F. LA O. LATHROP.

CONNECTION FOR CURTAIN RODS AND THE LIKE.

APPLICATION FILED JUNE 24, 1910.

972,544. **Patented Oct. 11, 1910.**

Fig. 1.

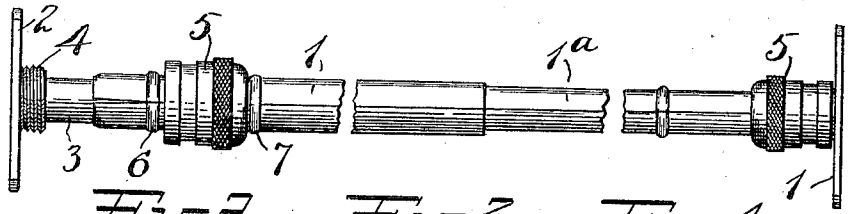


Fig. 2

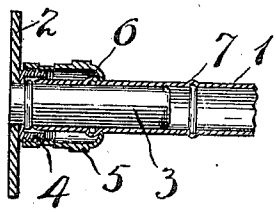


Fig. 3.

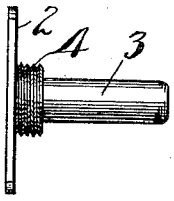


Fig. 4.

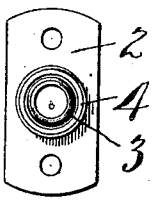


Fig. 6.

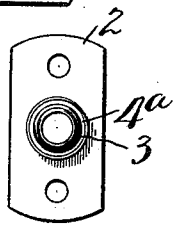


Fig. 5.

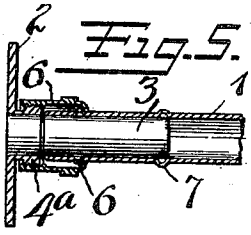


Fig. 7.

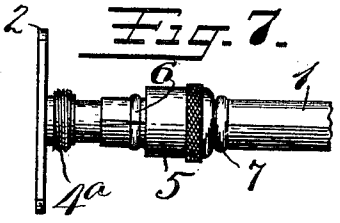


Fig. 9.

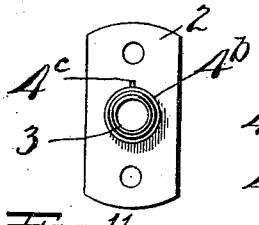


Fig. 8.

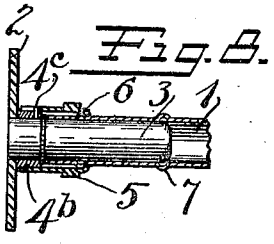


Fig. 10.

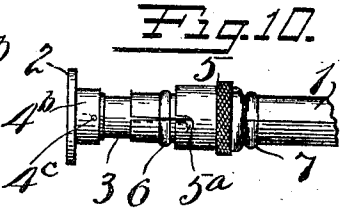
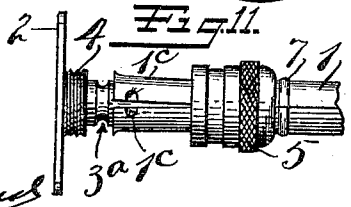


Fig. 11.



Witnesses:

Inventor

F. L. LATHROP.

By his Attorneys

UNITED STATES PATENT OFFICE.

FRANK LA OTIS LATHROP, OF WALLINGFORD, CONNECTICUT, ASSIGNOR TO H. L. JUDD COMPANY, OF WALLINGFORD, CONNECTICUT, A CORPORATION OF NEW YORK.

CONNECTION FOR CURTAIN-RODS AND THE LIKE.

972,544. Specification of Letters Patent. **Patented Oct. 11, 1910.**

Application filed June 24, 1910. Serial No. 568,628.

To all whom it may concern:

Be it known that I, FRANK L. LATHROP, a citizen of the United States, residing at Wallingford, county of New Haven, State of Connecticut, have invented certain new and useful Improvements in Connections for Curtain-Rods and the Like, of which the following is a full, clear, and exact description.

My invention relates to improvements in connecting devices for curtain rods and the like, the object of the invention being to provide a simple and effective means whereby the ends of the curtain rod may be securely fastened to a suitable supporting member.

In the drawings, Figure 1 is a side elevation of a small sized curtain rod, one end being secured in place, the other end being only partially in place. Fig. 2 is a longitudinal section of the left hand end of Fig. 1, with the parts finally in place. Fig. 3 is a side elevation of a detail. Fig. 4 is an end elevation thereof. Fig. 5 is a section similar to Fig. 2, illustrating a slight modification. Fig. 6 is an end view of the support for the rod end shown in Fig. 5. Fig. 7 is a side elevation of the modification shown in Fig. 5, the parts being only partially in place. Fig. 8 is a section of another modification. Fig. 9 is an end view of the rod support shown in Fig. 8. Fig. 10 is a plan view of the parts shown in Fig. 8 only partially assembled. Fig. 11 is a view of another modification of one end of the rod and one end support, showing said parts only partially assembled.

1—1ª represent the two sections of a rod, said parts being preferably telescopic for convenience of adjustment. These rods are ordinarily made by rolling a piece of sheet metal into tubular form, the edges of the metal forming a disconnected butt seam. In the present instance the end of the seam in each rod section is unsecured, whereby the end of the tube may be sprung open when it is being attached to its support. The support in this particular instance comprises a base plate 2 having a post 3 mounted thereon, and having also a screw-threaded undercut washer 4 suitably secured on the post 3, the undercut portion facing outwardly.

5 is a coupling sleeve slidable on the end of the rod and arranged to be secured to the member 4 by rotation. In Figs. 1 to 7 inclusive, these parts are secured together by an uninterrupted thread.

6 is an annular rounded bead formed on the outer surface of the curtain rod near its end, the same performing a double function, as hereinafter described.

7 is a raised stop bead, also preferably employed.

The rib 6 and stop bead 7 serve to limit the longitudinal movement of the coupling sleeve 5 on the rod, and thereby prevent accidental separation and loss of said sleeve. The bead 6 is preferably so spaced relatively to the end of the rod that when the sleeve 5 is drawn up on the threaded part of the washer 4 the extreme end of the rod will be drawn into the undercut space within the undercut washer 4, as shown in the sectional view, Fig. 2, while the rear end of said outer end of the sleeve will engage with the inclined side of the rib 6 so as to clamp the split end of the tube 1 tightly upon the post 3, thereby securing said parts not only against being separated by a straight pulling movement, but also from being rotated independently.

In Figs. 5 to 7 inclusive, the construction of the various parts corresponds substantially to the construction shown in Figs. 1 to 4, excepting that the threaded washer 4ª lacks the undercut of the threaded washer 4 shown in Figs. 1 to 4; otherwise, similar reference numerals are employed in Figs. 5 to 7 to illustrate the corresponding parts previously described.

In Figs. 8 to 10, the construction corresponds substantially to that shown in Figs. 5 to 7, excepting that the washer part 4ᵇ, instead of being provided with the screw thread of the corresponding part 4ª shown in Fig. 7, is provided with a projection 4ᶜ to project into a bayonet lock slot 5ª upon the sleeve 5, which latter corresponds, with this exception, to the internally threaded clamping sleeve 5ᶜ of the previous views.

In all of the views it will be observed that the clamping sleeve serves to prevent the split end of the rod from expanding, and since said sleeve is securely held in place by its connection with the main support, it is obvious that the rod is securely locked.

In Fig. 11 I have shown a construction in

which the split end of the rod is provided with one or more inwardly directed nibs 1^c—1^c which are arranged to register with and project into a suitable recess 3^a in the post 3. At the base of the post, as before, is a screw threaded fixed washer 4, arranged to receive the corresponding screw-threaded end of the sleeve 5. When the tube 1 is being slid into place, its split end will first expand and then contract to normal size, the nibs 1^c—1^c projecting into the recess 3^a in the post, whereupon the coupling sleeve 5 may be slid over said end and secured by the threaded connection to the threaded part 4 of the post, thus preventing accidental detachment. The presence of the sleeve 5 directly over the split end of the tube 1 where it engages with the post will prevent that degree of expansion of the latter necessary to free the nibs from the locking recess in the post.

What I claim is:

1. In a rod connection of the character described, two elements to be connected, comprising a pin-like element having a base arranged to be secured to a wall and a tubular rod-like element, one of said parts being slitted at one end, said parts being arranged to slide one within the other, a recess on one part arranged to receive a portion of the other part, a coupling sleeve mounted on the outer part and means to secure said sleeve to the base of said pin.

2. In a rod connection of the character described, two elements to be connected, comprising a pin-like element having a base arranged to be secured to a wall and a tubular rod-like element, one of said parts being slitted at one end, said parts being arranged to receive a portion of the other part, a coupling sleeve slidably mounted on the outer part and a screw-thread connection between said base and sleeve.

3. In a rod connection of the character described, two elements to be connected comprising a pin-like supporting element having a base arranged to be secured to a wall, a split tube forming a rod-like element, slidable upon the outside of the pin-like element, a coupling sleeve slidable and rotatable on the rod-like element, an internal thread on the coupling sleeve at its outer end, and a co-acting external thread upon the base of the pin-like element, an inclined shoulder on the tube, a part of said coupling arranged to co-act with said inclined shoulder to frictionally clamp the split tube on the pin.

FRANK LA OTIS LATHROP.

Witnesses:

WILLIAM H. EDSALL,

FREDERIC M. COWLES.