

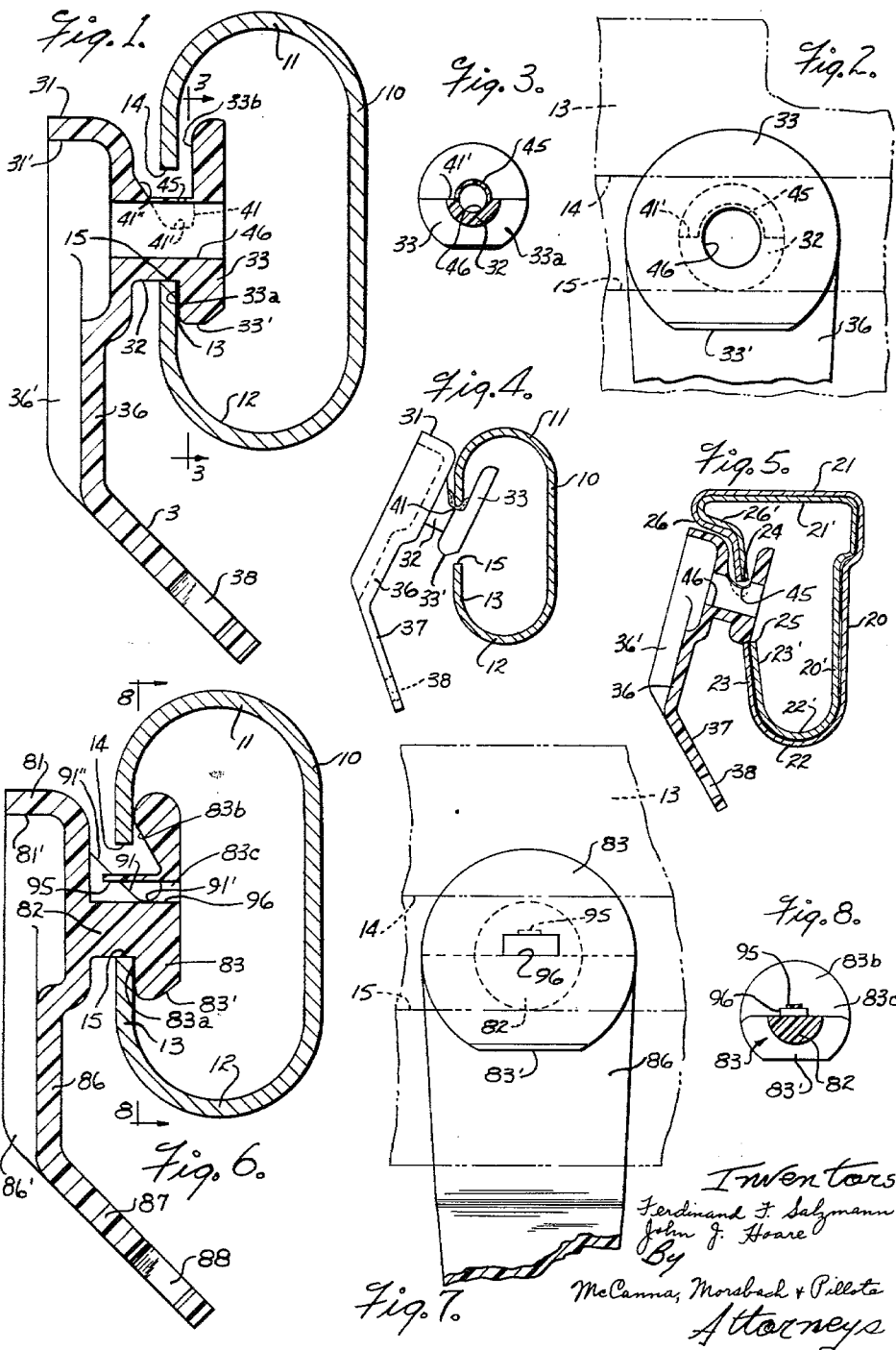
Aug. 10, 1965

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3,199,142

DRAPERY SLIDE

Filed Sept. 19, 1963



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**DRAPERY SLIDE**

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 Filed Sept. 19, 1963, Ser. No. 309,952  
 8 Claims. (Cl. 16—87.2)

This invention relates to a drapery carrier, commonly referred to as a drapery slide, to support draperies and the like for movement along the trackway in a traverse rod.

An important object of this invention is to provide an improved drapery carrier for supporting a drapery for movement along the trackway in a traverse rod, which carrier can be readily inserted or removed from the trackway at any point along the rod, and which will not stick or jam in the trackway during use.

Another object of this invention is to provide an improved drapery carrier for supporting a drapery for movement along the trackway in the rod, which carrier can be readily inserted and removed from the trackway at any point along the rod and which will not become accidentally detached or fall out of the rod during transportation or installation of the rod.

Yet, another object of this invention is to provide a drapery carrier which is adapted for use in both single and double rod sections and which can be inserted and removed from the trackway at any point along such single or double rod sections.

Still another object of this invention is to provide a drapery carrier adapted to be inserted and removed from a trackway at any point therealong, and which can be re-used after removal from the trackway.

These, together with other 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:

FIG. 1 is a sectional view through a rod and drapery slide, showing the parts on an enlarged scale to facilitate illustration of details of construction;

FIG. 2 is a fragmentary end view of the drapery carrier of FIG. 1;

FIG. 3 is a sectional view taken on the plane 3—3 of FIG. 1 illustrating the parts on a somewhat smaller scale than in FIG. 1;

FIG. 4 is a side view of the drapery carrier of FIG. 1, illustrating the manner of inserting and removing the same from the rod;

FIG. 5 is a sectional view through the drapery carrier of FIG. 1, and illustrating the insertion and removal of the same from a modified form of rod section;

FIG. 6 is a sectional view through a rod and illustrating a modified form of detachable drapery slide on an enlarged scale;

FIG. 7 is a fragmentary front view of the drapery carrier of FIG. 6; and

FIG. 8 is a sectional view taken on the plane 8—8 of FIG. 6 and illustrating the parts on a somewhat smaller scale than in FIG. 6.

The detachable drapery carriers of the present invention are generally adapted for use with conventional traverse rods of the type having a trackway located in a generally upright wall thereof. Such traverse rods commonly have a generally C-shaped cross section as shown in FIG. 1 and include a generally upright front wall 10, arched top and bottom walls 11 and 12 and a rear wall 13. The trackway is generally located in the rear wall and comprises an elongated slot extending along the length of the rod and defining spaced upper and lower guide edges 14 and 15 respectively. The drapery rod may comprise either a single tubular section as shown in FIG. 1, or, in the case of

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the so-called extension type rods, may include inner and outer telescoping sections, as is well known in the art. The drapery carrier of the present invention is adapted for use in either of the single rod sections as shown in FIG. 1, or in the double rod section of an extension rod. The carriers are also adapted for use with rods which are different cross sectional shapes and may, for example, be used with rods of the type shown in FIG. 5. The rod shown in FIG. 5 includes inner and outer rod sections. The inner rod section has parts similar to the outer rod section and like numerals followed by the superscript (') used to designate corresponding parts. Thus, the outer and inner sections of the rod of FIG. 5 respectively include front walls 20, 20', top walls 21, 21', bottom walls 22, 22' and rear walls 23, 23'. The rear walls 23, 23' of the outer and inner sections have registering longitudinally extending slots therein and which define a trackway extending lengthwise of the rod between the upper and lower guide edges 24 and 25. In the rod section, as shown in FIG. 5, the top walls 21 and 21' extend rearwardly of the respective rear walls 23, 23', and form an overhanging flange designated 26, 26' along the upper edge of the rear wall, and which flange is spaced above the upper edge of the trackway. This overhanging flange on the rod sections of FIG. 5 normally presents an obstruction to the removal of slides from the rods and the removable drapery slides of the present invention are constructed in the manner hereinafter described to also enable ready insertion and removal of the same from rod sections of the type shown in FIG. 5.

As previously noted, the traverse rods are of a conventional type and employ the usual master slides, pulleys and cords connected to the master slides and entrained over the pulleys at the ends of the rod for moving the same along the rod. In such traverse rods, a plurality of auxiliary slides are employed, the number of which slides will vary dependent upon the length of the rod and the number of pleats in the drapery panels. The present invention is directed primarily to an auxiliary slide construction which can be readily inserted and removed from the trackway on the traverse rod, at any point therealong, but it is to be understood that the present invention can also be used on the master slide buttons if it is desired to enable insertion and removal of the master slide from the rod.

Reference is now made more specifically to the form of the detachable slide shown in FIGS. 1-5. The size of the slides may be varied for different size rods so long as the relative proportions of certain parts of the slides and rods are maintained in the manner described hereinafter. However, the slides and rods are generally somewhat smaller than as shown in the drawings and, in the embodiments shown, are illustrated approximately four times size in FIGS. 1, 2, 6 and 7 and approximately two times size in the other views to facilitate illustrating of details of construction. The slide in general includes a body portion 31 disposed externally of the trackway, a reduced neck portion 32 that extends laterally from the body portion and through the trackway, and an enlarged retainer head or button disposed inside the trackway to engage the inner side of the rod at opposite side of the rod at opposite sides of the trackway. The body 31, neck 32 and head 33 are molded or otherwise formed as a unit from a resilient plastic material and may, for example, be molded from polyethylene or nylon. A drapery suspending means is provided on the body 31 and, as shown, comprises a downwardly extending pendant portion 36 formed integrally with the body 31, and a forwardly inclined lower end portion 37 which extends forwardly below the rod and has a drapery hook receiving opening 38 therein. The body 31 is conveniently

made hollow as shown at 31' to reduce the overall amount of material in the slide and ribs such as 36' preferably provided at opposite sides of the pendant portion 36 and merge with the body to reinforce the pendant portion. The pendant portion may have any other suitable configuration and may, if desired, be formed separate from the body portion and attached thereto as by a rivet or screw, as is conventional in the art.

The neck portion 32 is preferably formed with a generally semi-cylindrical configuration, at least at the underside thereof, to enable free swinging movement of the slide in a direction crosswise of the trackway. The underside of the neck portion 32 rests on the lower edge 15 of the trackway and, in order to enable use of the slides on single, as well as the double telescoping trackways, the neck has a length between the body 31 and head 33 somewhat greater than the combined thickness of the double trackway to allow free sliding movement of the drapery slide therealong. In order to facilitate swinging movement of the slides when a plurality of such slides are disposed in sidewise abutting engagement in the trackway, the upper halves of the body portion 31 and button or head 33 are formed with an arcuate periphery substantially concentric with the axis of the neck portion 32. Moreover, the body portion 31 and button 33 are preferably formed with a like radius so that the body portion and button portions of adjacent slides engaged during relative swinging movement of the adjacent slides to provide dual points of contact between adjacent slides that are located both inside and outside the trackway.

The button or head portion 33 extends outwardly from the neck portion and is substantially wider than the width of the trackway formed between the edges 14 and 15 so as to normally retain the slide in the trackway. In order to enable removal of the slides from the trackway at any point along the rod, the neck portion 32 of the slide is notched at one side to receive one edge of the trackway when the slide is moved crosswise of the trackway, and a means is provided on the slide for normally preventing the edge of the trackway from entering the notch to thereby prevent accidental detachment of the slides from the trackway. The notch designated 41 extends crosswise of the upper portion of the neck 32 to receive one edge 14 of the trackway, when the slide is moved crosswise of the trackway, and the notch is made sufficiently deep to allow the lower edge 33' of the button 33 to move past the edge 15 of the trackway, when the edge 14 extends to a point adjacent the base of 41' of the notch. The width of the notch 41, measured in a direction lengthwise of the neck, is preferably made somewhat narrower than the spacing between the button 33 and the body 31, and one edge of the notch designated 41'', is preferably inclined downwardly and forwardly from the body portion 31 to the base 41' of the notch to guide the edge 14 of the trackway into the base of the notch, when the slide is shifted in a direction crosswise of the trackway. As shown, the base 41' of the notch is advantageously positioned closely adjacent the button 33 and is spaced from the body 31 so that the semi-cylindrical neck has its full cross section adjacent the body 31 and decreases in cross sectional area in a direction toward the button 33 to maintain adequate strength in the neck 32. As previously described, the draperies are attached to the pendant on the body 31 and the underside of the neck portion 32 rests on the lower edge of the trackway to support the weight of the draperies. Locating the base of the notch 41 closely adjacent the button and spaced from the body 31 retains the strength at the neck portion to support the weight of the draperies and, in addition, locates the pivot point of the slides, during insertion and removal from the trackway, at a point closely adjacent the button

33 to facilitate insertion and removal of the slides from the trackway.

As will be seen from FIG. 4, the base 41' of the notch extends to a point adjacent the centerline of the neck and is spaced from the lower edge 33' of the button 33 a distance no greater than the width of the trackway, measured between the edges 14 and 15, to allow the lower edge 33' of the button to move past the edge 15 of the trackway, when the other edge 14 of the trackway extends into the base of the notch. As shown in FIG. 2, the lower edge of the button 33 is cut along a secant line to facilitate insertion and removal of the slide.

In order to prevent accidental detachment of the slide from the trackway, an integral deformable portion is provided on the slide to yieldably oppose entrance of the edge of the trackway into the base of the notch. In the embodiment shown in FIGS. 1-5, the deformable portion comprises a thin membrane-like section designated 45 which extends across the notch at a level above the base of the notch. The thin, membrane-like portion 45 is preferably formed with an arcuate cross section generally concentric with the axis of the neck 32. The membrane-like portion 45 can conveniently be molded integrally with the slide by forming a passage 46 that extends through the neck 32 and through one and preferably both of the body 31 and the button 33, with the arcuate membrane-like portion 45 overlying the upper portion of the passage 46. The base of the notch 41 extends to a level below the upper edge of the passage 46 and the membrane-like section 45 extends above the base of the notch, as is clearly shown in FIGS. 1-3 to yieldably oppose the entrance of the edge 14 of the trackway into the notch.

The membrane-like section 45 is made very thin as compared to the thickness of the walls of the neck portion 32, and is preferably made of the order of .008 inch, so as to be readily deformable when the slide is manually pressed upwardly against the edge 14 in the trackway. The membrane-like section will deform under these conditions, as shown in FIG. 4, to allow the edge 14 of the trackway to enter the base of the notch in the neck 32. The slide can then be pivoted about the edge 14 until the lower edge 33' of the button 33 clears the other edge 15 of the trackway. At that time, the slide can be easily withdrawn from the trackway. When inserting the slide into the trackway, the above sequence of operations is merely reversed. The plastic from which the slide is formed is preferably made sufficiently resilient so as to deform in the manner described above without rupturing or breaking, to thereby allow use of the slide after it has been removed from the trackway. While the thin membrane-like section will deform readily under lateral pressures applied during removal, it is yet sufficient to yieldably oppose entrance of the edge of the trackway 14 into the notch to prevent accidental detachment of the slide from the trackway during storage and transportation of the rods.

The inner head or button 33 overlies the inside of the rod at opposite sides of the trackway to retain the slide in the trackway and has a face 33a which is arranged to guidably engage the rod during movement of the slide therealong. As previously noted, the face 33a is spaced from the registering face of the body 31 a distance somewhat greater than the width of the double rod section to allow free sliding movement of the slide along such a double rod section. In order to facilitate removal of the slides from such double rod sections and also from rod sections of the type shown in FIG. 5 having an overhanging flange 26 at the rear of the rod above the trackway, it is preferable to arrange the base 41' of the notch 41 so that the base extends somewhat inwardly of the guide face 33a on the head 33, as is clearly shown in FIGS. 1, 4 and 5. This locates the pivot point between the slide and the edge 14 of the trackway, during insertion and removal of the slide from the trackway, at a point quite close to the

center of the inner head 33 and markedly facilitates snapping the slide into and out of the trackway. As best shown in FIG. 1, the portion 33b of the face on the head 33 is offset from the face 33a and is spaced somewhat further from the body than the face 33a.

A modified form of detachable slide is illustrated in FIGS. 6-8. The slide in general includes a body 81 disposed externally of the rod, a neck 82 and an inner head or button 83. A drapery supporting pendant 86 having an angulated lower end portion 87 and a drapery receiving opening 88 is preferably formed integrally with the body 81. As in the preceding embodiment, the body is made hollow as indicated at 81' and reinforcing ribs 86' are provided along opposite sides of the pendant portion 86. The body, neck and head are formed of a resilient plastic material. In this embodiment, the neck 82 is also formed with a generally semi-cylindrical configuration to support the slides for free swinging movement on the lower edge 15 of the trackway and the body 81 and head 83 are preferably formed with arcuate peripheral edges, at least on the upper portions thereof, as best shown in FIG. 7. The neck 82 extends through the trackway and the head 83 extends outwardly from the neck to overlie the inner side of the rod at opposite sides of the trackway. The face 83a on the head is spaced from the registering face on the body 81 a distance somewhat greater than the thickness of a double rod section, to adapt the slide for use with both single and double rod sections.

In this embodiment, the notch designated 91 is formed in the upper portion of the neck 82 and the base of the notch extends down to a point adjacent the center line of the neck. As in the preceding embodiment, the base 91' of the notch 91 is preferably spaced from the head 81 and the edge 91'' of the notch is preferably inclined downwardly from the body 81 toward the head 83 to guide the edge of the trackway into the base of the notch when the slide is moved upwardly. The base of the notch 91 preferably extends into the head 83 to a point inwardly of the guide face 83a thereon so that the pivot point between the slide and the edge 14 of the trackway will be located closely adjacent the center of the head. As best shown in FIG. 6, the face portion 83b on the head above the notch is also inclined downwardly and inwardly from a point adjacent the upper edge of the head to a point adjacent the base of the notch. With this arrangement, the head has a reduced cross section designated 83c extending generally diametrically across the head at a level below the upper edge of the neck, and which reduced cross section permits limited flexing movement of the upper portion of the head, as may be required during insertion and removal of the slide from the trackway.

A resilient deformable member is provided for yieldably opposing entrance of the edge 14 of the trackway of the base 91' of the notch. The deformable member 95 is preferably attached to only one of the members comprising the body 81 and head 83 and, as shown in FIG. 6, the deformable member is attached to the head 83 and extends across the notch 91 at a level above the base of the notch. In this embodiment, the neck 82 and head 83 have a passage 96 formed therein adjacent the center line of the neck and which passage is shown as having a generally rectangular configuration, it being understood that the passage could be otherwise shaped if desired. The deformable member is herein shown in the form of a resilient tab that projects from the head 83 in overlying relation to the passage 96 and across the notch 91 at a level above the base 91' of the same. The member 95 is made sufficiently thin and resilient to deform readily when the slide is manually pressed upwardly against the edge 14 of the rod, to enable insertion and removal of the same from the trackway. The member 95 will, however, yieldably oppose entrance of the edge of the trackway into the base of the notch to prevent accidental detachment of the slide from the trackway during storage and shipment.

From the foregoing, it is thought that the construction

and use of the detachable slides will be readily understood. The inner head or button is formed in one piece and is integral with the neck and body to properly support and guide the slide during movement along the trackway and avoid sticking or binding of the slides in the trackway. The neck portions are notched to allow detachment of the slides from the trackway when the slides are pushed upwardly, and the resilient deformable portion overlies the notch to prevent accidental detachment of the slides when the rods are turned upside down or shaken, as may occur during storage, transportation or installation of the rod. By locating the base of the notch closely adjacent the inner head or button, the strength of the neck is maintained and, moreover, insertion and removal of the slide is facilitated.

While several preferred embodiments of the invention are herein specifically shown and described, it is to be understood that the invention is not limited to the precise forms of apparatus, and that changes may be made therein without departing from the scope of the invention which is defined in the appended claims.

We claim:

1. In a drapery rod having an elongated trackway at the rear thereof defined by spaced edges on the rod; a drapery slide comprising a drapery support pendant and a unitary slide member at the upper end of the pendant, said slide member being formed of a resilient plastic material and including a body adapted to lie outside the rod, a reduced neck extending from the body and dimensioned to slidably extend through the trackway between the edges on the rod, and an enlarged unitary head on the other end of the neck dimensioned larger than the width of the trackway; characterized in that the neck has a notch in the upper side, the base of which notch is spaced from the lower edge of the head a distance no greater than the spacing between the edges of the rod to allow the slide to be inserted or removed from the rod when the slide is shifted crosswise of the rod to position one edge of the rod in the notch, and a deformable portion is formed integral with the slide to overlie the base of the notch and yieldably oppose entrance of an edge of the rod into the base of the notch.

2. A drapery slide for use in a drapery rod having spaced edges defining a trackway, the slide comprising a drapery support pendant and a unitary slide member at the upper end of the pendant, the slide member being formed of resilient plastic material and including a body; a reduced neck dimensioned to extend through the trackway and having its outer end integrally joined to the body; and an enlarged unitary head at the inner end of the neck, the neck having a substantially rigid semi-cylindrical lower portion and a thin deformable membrane-like portion at the upper side thereof.

3. A drapery slide for use in a drapery rod having spaced edges defining a trackway, the slide comprising a drapery support pendant and a unitary slide member at the upper end of the pendant, the slide member being formed of a resilient plastic material and including a body; a reduced neck dimensioned to extend through the trackway having its outer end integrally joined to the body; and an enlarged unitary head at the inner end of the neck, the neck having a passage extending therethrough, the neck having a thick-walled substantially rigid lower portion and a thin-walled transversely arched upper portion, the upper portion being laterally deformable when pressed against the edge of a trackway sufficient to allow the head on the slide to be laterally withdrawn from a rod.

4. A drapery slide for use on a drapery rod having vertically spaced edges defining a trackway, the slide including a drapery support pendant and a unitary slide member at the upper end of the pendant formed of a resilient plastic material, the slide member comprising a body, a reduced neck disposed transverse to the pendant adapted to extend through the trackway and having an outer end integrally joined to the body, and an enlarged

unitary head integrally joined to the inner end of the neck and having upper and lower portions extending above and below the neck, the neck having a thick sectioned lower portion extending between the head and body for supporting the head in substantially rigid spaced relation to the body and a relatively thin sectioned laterally deformable upper portion formed integrally with the slide and extending along the upper side of the lower portion of the neck, said upper portion of said neck being deformable toward the lower portion thereof when pressed against the edge of a trackway to thereby reduce the effective cross-section of the neck and facilitate lateral withdrawal of the head through the trackway.

5 5. The combination of claim 4 wherein said deformable upper portion of the neck comprises a thin membrane-like section arched in a direction crosswise of the neck.

10 6. The combination of claim 4 wherein said deformable upper portion of the neck comprises a thin resilient tab supported at one end and extending in lateral spaced relation to the upper side of the lower portion of the neck.

15 7. A drapery slide for use on a drapery rod having vertically spaced edges defining a trackway, the slide including a drapery support pendant and a unitary slide member at the upper end of the pendant formed of a resilient plastic material, the slide member comprising a body, a reduced neck disposed transverse to the pendant adapted to extend through the trackway and having an outer end integrally joined to the body, and an enlarged unitary head integrally joined to the inner end of the neck and having upper and lower portions extending above and below the neck, the neck having a thick sectioned lower portion extending between the head and body for supporting the head in substantially rigid spaced relation to the body and a relatively thin sectioned laterally deformable upper portion formed integrally with the slide and extending along the upper side of the lower portion of the neck, said upper portion of said neck being deformable toward the lower portion thereof when pressed against the edge of a trackway to thereby reduce the effective

tive cross-section of the neck and facilitate lateral withdrawal of the head through the trackway, said head having stepped inner guide face with the inner face of the upper portion of the head spaced relatively farther from said body than the inner face of said lower portion of the head to provide clearance when inserting and removing the slide from a rod.

8. In a drapery rod having an elongated trackway defined by vertically spaced edges on the rod, a drapery slide including a drapery support pendant and a unitary slide member at the upper end of the pendant formed of resilient plastic material, the slide member comprising a body disposed outside the rod and having a downwardly extending drapery support pendant, a reduced neck extending from the body in a direction transverse to the pendant and dimensioned to slidably extend through the trackway between the edges of the rod, and an enlarged unitary head on the other end of the neck having upper and lower portions respectively extending above and below the neck, the neck having a thick sectioned portion extending between the head and body for supporting the head in substantial rigid spaced relation to the body, said neck portion having the upper side thereof in the area adjacent said head spaced from the lower edge of said head a distance no greater than the spacing between the edges of the rod to allow the slide to be inserted and removed from the rod when the slide is shifted crosswise of the rod to position the upper edge of said lower portion of the neck against an edge of the rod, said head having a stepped inner guide face with the inner face of the upper portion of the head spaced relatively farther from said body than the inner face of the lower portion of said head.

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