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CENTER BRACKET FOR CURTAIN RODS

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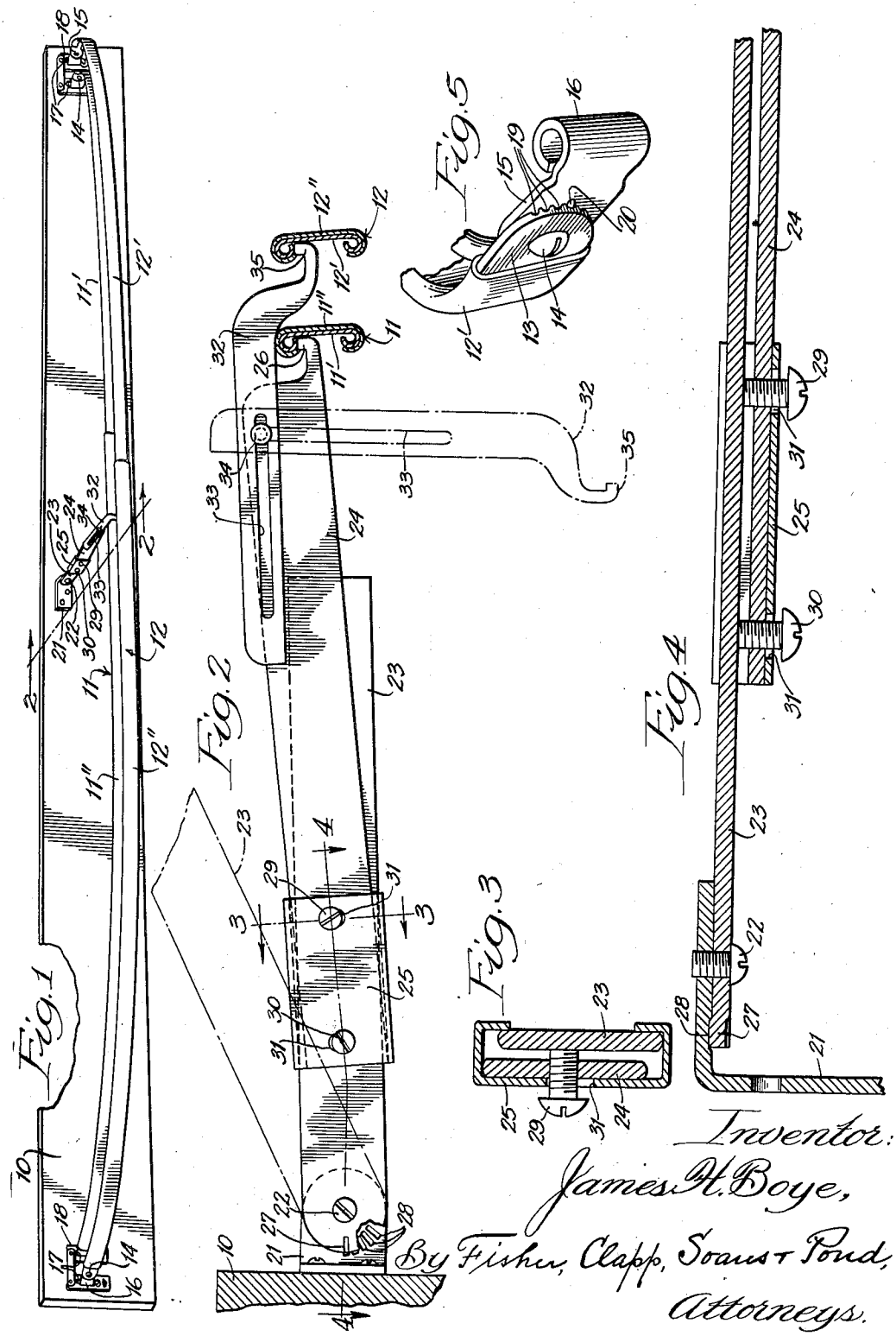

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CENTER BRACKET FOR CURTAIN RODS

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4 Claims. (Cl. 248—263)

This invention pertains to the general art of curtain supports or hangers, and has reference more particularly to an improved bracket for supporting long curtain rods between their ends to prevent sagging of the rods under the weight of curtains and drapes suspended therefrom. Such supports, commonly known as center brackets, are used in connection with wide windows or double windows which require a rod of considerable length, and are especially useful in connection with extensible rods commonly comprising two or more telescoping sections. An example of rods of this type is shown in my former Patent No. 1,518,245, granted December 9, 1924.

The present invention has been designed more particularly for use in connection with extensible bowed curtain rods, although it may also be advantageously employed in connection with straight curtain rods such as are shown in my aforesaid patent. Extensible bowed rods have one characteristic not possessed by extensible straight rods. When a bowed rod is lengthened its intermediate portion bellies outwardly away from the window, and when it is shortened its intermediate portion is retracted toward the window. This makes it advantageous, from a manufacturing and economic viewpoint, to make the center bracket extensible to avoid the necessity of supplying individual brackets of varying lengths to fit installations on windows of varying widths. An extensible center bracket is not broadly new, since my aforesaid patent discloses an extensible center bracket to meet situations where straight extensible curtain rods are mounted at varying distances from the window. But in the case of a bowed extensible rod, the extensible center bracket meets situations where the windows are of varying widths and consequently the rods have to be lengthened or shortened to fit.

One object of the present invention is to provide a center bracket capable of adjustment in a vertical plane, so that its rod-engaging portion can be raised or lowered to support the rod in a perfectly horizontal position and also, in the case of a bowed rod, to support the rod in a more or less arched position. Another object is to provide such a center bracket with a double adjustment—one a coarse adjustment by which the rod may be brought to approximately its desired position, and the other a fine adjustment by which the rod may be brought to exactly its desired position. Another object is to provide a very simple accessory or extension of the main bracket for use in double rod installations, by which the outer rod may be supported at varying distances from the inner rod.

Other objects and attendant advantages of the invention will be apparent from the following detailed description of an approved embodiment thereof shown in the accompanying drawing, in which—

Fig. 1 is a perspective elevation of a pair of inner and outer extensible bowed rods for supporting a curtain and drapes, respectively, in association with my improved intermediate supporting bracket.

Fig. 2 is an enlarged cross section on the line 2—2 of Fig. 1, showing the center bracket in side elevation.

Fig. 3 is a transverse section on the line 3—3 of Fig. 2.

Fig. 4 is a longitudinal section on the line 4—4 of Fig. 2.

Fig. 5 is a perspective view of an end portion of a rod, showing an angularly adjustable bracket-engaging member associated therewith.

Referring to the drawing, 10 designates a conventional top member of a window or door frame on which the fixture is mounted. 11 and 12 designate respectively and as entireties inner and outer extensible rods, the former of which ordinarily supports a curtain or pair of curtains, and the latter supports one or a pair of drapes. As herein shown, these rods are of a bowed type, structurally similar to bowed rods disclosed in my co-pending application, Serial No. 239,615, filed November 9, 1938; now Patent No. 2,150,204. They are of the "flat" type having the cross-sectional form illustrated in Fig. 2, the inner rod 11 comprising telescoping sections 11′ and 11″ and the outer rod 12 comprising similar telescoping sections 12′ and 12″.

In each end of each rod there is tightly fitted an insert 13 (Fig. 5), the projecting end of which is connected by a pivot screw 14 to the shank 15 of a hinge sleeve 16 that fits over a pin 17 (Fig. 1) carried by an end bracket 18 mounted on the frame member 10. The hinge screws 14 permit the rods to be mounted either horizontally or in an upwardly arched position, and, preferably, to lock the rod at its ends in said position, the inner face of the insert 13 is formed with radial grooves such as 19, and the shank 15 is formed with a fixed tooth 20 engageable with any of the grooves 19 so that, when the screw 14 is tightened up, the rod end is locked rigid with the shank 15. The end brackets herein shown constitute in part the subject matter of my aforesaid application, and

with the specific structural features thereof the present invention is not concerned.

Turning now to a description of my improved center bracket designed to support the rods substantially mid-length, 21 designates an angle base member attached to the frame bar 10, to the forwardly extending limb of which is connected, by a pivot screw 22, a forwardly extending bracket arm. This arm is made in two sections, an inner main section 23 and an outer rod supporting section 24. Both arms consist of flat strips which overlap each other, and the overlapping portions are loosely embraced by a collar 25 in the manner best shown in Fig. 3. The arm 24 terminates at its forward end in a hook 26 which, as clearly shown in Fig. 2, engages beneath the upper curled flange of the inner rod 11. The pivot 22, of course, permits the main arm 23 to be adjusted up and down in a vertical plane, an upwardly adjusted position being indicated fragmentarily by dot and dash lines in Fig. 2. The arm 23 is locked in any adjusted position by a tooth 27 engageable with any of a radial group of grooves 28 formed in the base piece 21, upon first loosening and then tightening the pivot screw 22. This effects what may be termed a rough or approximate adjustment of the position of the main bracket arm 23.

Adjustment of the length of the rod supporting bracket arm and angular adjustment of the section 24 relatively to the section 23 is effected by the following means. In the portion of rod 24 that is embraced by the collar 25 are mounted longitudinally spaced front and rear screws 29 and 30 respectively. As shown in Fig. 4, these screws extend through holes 31 in a side wall of the collar 25, which holes are of greater diameter than the threaded stems of the screws. The tips of the screws abut against the inner side of the arm section 23. From Fig. 3 it will be observed that the internal vertical dimension of the collar 25 is somewhat in excess of the width of the two arm sections, so that the latter are capable of angular adjustment relatively to each other. To effect longitudinal adjustment of the arm 24, both screws are loosened and the arm 24 is moved forwardly or rearwardly, shifting the collar 25 with it. When the desired adjustment has been made, both screws are tightened up. To effect angular adjustment, the screw 29 is loosened, and the arm 24 is raised or lowered to the desired height, and the screw 29 is then tightened; or, a slightly greater angular adjustment is obtainable by loosening both screws 29 and 30 and tilting the arm 24 until its upper and lower edges strike the upper and lower cross members of the collar. By this construction a very fine and accurate adjustment of the height of the inner rod 11 is obtainable. The two arm sections 23 and 24 with the collar 25 and screws 29 and 30 obviously form a single composite bracket arm.

The construction as thus far described is complete as a center bracket for a single rod. Since double rods (front and rear) are very commonly used, I have incorporated in the bracket structure a simple accessory or extension for supporting the outer or front rod at the same height or in the same horizontal plane as the inner rod. This consists of an extension member 32 formed with a longitudinal slot 33 that straddles a lateral stud 34 on one side of the arm 24. The forward end of the extension 32 terminates in a rod-engaging hook 35 similar to the rod-engaging hook 26, that engages beneath the upper flange of the outer rod 12, in the manner clearly shown in Fig. 2. It will also be observed that the extension 32, when in working position, lies crosswise of and is supported by the inner rod 11, and the engagement of the stud 34 with the slot 33 prevents the extension 32 from tilting upwardly under the weight of the rod 12. The slot 33 permits the extension 32 to be adjusted forwardly to suit the lateral spacing of the rods 11 and 12.

In single rod installations, where the outer rod 12 is not used, the extension 32 may be permitted to hang idly in the position shown by dot and dash lines in Fig. 2, where it is substantially concealed by the curtains.

Some users of bowed curtain rods prefer to mount them in an upwardly tilted or arched position. My improved center bracket readily permits this to be done by mere adjustment of the pivotal connection 22 to the base member 21, a corresponding adjustment of the end bracket pivots 14 being made at the same time.

From the foregoing it will be evident that the described center bracket is adaptable to either a single rod or a double rod installation and to either straight rods or bowed rods, and to either a horizontal or an arched position of the latter. It also adapts itself to the lateral spacing of the two rods which, in the case of bowed rods, varies when the rods are lengthened or shortened. Obviously, the structural details shown and described may be varied without sacrificing any of the described advantages. Hence, I do not limit the invention to the particular embodiment presented for purposes of illustration, but reserve all such variations, modifications and mechanical equivalents as fall within the spirit and purview of the claims.

I claim:

1. A center supporting bracket for a curtain rod comprising a base member adapted to be attached to a window frame, a forwardly extending arm horizontally pivoted at its inner end on said base member, means for locking said arm rigid with said base member in any adjusted position thereof, a rod-engaging arm laterally overlapping and extending beyond said first named arm and adjustable both lengthwise of and vertically angularly to said first named arm, and means for locking said rod-engaging arm rigid with said first named arm in any adjusted position thereof, said last named means comprising a collar embracing the overlapped portions of said arms with sufficient clearance to permit relative vertical angular adjustment of said arms, and means for forcing the overlapped portions of said arms hard against opposite sides of said collar.

2. A center supporting bracket for a curtain rod comprising a base member adapted to be attached to a window frame, a forwardly extended arm horizontally pivoted at its inner end on said base member, means for locking said arm rigid with said base member in any adjusted position thereof, a rod-engaging arm laterally overlapping and extending beyond said first named arm, and means for effecting both relative longitudinal and vertical angular adjustment of said arms comprising a collar loosely embracing both overlapping portions of said arms, and a pair of screws spaced lengthwise of said collar and mounted in one of said arms with their inner ends in thrust engagement with the other arm, whereby said screws when

tightened force said arms against opposite sides of said collar.

3. A center supporting bracket for a curtain rod, comprising a base member adapted to be attached to a window frame, a flat forwardly extended arm horizontally pivoted at its inner end on said base member, means for locking said arm rigid with said base member in any adjusted position thereof, a flat rod-engaging arm laterally overlapping and extending beyond said first named arm, and means for effecting both relative longitudinal and vertical angular adjustment of said arms, comprising a collar loosely embracing the overlapping portions of said arms, said collar having spaced holes in a side wall thereof, and screws having stems of less diameter than said holes passed through the latter and mounted in said rod-engaging arm with their tips in thrust engagement with said first named arm.

4. A center supporting bracket for inner and outer curtain rods, comprising a base member adapted to be attached to a window frame, a forwardly extending flat arm disposed in a vertical plane attached at its rear end to said base member and having on its forward end a hook for engaging the inner rod, a laterally projecting stud on the forward portion of said arm, and a flat extension member disposed in a vertical plane having a longitudinal slot slidably engaged with said stud to permit endwise adjustment thereof relatively to said arm to accommodate the spacing of the rods, said extension member adapted to rest on and crosswise of the inner rod and having on its free end a hook for supporting the outer rod, and, when not required for use, being suspended from said stud behind the inner rod and its curtain.

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