receiving a drapery hook, said plate having an opening therein between said ears, a screw extending through said opening, an elongated spring nut of generally trapezoidal configuration threaded on said screw and frictionally engaging the same to normally turn with the screw, said nut having a length substantially equal to the spacing between said ears to extend longitudinally therebetween in one position thereof, said nut having the end edges thereof shaped so that the nut has a length across one diagonal which is greater than the spacing between the ears and a length across the other diagonal which is less than the spacing between the ears whereby the nut engages the ears to stop the nut in a first position with its longitudinal axis extending between the ears when the screw is turned to loosen the nut and the nut engages the ears to stop the nut in a position with the longitudinal axis extending crosswise of said first position when the screw is turned to tighten the nut.

6. The combination of claim 5 wherein said screw is a thumb screw.

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