March 25, 1952 R. E. BELL 2,590,370

TRAVERSE CURTAIN SUPPORT AND PULLEY HOUSING

Filed Oct. 23, 1951

Fig. 1.

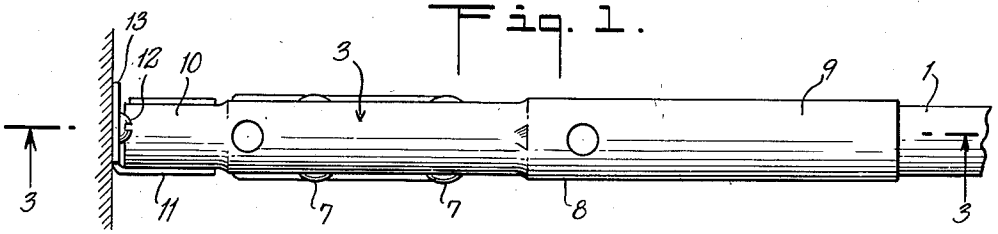


Fig. 2.

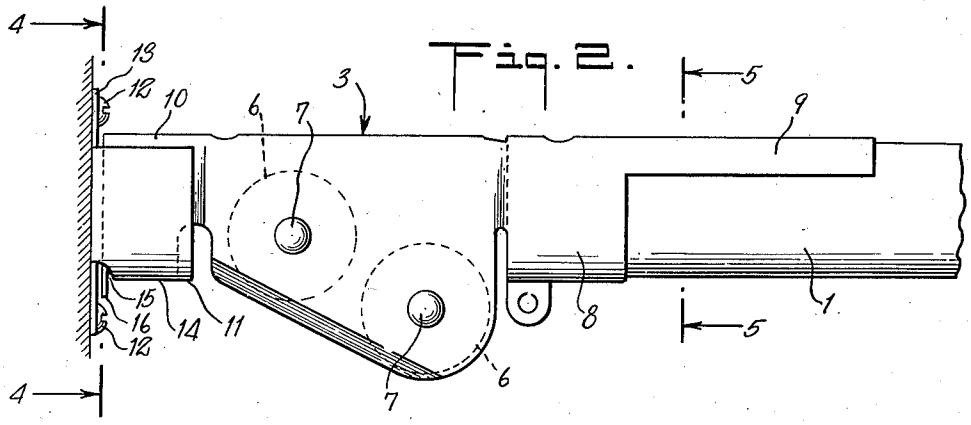
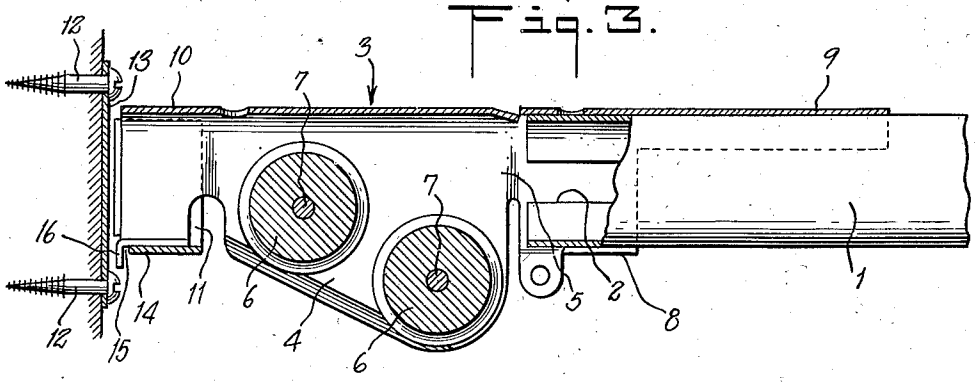


Fig. 3.



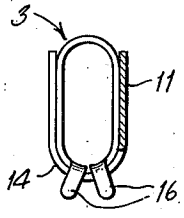


Fig. 4.

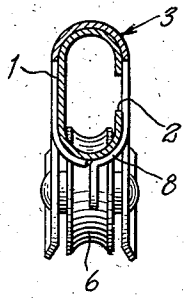


Fig. 5.

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TRAVERSE CURTAIN SUPPORT AND PULLEY HOUSING

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6 Claims. (Cl. 160—345)

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This invention relates to curtain and drapery supporting hardware and particularly to such hardware which is employed for traverse supports.

The invention is adapted primarily for use in supporting heavy draperies which are supported over wide expanses, which has become a very common window treatment.

One of the objects of this invention is to provide suitable supporting and traverse equipment which has great strength.

Another object is to provide such equipment adapted to employ large pulleys and relatively heavy cords so that one operating the equipment may operate it easily even though very heavy drapes are employed and long expanses are covered.

Another object of the invention is to provide such equipment which may be used in combination with standard curtain rods and supporting brackets.

Other objects and advantages of the invention will be apparent from the following specification and the accompanying drawings, in which

Fig. 1 is a top plan view of one end of a curtain rod embodying the invention;

Fig. 2 is an elevational view of the side of the rod shown in Fig. 1;

Fig. 3 is a detailed sectional view taken on the line 3—3 of Fig. 1;

Fig. 4 is a detailed sectional view taken on the line 4—4 of Fig. 2, and

Fig. 5 is a detailed sectional view taken on the line 5—5 of Fig. 2.

The combination supporting element and pulley housing which is employed is made up of a curtain rod 1 which is hollow and has a C-shaped cross section. Along one side is a longitudinally-extending slot 2 which is conventional in such rods and which serves to carry the slides which support the draperies and are not shown because they are conventional. Rods such as these may be obtained in considerable lengths and the preferred form of rod is cut to fit the particular window. The housing 3 for the pulleys is made of sheet metal which is bent to the form shown. It has an open bottom 4 and an open end 5. Pulleys 6 are mounted on transverse axles 7 which are disposed at different levels so that a cord running through the hollow rod may have its ends trained over the two pulleys to be grasped by the user in a conventional manner. Surrounding the open end 5 of the casing is a socket 8 which is made to receive the end of the rod 1 and to engage the bottom thereof as shown

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particularly in Figs. 3 and 5. Extending from the upper portion of the socket is a bearing member 9 which lies upon and engages the top of the rod. The member 9 does not extend down around the sides of the rod to any appreciable extent and is of a size to leave the slot 2 in the rod exposed so that the slides may be brought up as close to the housing as possible when the curtains are drawn. This bearing member 9 extends a considerable distance along the rod relative to the length of the socket 8 and in combination with the socket acts on the rod to give stiffness against downward bending of the rod and housing when they are assembled as shown. At the other end of the housing is a supporting member 10 which is in line with the socket 8 and directly opposite thereto. This supporting member 10 is made with the same external configuration as the rod 1 so that it may be placed in a supporting bracket 11 of conventional design such as is commonly provided for supporting the rods such as rod 1 alone. The bracket as shown is fastened by suitable screws 12 to a wall or other support. It consists of a base 13 which carries a socket member 14 which is spaced at 15 from the base 13 to form an aperture to receive a hook 16 which may be provided to anchor the housing against movement laterally out of the bracket.

With this arrangement the housing 3 and the rod 1 form a unitary structural or supporting member to support the draperies. The bearing member 9 extending out over the top of the rod tends to give rigidity in cooperation with the socket 8 which need be only relatively short compared with the bearing member 9, which keeps the rod firmly connected to the housing even though considerable downward force is exerted on the rod.

The rod and bracket used may be the conventional rod and bracket presently available on the market so that the only additional element which must be manufactured is the housing itself. By using this housing it is possible to employ larger pulleys than are employed in conventional traverse equipment and larger cord may likewise be employed because the arrangement of the pulleys in the housing provides more room for the passage of cord than is provided in conventional traverse equipment where the pulleys are concealed in the rod itself. This permits greater ease of operation and permits wider spans and heavier draperies to be supported by the standard rods than has been the case heretofore.

A preferred form of the invention has been described by way of illustration. It will be ap-

parent, however, to those skilled in the art that other forms of the invention can be employed and there is no intention by confining the description to the one form of the invention to limit the invention to the specific form shown.

I claim:

1. A traverse curtain support comprising a hollow curtain rod having a longitudinally-extending lateral slot and a housing having a pair of pulleys therein mounted on transverse axles mounted at different levels and having an open end and a socket substantially surrounding said open end and fitting over and engaging the bottom of the end of said rod and having a bearing member extending beyond said socket at the upper portion only thereof and bearing on the top surface of said rod only leaving the lateral slot thereof uncovered and a supporting member at the other end of said housing in line with said rod and having substantially the contour of said rod.

2. A traverse curtain support comprising a hollow curtain rod having a longitudinally-extending lateral slot and a housing having an open end and having a socket substantially surrounding said open end and fitting over and engaging the bottom of the end of said rod and having a bearing member extending beyond said socket at the upper portion only thereof and bearing on the top surface of said rod only leaving the lateral slot thereof uncovered and a supporting member at the other end of said housing in line with said rod anad having substantially the contour of said rod.

3. A traverse curtain support comprising a hollow curtain rod having a longitudinally-extending lateral slot and a housing having a pair of pulleys therein mounted on transverse axles mounted at different levels and having an open end and a socket substantially surrounding said open end and fitting over and engaging the bottom of the end of said rod and having a bearing member extending beyond said socket at the upper portion only thereof and bearing on the top surface of said rod only leaving the lateral slot thereof uncovered.

4. A traverse curtain support comprising a hollow curtain rod having a longitudinally-extending lateral slot and a housing having an open end and having a socket substantially surrounding said open end and fitting over and engaging the bottom of the end of said rod and having a bearing member extending beyond said socket at the upper portion only thereof and bearing on the top surface of said rod only leaving the lateral slot thereof uncovered.

5. A pulley attachment for hollow traverse curtain rods of the type having a generally C-shaped cross section and provided with a longitudinally-extending lateral slot adapted to receive curtain-supporting slides, said attachment having an end supporting bracket adapted to receive an end of the rod comprising a housing having a pair of pulleys therein disposed on transverse axles disposed at different levels, said housing having an open end and an open bottom and having at said open end a socket snugly mountable over the terminal end of said curtain rod and engageable with the bottom of said rod when said rod is inserted therein, said socket having a bearing member extending therebeyond at the upper portion only thereof and adapted to bear upon the top surface of said rod while leaving the lateral slot thereof unobstructed and a supporting member at the other end of said housing and in line with said socket and having substantially the contour of said rod and snugly mountable in said end supporting bracket whereby when a rod is inserted in said socket and in engagement with said bearing member said housing and rod function as a single structural unit when said supporting member is inserted in said supporting bracket.

6. A pulley attachment for hollow traverse curtain rods of the type having a generally C-shaped cross section with a longitudinally-extending lateral slot adapted to support curtain-supporting slides comprising a housing having a pair of pulleys therein disposed on transverse axles disposed at different levels, said housing having an open end and an open bottom and having at said open end a socket snugly mountable over the terminal end of said curtain rod and engageable with the bottom of said rod when said rod is inserted therein and having a bearing member extending beyond said socket at the upper portion only thereof and adapted to bear upon the top surface of said rod while leaving the lateral slot thereof unobstructed whereby when a rod is inserted in said socket and in engagement with said bearing member said housing and rod function as a single structural unit.

RALPH E. BELL.

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The following references are of record in the file of this patent:

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