J. H. BOYE.

CURTAIN ROD.

APPLICATION FILED OCT. 19, 1917.

1,310,469. Patented July 22, 1919.

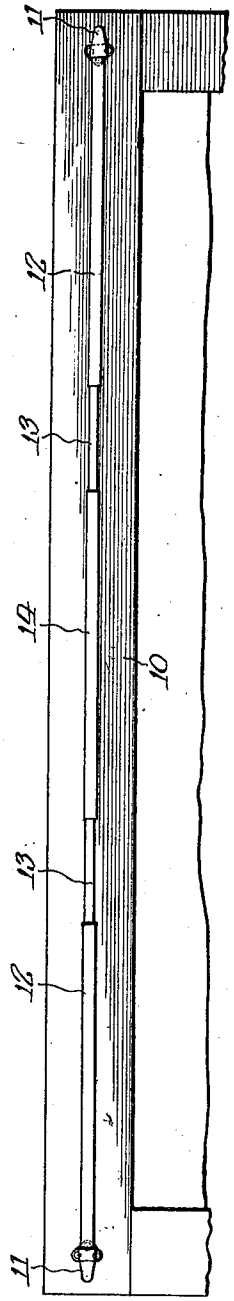


Fig. 1.

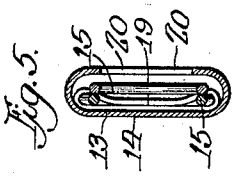


Fig. 5.

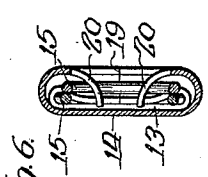


Fig. 6.

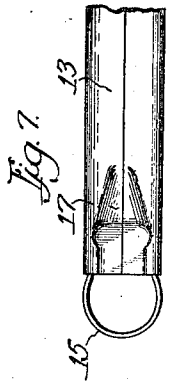


Fig. 7.

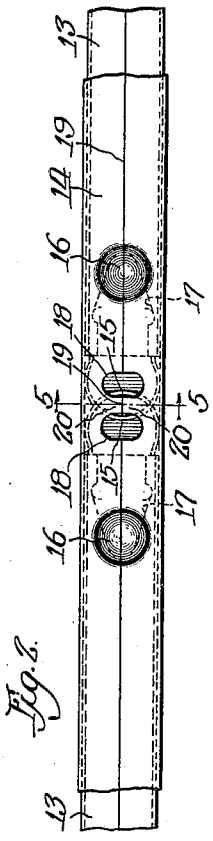


Fig. 8.

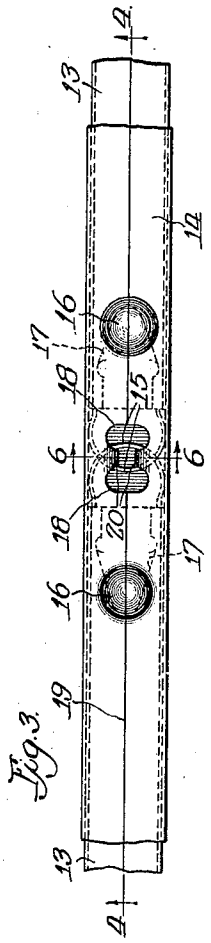


Fig. 3.

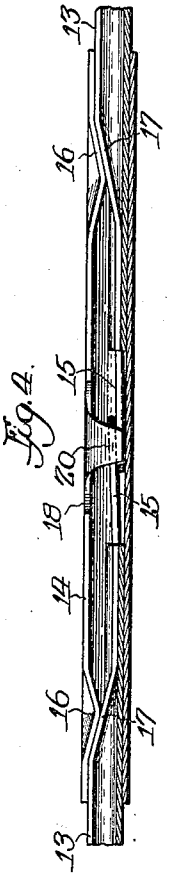


Fig. 4.

Witness:
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UNITED STATES PATENT OFFICE.

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CURTAIN-ROD.

1,310,469. Specification of Letters Patent. Patented July 22, 1919.

Application filed October 19, 1917. Serial No. 197,403.

To all whom it may concern:

Be it known that I, JAMES A. BOYE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Curtain-Rods, of which the following is a specification.

This invention relates to improvements in curtain rods, and the salient objects of the invention are, to provide a relatively long rod made up of a plurality of telescoping sections which, by reason of its improved construction, shall possess unusual rigidity against bending or sagging and preserve a substantially straight condition from end to end, to provide a relatively long rod of the character mentioned with an improved means for coupling together the end sections thereof so as to prevent central sagging of the rod and provide ample strength to support the curtain or curtains, to provide, in conjunction with a coupling member of the character mentioned, simple and efficient means for taking up slackness of fit of the end sections within the coupling section, and to provide, in conjunction with such a coupling member, a simple and effective means for locking the proximate ends of the end sections of the rod within said coupling member.

With these and other objects in view, the invention resides in the new and improved construction of curtain rod herein described and definitely pointed out in the claims hereunto appended.

In order that my invention may be readily understood and appreciated by those skilled in the art, I have illustrated in the accompanying drawing one practical and preferred embodiment thereof, and referring to the drawing,—

Figure 1 is a front elevation of the complete extensible rod shown as applied to the top of a window casing;

Fig. 2 is an enlarged detail rear elevation of the central part of the rod showing a portion of the coupling section and portions of the end sections that telescope and are positioned and ready to be locked within the same;

Fig. 3 is a view similar to Fig. 2, but showing the locking tongues of the coupling member thrown down into locking position;

Fig. 4 is a longitudinal section on the line 4—4 of Fig. 3;

Fig. 5 is a cross-section on the line 5—5 of Fig. 2;

Fig. 6 is a cross-section on the line 6—6 of Fig. 3;

Fig. 7 is a detail rear side elevation of the inner end portion of one of the end sections of the rod, clearly showing the transversely compressible wire loop extension thereon for taking up slackness of fit within the coupling section and constituting an element of the locking means.

Referring to the drawings, 10 indicates the top member of a wide window casing, to which, at or near its ends, are secured supporting brackets 11 for my improved rod. This rod, in the form herein shown, comprises extensible end sections 12 and 13, and a central flattened tubular section 14 that constitutes a coupling member for the end sections. As herein shown the coupling member 14 has the same transverse size and dimensions as the outer members 12 of the extensible end sections of the rod, and may be cut to a suitable length from the same stock as the end members 12. The inner ends of the rod members 13 are provided with spring wire loop extensions 15 that are transversely compressible when said members 13 are telescoped into the coupling member 14, thereby taking up any slackness of fit and rendering the members 13 substantially rigid with the intermediate coupling member 14. My invention also comprehends means for determining or limiting the extent to which the rod members 13 may be inserted within the coupling member 14, and also means for locking said members against separation; the limiting means being preferably arranged to coördinate with the locking means so that when the members 13 are inserted to the full extent within the coupling member, a locking member carried by the latter shall be in position to coöperate with the wire loop extensions of the rod members to effect the locking of the latter in the coupling member.

The movement-limiting means herein shown consists, as best shown in Fig. 4, of stops 16 that are easily and cheaply formed by depressing the metal on the rear side or wall of the coupling member, and cooperating stops 17 formed by an inclined portion of the rear wall of each rod member 13, said inclined portion 17 resulting

from the mashing down of the end portion of the rear wall of the member 13 over the legs of the wire loop extension 15 to secure the latter in place, as clearly shown in Figs. 4 and 7.

The stops 16 and 17 are so related that when they are in coöperation, the wire loop extensions 15 are in overlapping relation to each other, as clearly shown in Figs. 2, 3 and 4. To provide a simple and convenient means adapted for coöperation with the overlapping wire loops 15, I make a pair of oblong transverse holes 18 in the rear wall of the coupling member across the longitudinal joint 19 of the wall, thereby creating a pair of oppositely facing tongues 20 between said holes that, after the end sections of the rod have been inserted into the coupling member to the full extent permitted by the stops 16 and 17, may be simply bent down between and through the overlapping portions of the wire loops 15, as clearly shown in Figs. 4 and 6, whereby the rod sections 13 are securely locked against accidental withdrawal from the coupling member. These tongues 20 also coöperate with the wire loops 15, maintaining the rod sections 13 in rigid alinement with the central coupling member.

The coupling means last described, including and embodying the automatic stopping and locking means, is, of course, capable of advantageous use with plain or non-extensible end sections; but it finds its highest usefulness as an element of comparatively long curtain rods, which are usually made extensible so as to fit wide windows of varying dimensions, said coupling means satisfactorily taking the place of intermediate supporting brackets secured to the window casing, which are now almost exclusively used on very wide single windows or double windows.

It is believed that the structural features, manner of use, utility and advantages of the invention will be understood and appreciated from the foregoing without further detailed description; and hence, without limiting myself to the exact construction and arrangement herein shown and described.

I claim:

1. A curtain rod, comprising flat end sections provided at their proximate ends with transversely compressible spring wire loop extensions, and an intermediate flattened tubular coupling section into which the proximate ends of said end sections are telescoped with their wire loop extensions in overlapping relation within said coupling section.

2. A curtain rod, comprising extensible flat end sections provided at their proximate ends with transversely compressible spring wire loop extensions, and an intermediate flattened tubular coupling section into which the proximate ends of said end sections are telescoped with their wire loop extensions in overlapping relation within said coupling section.

3. A curtain rod, comprising flat end sections provided at their proximate ends with transversely compressible spring wire loop extensions, and an intermediate flattened tubular coupling section into which the proximate ends of said end sections are telescoped, said coupling section having integral means adapted to interlock with said wire loop extensions to prevent withdrawal of said end sections from said coupling section.

4. A curtain rod, comprising flat end sections provided at their proximate ends with transversely compressible spring wire loop extensions and adjacent to their proximate ends with stop members, and an intermediate flattened tubular coupling section into which the proximate ends of said end sections are telescoped, said coupling section having stops coöperating with the stops of said end sections, and integral means adapted to interlock with said wire loop extensions when said coöperating stops are engaged with each other.

5. A curtain rod, comprising flat end sections provided at their proximate ends with transversely compressible spring wire loop extensions and adjacent to their proximate ends with stop members, and an intermediate flattened tubular coupling section into which the proximate ends of said end sections are telescoped, said coupling section having stops so located as to coöperate with the stops of said end sections when the latter have entered the coupling section with their wire loop extensions in overlapping relation, and an integral tongue on said coupling section adapted to be bent between and through said wire loop extensions to lock said end sections against withdrawal.

JAMES H. BOYE.

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