J. KRODER.

EXTENSION CURTAIN ROD.

APPLICATION FILED SEPT. 14, 1916.

1,284,113. Patented Nov. 5, 1918.

Fig. 1

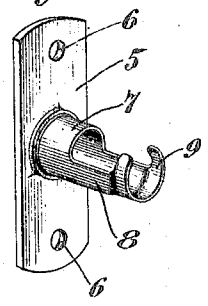


Fig. 2

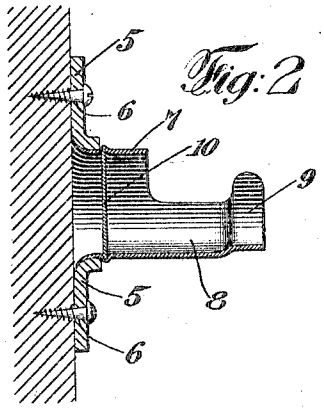


Fig. 3

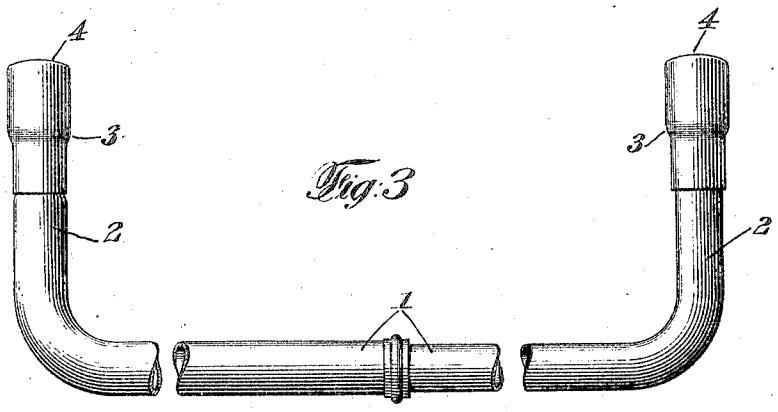
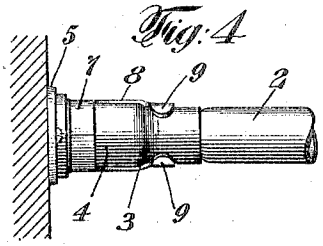


Fig. 4



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EXTENSION CURTAIN-ROD.

1,284,113. Specification of Letters Patent. Patented Nov. 5, 1918.

Application filed September 14, 1916. Serial No. 120,000.

To all whom it may concern:

Be it known that I, JOHN KRODER, of New York, in the county of New York, and in the State of New York, have invented a certain new and useful Improvement in Extension Curtain-Rods, and do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to an improvement in extension curtain rods, particularly that type of rod having ends which extend at right angles to the main body of the rod and is supported in horizontal position by the engagement of said ends with suitable brackets, and has for its object to provide brackets and coöperating rod ends which will permit the ready engagement and disengagement of said rods ends with and from said brackets.

A further object of my invention is to provide rod ends and brackets of the type described, which will be easier and less expensive to manufacture than other known forms, but sufficiently strong and durable to withstand the usage to which they are subjected.

A further object of my invention is to provide rod ends and brackets which will be finished and attractive in appearance and thus readily marketable.

Other and further objects of my invention will be apparent from the following description of one embodiment thereof and from an inspection of the accompanying drawings of said embodiment in which:

Figure 1 is a perspective view of a form of bracket;

Fig. 2 an enlarged longitudinal section of the bracket shown in Fig. 1;

Fig. 3 a plan of a rod; and

Fig. 4 a plan of a rod end engaged in a bracket.

Similar reference characters refer to similar parts throughout the drawings.

While I have illustrated my invention by the best embodiment thereof known to me, the invention is not to be restricted to such embodiment which is to be regarded only as typical for purposes of illustration.

Referring to the drawings, an extension rod of ordinary type is shown comprising a main body portion 1 having right-angled extensions 2. Each end of the rod is provided with a shoulder 3 which, in the present embodiment, is formed by enlarging the diameter of the rod adjacent its end. This form of rod end is most economical to manufacture, and is strong, substantial, and finished in appearance.

The rod end preferably is made by securing thereto an elongated cap 4 of the desired formation, characterized by two portions of different diameters whereby a shoulder is formed, each portion preferably having a smooth, unbroken, and uninterrupted surface without the usual ribs, projections, grooves, or depressions. Although the main body portion 1 of the rod is formed of two parts of different diameters in order to provide the extension or sliding feature, each cap 4 is of the same size, being fitted in well-known manner over each right-angled extension 2, which extension, of course, is of the same diameter as the portion of the main rod 1 of which it forms a part. As each cap is of the same size, the brackets therefore can be of the same size, and, if desired, identical in every particular.

Each bracket preferably consists of a plate 5 provided with means such as nail or screw holes 6 for ready attachment of the bracket to a wall or other place of attachment. Preferably connected to said plate 5 in any desired manner is means to prevent upward movement of the rod, such, for example, as a socket 7. The under portion of the rod is supported by an extension from the bracket, one embodiment of which may take the form of a lower semi-circular extension 8 on which the rod end is adapted to rest. Means also is provided to engage behind the shoulder on the rod end and maintain the rod in position, which in the present embodiment takes the form of a portion 9 of extension 8, of proper size to engage behind said shoulder at any desired number of points. If desired, the reduced portion 9 may form spring fingers in which the rod end fits, thereby preventing accidental upward movement of the rod.

If it is not desired to have the rod end extend entirely through the bracket, a cross plate or a narrow strip 10 (Fig. 2) may be inserted, against which the rod end will contact, so that the reduced portion 9 will engage directly behind the shoulder 3 on the rod end. The rod end therefore is maintained securely against longitudinal movement in either direction.

Many modifications of the embodiment of my invention disclosed herein will be ap-

parent to those skilled in the art, without departing therefrom or from the scope of the claims.

Having described one embodiment of my invention, what I claim is:

1. A rod adapted to be received in a bracket and maintained in position therein and having an outer end portion of substantially uniform and uninterrupted diameter, and an inner, substantially uniform reduced portion adjacent such outer end portion, to provide a shoulder adapted to engage with a bracket.

2. A rod adapted to be received in a bracket and maintained in position therein by an elongated cap secured to the end of the rod which is formed to coöperate with the bracket, said cap having an outer end portion of substantially uniform diameter, and an inner substantially uniform reduced portion adjacent such outer end portion, to provide a shoulder adapted to engage with a bracket.

3. A bracket adapted to receive the end of a shouldered rod comprising means to prevent upward movement of the extreme end of the rod and having a semi-circular extension adapted to extend under and support the rod, the outer portion of which extension is reduced in size to coöperate with the shoulder to hold a rod in position.

4. A bracket adapted to receive the end of a shouldered rod comprising a socket to receive the extreme end of the rod and having a semi-circular extension adapted to extend under and support the rod, the outer portion of which extension is reduced in size to coöperate with the shoulder to hold a rod in position.

5. A rod adapted to be received in a bracket and maintained in position therein and having an end portion of substantially uniform diameter and a substantially uniform reduced portion adjacent said end portion, in combination with a bracket having means to prevent upward movement of the extreme end of the rod, and an extension adapted to support the rod and to engage the rod and shoulder to maintain the rod in position in the bracket.

6. A rod adapted to be received in a bracket and maintained in position therein by an elongated cap secured to the end of the rod, said cap having an outer end portion of substantially uniform diameter, and an inner substantially uniform reduced portion adjacent such end portion, to provide a shoulder, in combination with a bracket adapted to receive the end of the cap and having means to prevent upward movement of the end of the cap and an extension adapted to support the cap, said bracket also having means to engage the cap and shoulder to maintain the cap in position in the bracket.

7. A rod adapted to be received in a bracket and maintained in position therein and having an outer end portion of substantially uniform diameter, and an inner substantially uniform reduced portion adjacent such end portion, to provide a shoulder, in combination with a bracket having a socket to receive the extreme end of the rod and an extension adapted to support the rod of such diameter as to engage the rod and shoulder to maintain the rod in position in the bracket.

8. A curtain rod, a sheet metal cap therefor having a substantially cylindrical end portion and an adjacent cylindrical reduced portion at the point where the cap is secured to the rod, whereby a shoulder is provided between said portions, in combination with a bracket having a socket to receive the extreme end of the cap and a semicylindrical extension adapted to extend under and support the cap, the outer portion of said extension being reduced to coöperate with the reduced portion and shoulder of the cap to hold the rod in position, and means for preventing undue inward movement of the rod.

In testimony that I claim the foregoing I have hereunto set my hand.

JOHN KRODER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."