Jan. 3, 1961 F. A. YOUNG 2,966,696

DRAPERY ROD ASSEMBLY

Filed Sept. 16, 1957 2 Sheets-Sheet 1

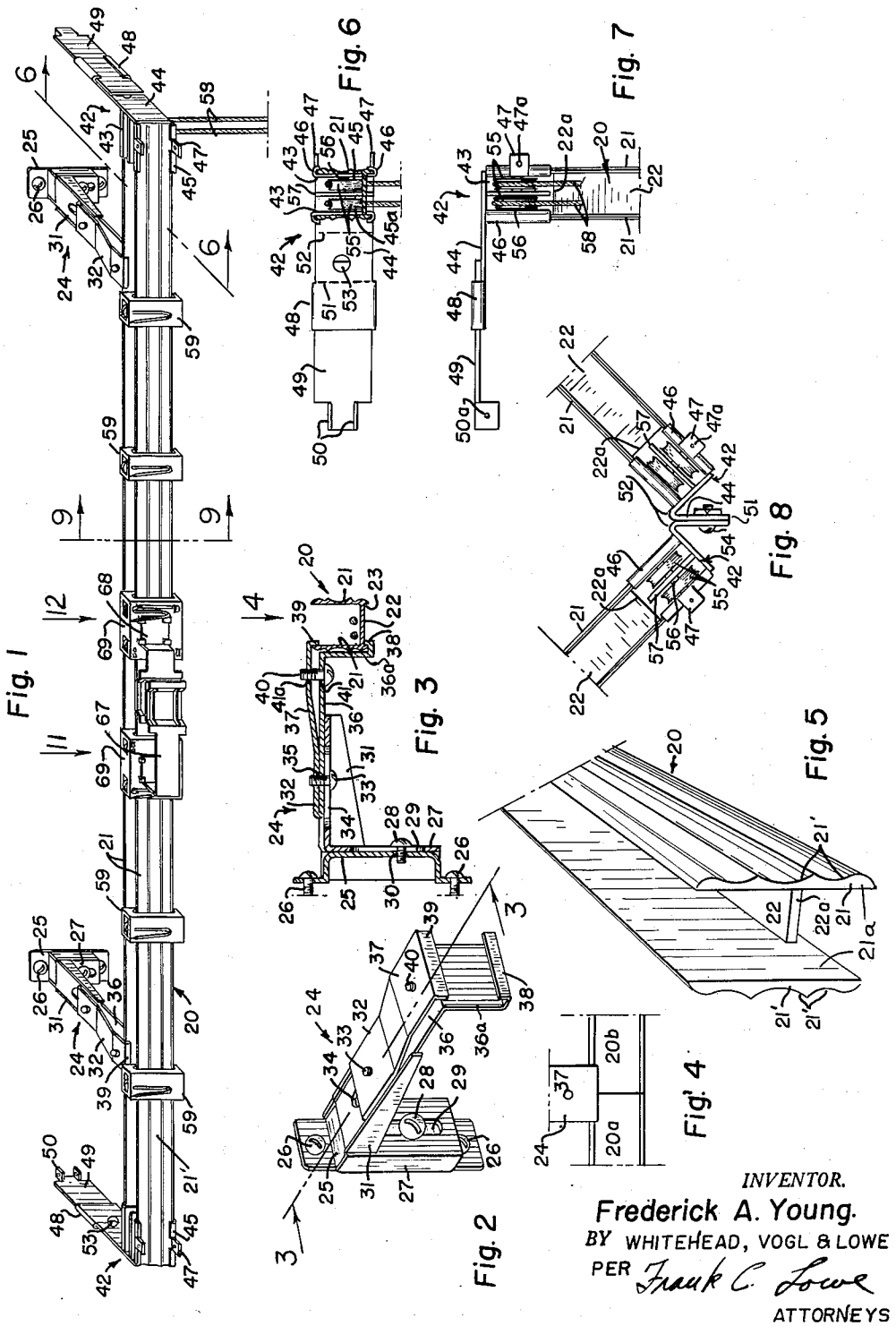


Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

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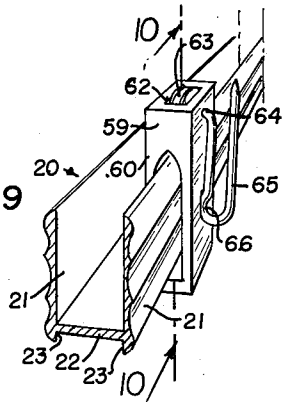


Fig. 9

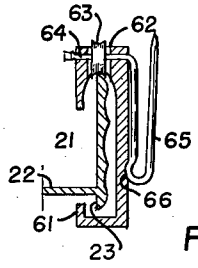


Fig. 10

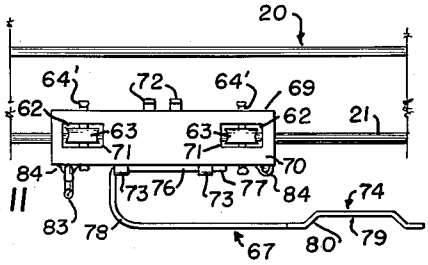


Fig. 11

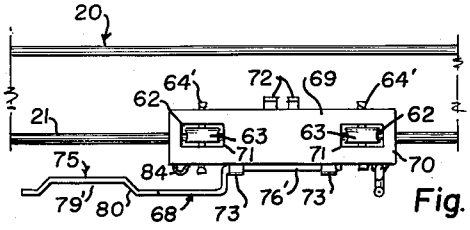


Fig. 12

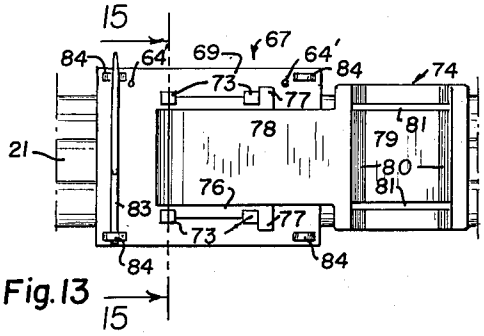


Fig. 13

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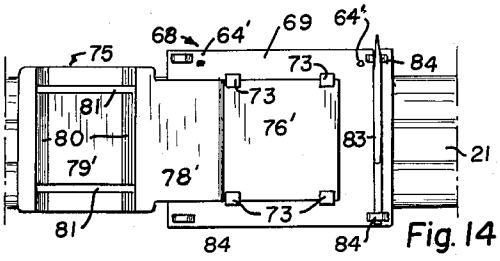


Fig. 14

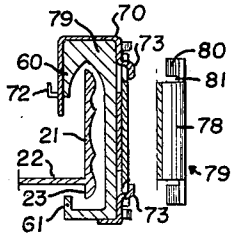


Fig. 15

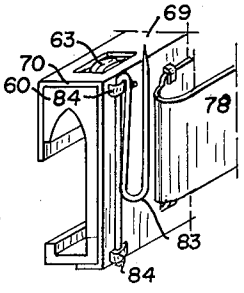


Fig. 17

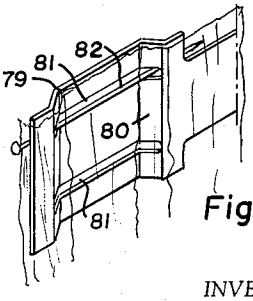


Fig. 16

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DRAPERY ROD ASSEMBLY

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Filed Sept. 16, 1957, Ser. No. 684,215

11 Claims. (Cl. 16—94)

This invention relates to traverse rods and more particularly to a traverse rod assembly for carrying draperies, a primary object of the invention being to provide a novel and improved drapery traverse rod assembly.

Other and more specific objects of the invention are to provide a novel and improved drapery traverse rod assembly which: (*a*) combines the associated elements of the assembly into a versatile, simple, functionally-integrated structure with no left hand-right hand elements; (*b*) correlates improved, simplified drapery carrying elements with an improved carrier rod into a compact, neat appearing unit of enhanced simplicity; (*c*) is especially adapted for supporting conventionally pleated draperies with the outer corner pleats at the ends of the rod being held absolutely neat and square and the inner edges of the draperies at the center of the traverse rod being held straight and flat and in spaced overlapping relation without touching each other when the draperies are closed; (*d*) holds suspended draperies at their top edge and thereby permits the use of simplified drapery constructions without sew-on hooks and heavy pleat-reinforcing materials; (*e*) includes improved shiftable mounting brackets for quick and easy horizontal and vertical adjustment of the traverse rod; (*f*) includes improved brackets which are further adapted to support the traverse rod at any point along the rod and may be mounted on a wall at any convenient location without restriction as to the length and position of the rod; (*g*) includes a simplified cantilevered return for each end of the rod to provide a very compact wheel arrangement and drapery return which may be extended substantially to the wall to hold a corner pleat neatly and properly in position; (*h*) includes an improved channel-type carrier rod adapted to accommodate a simple compact pulley case at the end thereof; (*i*) permits simplified installation at interconnecting internal corners of the rods and the easy mounting of cornices and like accessories above the rod; and (*j*) is a simplified, balanced design, easily adapted to various installations, economical, neat appearing, sturdy and reliable in use.

With the foregoing and other objects in view, all of which more fully hereinafter appear, my invention comprises certain novel and improved constructions, combinations and arrangements of parts and elements, as hereinafter described and as defined in the appended claims, and illustrated, in preferred embodiment, in the accompanying drawing in which:

Figure 1 is a perspective view of my improved drapery traverse rod assembly as mounted upon a wall preparatory to hanging draperies thereon.

Figure 2 is a perspective view of a supporting bracket of the assembly illustrated in Fig. 1, but on an enlarged scale.

Figure 3 is a sectional elevation of the bracket as viewed substantially from the indicated line 3—3 at Fig. 2 but illustrating the same as holding a traverse rod, also shown in section.

Figure 4 is a fragmentary detail of the end of the

bracket as viewed from the indicated arrow 4 at Fig. 3, but illustrating the bracket as connecting the ends of two abutting traverse rods.

Figure 5 is a fragmentary perspective view of the end of the improved traverse rod per se, with the end being notched for receiving the pulley case of my improved end return.

Figure 6 is a section of the traverse rod as taken substantially from the indicated line 6—6 at Fig. 1, and showing an elevation view of the end return mounted therein.

Figure 7 is a plan view of the return and an end portion of the traverse rod illustrated at Fig. 6.

Figure 8 is a plan view of two returns, such as shown at Fig. 7, modified and connected together as where the ends of the rods are at a corner.

Figure 9 is a perspective view of a fragmentary sectional portion of the traverse rod and of an intermediate drapery attachment slide as viewed substantially from the indicated line 9—9 at Fig. 1, but on an enlarged scale.

Figure 10 is a transverse sectional elevation as viewed from the indicated line 10—10 at Fig. 9.

Figure 11 is a plan view of a master slide having an overlapping plate mounted thereon, as viewed from the indicated arrow 11 at Fig. 1, but on an enlarged scale.

Figure 12 is a plan view of a master slide having an underlapping plate mounted thereon, as viewed substantially from the indicated arrow 12 at Fig. 1, but on an enlarged scale.

Figure 13 is a front elevation view of the master slide with the overlapping plate.

Figure 14 is a front elevation view of the overlapping master slide with the underlapping plate.

Figure 15 is a transverse sectional elevation as viewed from the indicated line 15—15 at Fig. 13.

Figure 16 is a fragmentary perspective view of the extended end of a master slide carrier plate, illustrating in irregular lines the corner of a drape securing thereto as by pins.

Figure 17 is a fragmentary perspective view of a portion of a master slide drapery pin attached thereto and a portion of a carrier plate mounted thereon.

Referring more particularly to the drawing, the improved traverse drapery-rod assembly illustrated at Fig. 1 incorporates a simplified association of component elements as hereinafter described in detail. This arrangement is centered about an improved channeled carrier-rod 20 of any selected length depending upon the width of the draperies. This carrier-rod may be manufactured by any suitable process and of any suitable metal, although preferably by extrusion of aluminum to provide for a uniform, neat appearing product. The channel is formed as a distorted H and comprises a pair of slide plates 21 which are held apart in spaced parallelism by a floor plate 22. The floor plate 22 is positioned near, but a short distance above, the lower edges of the plates 21 whereby the inner sides of the lower edges of the side plates form depending rims 23 to give the section the appearance of a distorted H rather than the appearance of the ordinary U-shaped channel. The rims 23 facilitate the connection of mounting brackets and the like as hereinafter described.

The carrier-rod is supported by a plurality of wall brackets 24, and each bracket 24 is adapted to grasp the inner side plate 21 of the carrier-rod 20 while the outer opposite side plate 21 faces outwardly with its exposed surface or face being designed in any desirable manner to expose a neat appearing pattern or facade such as that illustrated as 21′ at Fig. 5. In preferred construction, identical facade designs 21′ are formed on both side plates 21 to permit the rod to be reversed with either face exposing the pattern 21′. However, it is anticipated that

color and the physical design of the faces of side plates 21 may be varied to permit minor changes of appearance of the traverse rod assembly by simply reversing the rod.

Each bracket 24 is formed upon a vertically disposed omega-shaped clip 25 having ears extending from the top and bottom ends thereof to carry mounting screws 26 for affixing the bracket onto a wall or window casing. The body of the bracket is a slotted U-shaped sleeve 27 which shiftably overlies the clip 25 for movement in a vertical direction upon the clip. A lock screw 28 extends through the sleeve slot 29 and into a threaded orifice 30 in the clip 25. This lock screw 28 affixes the sleeve 27 onto the clip 25 at any selected altitudinal position.

A cantilevered supporting arm 31 outstands from the upper edge of the sleeve 27 and is formed with a shallow channel at its upper surface to hold a rod clip 32 therein. The rod clip 32 is slidably mounted in this channel for adjustable outward extension from the bracket arm 31 to support the carrier-rod 20 at any selected distance from the wall. A screw 33 extends through a slot 34 in the arm 31 and into a threaded orifice 35 in the clip 32 to interlock the clip to the arm 31 at any selected extension.

The rod clip 32 is formed as an overfolded metallic strip having a straight, flat lower leaf 36 which lies upon the channeled supporting arm 31 and a broken leaf 37 which diverges from the lower leaf to lie thereabove. The outward end of the lower leaf 36 is formed as a depending leg 36*a* having an upturned channeled bottom edge 38 while the outward end of the upper leaf 37 is formed with a downturned edge 39 directly above the edge 38, the spacing of these edges being such as to grip the depending rim 23 and the upper edge of the inner side plate 21. A lock screw 40 extends through an orifice 41 in the lower leaf and through a threaded orifice 41*a* in the upper leaf to clamp the leaves together and secure the carrier rod therein.

Not only is it possible to hold the carrier rod in the adjustable bracket 24, but the grip is so firm when properly clamped that the abutting ends of two interconnecting carrier rods 20*a* and 20*b* may be spliced at such a bracket by gripping them securely within the bracket in the manner clearly illustrated at Fig. 4. Further, the bracket is especially adapted for the mounting of cornices above the carrier rod by simply attaching an extension screw or like member to the bracket of sufficient length as to permit a cornice to be affixed thereto in any desired manner. Further advantages of this improved bracket-carrier rod construction become obvious since the rod supporting brackets 24 hold a rod 20 at any intermediate point along the rod and not at the end of the rod. It is thus possible to attach the brackets to any selected convenient location or position along the reach of the drapery rod 20, such as, for example, at the window casings.

An improved form of pulley-carrying end return 42 is adapted to be mounted at each end of the drapery rod 20. This return includes a pulley case 43 and an extendible return arm 44 which is normally adapted to extend rearwardly from the drapery rod to the wall whereon the drapery rod assembly is mounted. The pulley case 43 is formed as a pair of substantially square clip plates 45 and 45*a* which are affixed to one end of the return arm 44 to outstand therefrom in spaced parallelism, with the spacing being such that they will snugly lie between the side plates 21 of the carrier rod 20. Each end of the carrier rod 20 is prepared for receiving a pulley case by forming the side plates 21 with squared ends and by removing a portion of the floor plate 22 to form a backset edge 22*a* from the ends of the side plates 21 to provide for end projections 21*a*, as illustrated at Fig. 5, of the side plates between which the clip plates 45 and 45*a* are adapted to snugly fit.

Each plate 45 and 45*a* is formed with top and bottom overturned lips 46 which slidingly embrace the top and bottom of the respective side plates 21 to secure the case in position upon the end of the carrier rod. The outer plate 45 also includes outstanding ears 47 at the top and bottom lips which are formed with suitably aligned orifices 47*a* therein for holding drapery pins to thereby provide fastening means for securing a drapery substantially at the corner of the rod.

The return arm 44 is formed with top and bottom overturned lips 48 at its end to slidingly embrace an extensible arm 49 which may be extended any selected distance as to the wall whereon the drapery rod assembly is mounted. The end of this arm 49 includes a pair of inturned ears 50 having aligned orifices 50*a* therein for holding drapery pins and thus provide drapery fastening means at the extended end of the arm. This return arm 44 is further formed with a break-off line 51, a fold line 52 and an orifice 53 between the lines, such providing means for interconnecting continuous draperies along both a straight course and at inside corners. Where the draperies are to be joined on a straight course, the adjacent return arms 44 of the end of the drapery assemblies may be broken off at the line 51 and bolted together. At a corner, where the course of the draperies turn, the adjacent arms 44 of the end returns 42 may be broken off at lines 51 and bent at fold lines 52 to permit them to be fastened together as by a bolt 54, in the manner clearly illustrated at Fig. 8.

A pair of pulley wheels 55 is mounted on a common shaft 56 between the plates 45 and 45*a* with a suitable divider plate 57 between the wheels. These wheels accommodate a conventional drapery pull cord 58 which may be strung about both pulleys 55 at the control end of the drapery and may be strung about a single pulley at the opposite end thereof. Each end return is symmetricaly formed and the same end return 42 may be used at either end of the drapery rod and these returns need not be designated as left or right hand members.

A simplified construction of the intermediate drapery-attachment slides 59 is possible with the distorted H-shaped carrier rod 20. Each intermediate slide 59 is formed as a narrow C-shaped body which embraces the outer side plate 21 of a carrier rod and includes an upper overhang 60 which reaches over the side plate and into the channel a sufficient depth to prevent the pull of a drapery from accidentally disengaging the slide from the rod and may also include a lower upstanding lip 61 which is adapted to contact the depending rim 23 of the rod to further eliminate accidental disengagement of the slide from the rod. Each slide 59 is preferably formed of molded nylon or similar strong plastic material having low frictional resistance so as to minimize the tendency of the slide to bind upon the rod.

Each slide 59 is formed with a pocket 62 at its top wherein a wheel 63 is mounted as upon a shaft 64. This shaft extends through the slide with the inner end being upset to prevent its slipping out of place and with the outer end extending outwardly and being turned downwardly against the face of the slide and thence upwardly to form a drapery hook 65. The bend at the bottom of this hook is dimpled as at 66 to fit into a small notch in the face of the slide to prevent rotation of the hook upon the slide. The upper point of the hook is slightly above the top of the slide to permit the drapery to be fastened with its top edge close to the top of the slide.

An overlapping master slide 67 and an underlapping master slide 68 are formed by mounting appropriate plates upon carriers 69, and these carriers ride upon the outer side plate 21 of the drapery rod. The master slides support the inner corners of a pair of draperies so they can meet and lap at the center of a drapery rod assembly. Each carrier is formed as a C-shaped body similar to the slides 59, including an upper overhang 60 and if desired a lower upstanding lip 61, substantially as hereinbefore described. They are likewise preferably formed about a body of molded nylon or the like. However,

the width of each carrier is substantially greater than that of the slides 59 and is sufficient to include a pair of aligned pockets 62 for holding a pair of wheels 63 in tandem and upon the upper edge of the side plate 21.

The body of each carrier is encased in a metallic sheath 70 which includes suitable openings 71 at the top in registration with the pocket opening 62, cord hooks of any desired form at the inner side in the channel to hold a drapery pull cord 58 and pairs of opposing ears 73 at the outer face which are adapted to receive drapery fastener plates and pin clip mounting eyes as hereinafter described.

Both of the wheels 63 of each carrier are mounted upon a short shaft 64' with each end of each shaft extending through the body of the carrier and being upset to prevent slipping out of position.

The spaced opposing ears 73 on either carrier form ways adapted to receive the overlapping plate 74 or the underlapping plate 75 and the arrangement of the ears is such that the mounting is easily interchanged or reversed in position. The overlapping plate is formed with a slide receiving base 76 having stop ears 77 at the inner edge. This plate is formed with an arm 78 that extends outwardly from the far side of the carrier 76 and thence turns to extend toward the opposite unit but spaced therefrom. The arm terminates as a drapery connecting head 79 having vertical offset edges 80 offsetting the center portion of the head and including a pair of horizontally disposed slots 81 across the central portion and edges 80 for attachment of the corner of a drapery thereto as with an ordinary pin 82.

The underlapping plate 75 is formed with a similar base 76' and with an arm 78' extending a short distance from the near side of the carrier and thence toward the opposite unit, but being spaced therefrom at a distance between the carrier and the overlapping plate so as to lie between it and the carrier when the units meet each other as to close draperies. This arm 78' terminates as a connecting head 79 having vertical offset edges 80 and horizontal slots 81, as hereinbefore described.

The connection of the corner of the drapery at these heads is by a simple pin 82 as in the manner clearly illustrated at Fig. 17. The offset edges 80 in the connecting head permit the corner of the drapery to be snugly pushed against the head and the pin 82 is thence inserted into a slot 81 through sufficient drapery cloth material to hold it firmly in position. Further attachment of the drapery to the carrier is by a conventional drapery pin clip 83 which may be set in sockets 84 at the ends of the carrier, as clearly illustrated at Fig. 17. A pair of sockets is formed at each end of the carrier to provide for complete interchangeability of the unit by simply alternating the position of the clips 83.

The use and operation of this unit is substantially the same as that of any conventional drapery rod assembly. The assembly is mounted in position upon a wall, the drapery pull-cord 58 threaded about wheels 55 at each end of the drapery rod in conventional manner, and affixed to the cord hooks 72 of the master slides. The cord conveniently lies in the channeled carrier rod and gives reliable wear-free service. Draperies are then attached to the master slides, intermediate slides and to the ears 47 and 50 at the corner returns 42, all to provide a neat appearing unit.

While I have described my construction in considerable detail, it is obvious that others can devise and construct alternate and equivalent units which are within the spirit and scope of my invention. Hence, I desire that my protection extend not to the constructions herein illustrated and described, but only to the proper scope of the appended claims.

I claim:

1. In combination with a channel-type drapery rod having a floor plate and a side plate upstanding from each edge of the floor plate with the width of the floor plate and the height of the side plates being proportioned to form a channel of sufficient size to accommodate drapery pull cords, and with one end of each side plate extending beyond an end of the floor plate as end projections, of an end-return-arm adapted to be mounted upon the end of the rod to outstand laterally therefrom and including an arm member, a pair of clip plates at one end of the arm member spaced apart to lie between and against the end projections of the side plates and a lip at the top and bottom of each clip plate adapted to slidingly embrace the top and bottom edge of a carrier rod side plate end projection.

2. The combination defined in claim 1 including a shaft interposed between the clip plates and pulleys upon this shaft.

3. The combination defined in claim 1, including ears outstanding from the bottom and top of a clip plate having orifices therethrough and being thereby adapted to receive a drapery connecting pin.

4. In the combination defined in claim 1 said end return arm being suspended from the end of the drapery rod as a cantilevered member.

5. In the combination defined in claim 1 said arm member including two portions with one portion constituting a fixed arm and the other portion constituting an extendable arm and slidable means interconnecting the two arms.

6. In the combination defined in claim 1 means for connecting the arm to other members.

7. In combination with a channel-shaped carrier rod having parallel side plates and a bottom plate with an end of the bottom plate backset from the ends of the side plate to form a clearance section and side plate extensions at the end of the rod, a cantilevered end return mounted upon the end of the rod comprising a return arm adapted to laterally outstand from the end of the rod, a pair of clip plates at one end of the arm and adapted to lie between and against the side plate extensions in the clearance space at the end of the rods, overturned lips at the top and bottom of each clip plate adapted to snugly embrace the top and bottom edges of the slide plate extensions, against which the clip plate lies, and a shaft interposed between the side plates and pulleys mounted upon the shaft.

8. A channel-type traverse drapery carrier rod having side walls for holding drapery pull-cords and slides of the type having an overhang at the top and an upstanding lip at the base, for being held by brackets having downturned upper and upturned lower gripping edges and for holding an end return adapted to lie between the wall portions of the carrier rod at the end of the rod, said rod being formed as an elongate member of uniform cross section and comprising a floor plate, and a front and rear side plate upstanding from the edges of the floor plate to form said side walls with the width of the floor plate and the height of the side plates being proportioned to form a channel of sufficient size to accommodate the pull-cords, a short extension of each side plate below the floor plate providing depending front and rear rims at each side of the undersurface of the floor plate whereby said slides are adapted to overhang the top edge of the front plate with the lips thereof upstanding behind the front rim and said brackets are adapted to grip the top edge and rim of the rear plate, and an extension of an end of each side plate beyond the end of the floor plate as an end projection whereby said end return is adapted to lie between said front and rear side plate projections.

9. A channel-type drapery carrier rod comprising a floor plate and a front and rear side plate with the width of the floor plate and the height of the side plates being proportioned to accommodate drapery pull-cords in the channel, to hold drapery slides of the type having an overhang at the top and an upstanding lip at the base and for being held by brackets having downturned upper

and upturned lower gripping edges, wherein each side plate is formed with a short extension below the floor as a depending rim at each side of the undersurface of the floor plate whereby the slides are adapted to overhang the top edge of the front plate with the lips thereof upstanding behind the front rim and said brackets are adapted to grip the rear plate with their upper gripping edges at the top edge of the rear plate and the lower gripping edges at the rim thereof and wherein said front and rear side plates are of the same proportions to provide a reversible unit and each plate includes an ornamental facade on its outer surface.

10. In the carrier rod defined in claim 9, said unit being symmetrical with the front and rear side plate being of the same design.

11. In combination with a channel-type drapery rod having a floor plate and a side plate upstanding from each edge of the floor plate with the width of the floor plate and the height of the side plates being proportioned to form a channel of sufficient size to accommodate drapery pull-cords, and with an end of each side plate extending beyond an end of the floor plate as end projections, of an end member adapted to be mounted upon the end

of the rod and including a pair of clip means having spaced-apart surfaces in spaced-parallelism adapted to lie between and against said end projections of the side plates and a lip at the top and bottom of each clip means adapted to slidingly embrace the top and bottom edge of the end projection against which the clip means lies.

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