Sept. 3, 1929. H. H. SCHROYER 1,726,720

CURTAIN ROLLER

Filed March 11, 1927

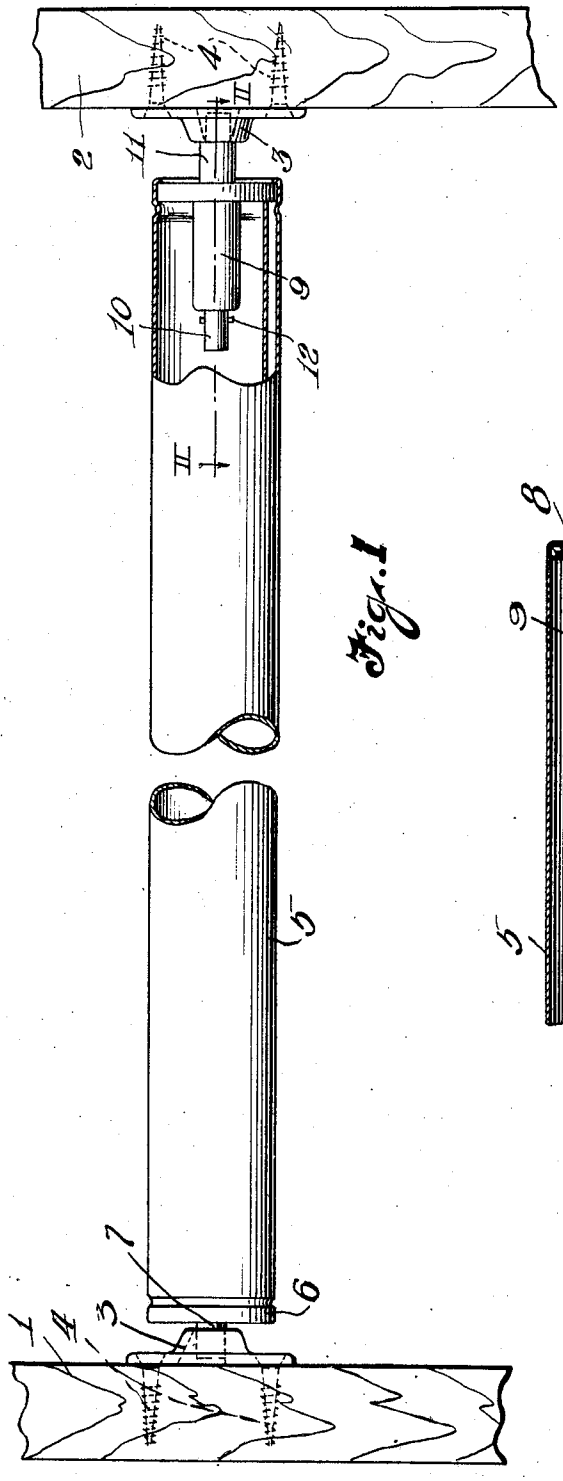


Fig. 1

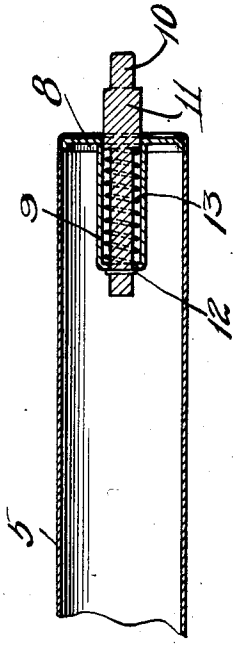


Fig. 2

INVENTOR.
Harry H. Schroyer
BY
ATTORNEY.

Patented Sept. 3, 1929. 1,726,720

UNITED STATES PATENT OFFICE.

HARRY H. SCHROYER, OF CHICAGO, ILLINOIS, ASSIGNOR TO MORTON MANUFACTURING COMPANY, A CORPORATION OF ILLINOIS.

CURTAIN ROLLER.

Application filed March 11, 1927. Serial No. 174,651.

This invention relates to a releasable curtain roller and more particularly to an improved spring controlled slidable gudgeon carried in one end thereof whereby the curtain roller may be easily mounted in place or removed from its supports in a window casing by reducing the overall length of the roller by depressing a spring controlled gudgeon.

It is an object of this invention to provide a curtain roller with a spring controlled gudgeon mechanism at one end thereof facilitating the mounting and release of a curtain roller.

It is also an object of this invention to provide a curtain roller with a spring controlled slidable supporting gudgeon at one end thereof, permitting the slidable gudgeon to be projected into the roller when the roller is mounted in place or is to be released from its position in a window casing.

It is an important object of this invention to provide a roller curtain having one of the supporting gudgeons thereof slidably engaged in the end thereof and controlled by means of a coiled spring, permitting said gudgeon to be projected into the end of the roller permitting said roller to be quickly mounted in place or released from its mounting.

Other and further important objects of this invention will be apparent from the disclosures in the specification and the accompanying drawings.

This invention (in a preferred form) is illustrated in the drawings and hereinafter more fully described.

On the drawings:

Figure 1 is a fragmentary view of an improved curtain roller mounted in place in a window frame and equipped with an improved supporting means embodying the principles of this invention.

Figure 2 is a longitudinal section through one end of the roller taken on line II—II of Figure 1.

As shown on the drawings:

The reference numerals 1 and 2 indicate a pair of window frame jambs on the inner face of each of which is mounted a recessed supporting socket or bracket 3 held in place by retaining screws 4 or other suitable means.

An improved curtain roller mechanism is provided for use with the supporting sockets 3 and said mechanism comprises a hollow roller 5 having one end thereof closed by a closure plug or cap 6 carrying an axially projecting pin or gudgeon 7 adapted to be removably journaled in one of the supporting sockets 3 to hold one end of the roller releasably supported in position in a window frame. Mounted in the opposite end of the hollow roller 5 is a closure cap or plate 8 having integrally formed on the inner face of the middle portion thereof an inwardly projecting sleeve 9. Slidably mounted in the sleeve 9 is a supporting pin or gudgeon 10 having integrally formed a short distance from the outer end thereof a guide collar or cylindrical shank 11 which is adapted to slide in the guide sleeve 9. The inner end of the gudgeon 10 projects through the sleeve 9 and through a guide opening in the inner end thereof. Mounted in the inner end of the gudgeon 10 is a stop member or pin 12 adapted to contact the inner end of the sleeve 9 to limit the outward movement of the gudgeon 10. Coiled around the gudgeon 10 between the guide shank 11 and the inner end of the guide sleeve 9 is a coiled control spring 13 which acts to normally hold the gudgeon 10 in a projected position with the stop pin 12 seated against the inner end of the guide sleeve 9, as clearly illustrated in Figure 2.

The improved roller may be rapidly and easily mounted in place by projecting the outer end of the gudgeon 10 into one of the supporting brackets 3 and then pushing the roller toward said bracket compressing the spring 13 allowing a relative sliding movement to take place between the gudgeon 10 and the sleeve 9. With the compression of the gudgeon control spring 13 the gudgeon 7 at the opposite end of the roller 5 may be easily inserted in the second supporting bracket 3 on the frame jamb 1. It will thus be seen that the roller 5 is resiliently held supported in the brackets 3 by the fixed gudgeon 7 and the slidable spring controlled gudgeon 10. The compression spring 13 acts to resiliently hold the head or shank 11 on the gudgeon 10 against its supporting brackets 3.

The improved roller mechanism is thus rotatably supported by the brackets 3 and may be readily removed from its supports by simply sliding the roller toward the frame jamb 2 a distance sufficient to release the

gudgeon 7 from its supporting bracket after which the second gudgeon 10 may be pulled out of its supporting bracket thereby completely releasing the roller and the curtain carried by the same. The improved roller mechanism is of simple and inexpensive construction and affords an arrangement permitting the roller to be readily mounted in brackets carried in inaccessible places on window frame jambs.

I am aware that many changes may be made, and numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I therefore do not purpose limiting the patent granted hereon, otherwise than necessitated by the prior art.

I claim as my invention:

1. A curtain roller mechanism comprising a hollow roller, a cap secured in one end of said hollow roller, a sleeve integral with said cap and projecting into the roller, a gudgeon slidably mounted in said sleeve and projecting from the roller, an enlarged head integrally formed on said gudgeon near the outer end thereof adapted to act as a guide for said gudgeon, a stop member engaged in the inner projecting end of said gudgeon beyond the inner end of said sleeve, and a spring coiled around said gudgeon between said gudgeon head and the inner end of said guide sleeve.

2. A curtain roller mechanism comprising a roller, a flanged sleeve mounted in one end of said roller with the flange serving to center said sleeve in the roller, a gudgeon slidably projecting through said sleeve, a stop member carried by the inner end of said slidable gudgeon to the outside of said sleeve, a head formed on said slidable gudgeon near the outer end thereof, and a spring coiled around said gudgeon within said sleeve to normally hold the slidable gudgeon projected a distance limited by said stop member.

3. The combination with a hollow roller, of a metal closure cap secured in one end of said roller, a sleeve integrally formed on said cap and projecting into said roller, a spring-controlled gudgeon slidably mounted in said sleeve and projecting through said cap, and a stop member on said slidable gudgeon beyond the inner end of said sleeve to limit the outward movement of said slidable gudgeon.

4. In a curtain roller having a hollow end, a sleeve having an outwardly directed flange about one end arranged within said roller with said flange supporting said sleeve axially in said roller, a pin having an intermediate collar substantially the same diameter as said sleeve slidably arranged within said sleeve, the inner end of said sleeve having a central opening for said pin, said pin extending through said opening and being guided by said collar and by its end extending through the end of said sleeve, a stop for limiting movement of said pin in one direction, a spring within said sleeve acting against said shoulder to urge said pin normally outwardly, said pin having an end beyond said collar for cooperating with a roller bracket.

In testimony whereof I have hereunto subscribed my name at Chicago, Cook County, Illinois.

HARRY H. SCHROYER.