

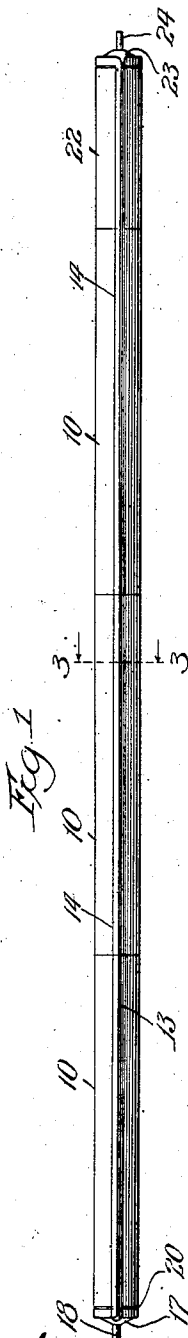
W. H. FORSYTH.

CURTAIN ROLLER.

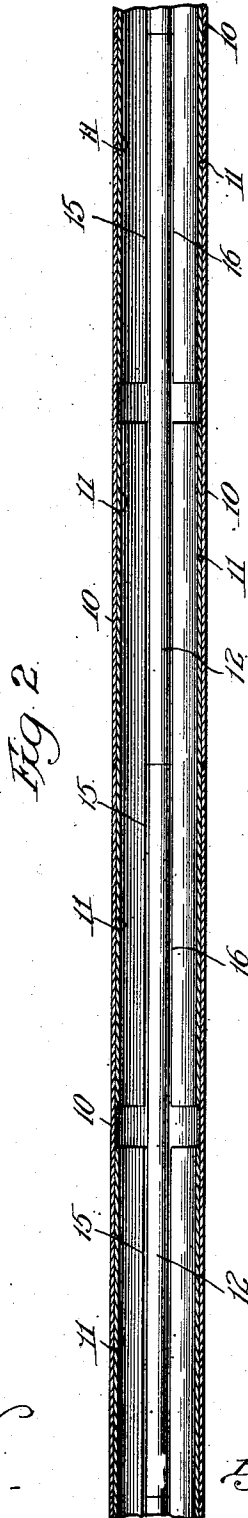
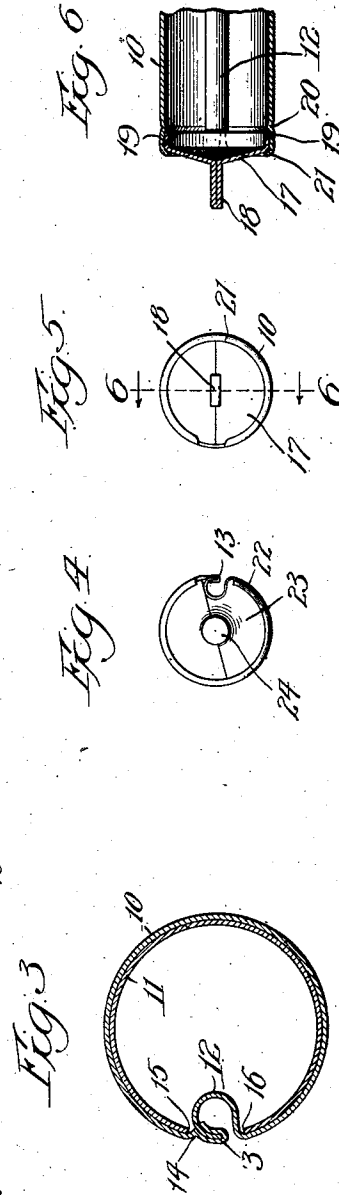
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1,010,608.

Patented Dec. 5, 1911.



Witnesses:
Ed. C. Davis
Henry M. Shurley.



Inventor:
William H. Forsyth
By Lenthicum, Bell & Fuller
Attys.

UNITED STATES PATENT OFFICE.

WILLIAM H. FORSYTH, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE CURTAIN SUPPLY COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

CURTAIN-ROLLER.

1,010,608.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM H. FORSYTH, a citizen of the United States, and a resident of Chicago, Cook county, Illinois, have
5 invented certain new and useful Improvements in Curtain-Rollers, of which the following is a specification.

My invention relates to curtain rollers and has particular reference to a form of roller
10 which is built up of a plurality of sections, and may thus be made of any desired length.

In the construction of the curtain roller, two features are of great desirability; first, that the roller should be sufficiently rigid in
15 order to prevent any danger of bending, and second, that it should be readily possible to vary the length of the roller according to any particular requirements. These results I accomplish by using a plurality of metallic
20 sections which are joined end to end by means of using a plurality of inner sections which closely fit within the outer sections. Each of the inner sections is placed so that approximately one-half of its length is within
25 one outer section and the remaining portion of its length is within the next adjacent outer section. By using such a construction it will be apparent that the roller may be made of any desired length, slight adjustments being effected by sliding one of the
30 outer sections on its telescoping inner section. Not only can a roller be made of any desired length in this manner, but the presence of the inner sections throughout the entire length of the roller, serves to reinforce
35 the same, and the roller becomes rigid and resists bending action. The outer sections of the roller are constructed with inwardly projecting ribs which are designed to receive
40 the upper transverse edge of the curtain, this edge being held in position by means of a wire which slips within the rib.

In my improved form of curtain roller, I use a form of rib which possesses features
45 of superiority over those which have previously been employed. Each of the outer sections is constructed of a piece of tube shaped longitudinally split metal. The inwardly projecting rib just mentioned, is
50 formed on one side of this longitudinal slit, whereas the opposing edge of the section is formed into a lip which incloses the free edge of the rib. This lip forms a rounded edge on the outer portion of the rib and thus

effectually prevents any injury to the curtain edge held by the wire within the rib. The base of this inclosing lip is slightly depressed in order to form an engaging surface for one edge of the longitudinally split inner section which fits within the outer section and whose opposite edge has its bearing
55 against the base of the inwardly projecting rib above mentioned. The two end sections of each curtain roller are provided respectively with a cap with which is integrally formed a pawl controlled mandrel
60 and a piece of metal which is suitably placed to similarly form a cap and a projecting pintle. These and other advantages of my invention will be more apparent by reference to the accompanying drawings which
65 show a preferred embodiment of my improvements and in which:

Figure 1 is a side elevation of my improved curtain roller. Fig. 2 is an enlarged
75 fragmentary vertical sectional view through the roller shown in Fig. 1. Fig. 3 is an enlarged transverse section on the line 3—3 of Fig. 1. Fig. 4 is an end elevation of the curtain roller showing the pawl controlled
80 mandrel in position. Fig. 5 is an end elevation of the opposite end of the curtain roller showing the pintle in position. Fig. 6 is a fragmentary vertical section on the line 6—6 of Fig. 5.

In one of the outer sections 10 is placed
85 the inner connecting section 11 which extends into the outer section for a distance corresponding to about half of its length. On the projecting end of the inner section
90 11 is then placed a second section 10 which is forced into position so that the edge of its end abuts against the edge of the adjacent section 10 first mentioned. This operation is continued until the curtain roller is
95 built up to approximately the desired length.

Each of the outer sections 10 is constructed with an inwardly projecting rib 12 on one side, the opposing edge being bent into the form of a lip 13 which incloses the cut
100 edge of the rib 12 and thus protects the curtain from the wear which would be caused by contact with a rough or sharpened edge. By thus inclosing the cut edge of the rib 12, a depression 14 is formed at the base of the
105 inclosing lip 13, and on its inner portion forms an engaging surface for the edge 15 of the inner section 11. This inner section

11, when removed from engagement with the outer section 10, by the spring quality of the metal of which it is constructed, normally assumes a diameter which is greater than the diameter of the outer section 10. In this way when the inner section is placed within the outer section, a tight fit is obtained. As most clearly shown in Fig. 3, the edge 16 of the inner section 11 engages the angle which is formed at the base of the inwardly extending rib 12.

In building up one of the curtain rollers, the first section which I use is preferably an end section, as for example, the one shown at the left in Fig. 1. Fitting into the outer end of this section, is the cap member 17 which is formed with the pintle 18 integral therewith. The edge 19 of this cap abuts against the lip 20 which is formed around the circumference of the outer section 10 and the edge 21 of the section is rolled inwardly over the cap member 17, thus holding it securely in position.

When the curtain roller has been built up to a length slightly less than that which is finally desired, the end section 22 is placed in position, being moved along its corresponding inner connector section 11 until the exact length of the roller which is desired is obtained. In order to fasten the sections securely in position, a slight amount of solder may be used between the inner and outer sections, although I generally find this is unnecessary. The section 22 has a cap member 23 held in its end in a manner similar to that in which the cap member 17 is held in the end section 10. Formed integrally with the cap member 23, is the pawl controlled mandrel 24, of well known con-

struction, the pintle 23 and mandrel 24 acting as supports for the roller.

It will be apparent that many changes may be made in the detailed construction of the parts which I have described without departing from the spirit of my invention.

What I claim is:

1. In a reinforced metal curtain-roller, the combination of a plurality of axially-disposed outer hollow sheet-metal sections arranged end to end having alined grooves for the accommodation of the attachment edge of a curtain, and a plurality of inner hollow sheet-metal sections also arranged end to end in the outer sections and extended substantially the full length of said roller, each of said inner sections internally telescoping with at least a pair of said outer sections, substantially as described.

2. In a reinforced metal curtain-roller, the combination of a plurality of axially-disposed outer hollow sheet-metal sections arranged end to end having inwardly-projecting hollow ribs affording an external groove arranged longitudinally of the roller for the accommodation of the attachment edge of a curtain, and a plurality of inner hollow sheet metal sections also arranged end to end in the outer sections, formed to accommodate the ribs of said outer sections, and extended substantially the length of said roller, each of said inner sections internally telescoping with at least a pair of said outer sections, substantially as described.

WILLIAM H. FORSYTH.

Witnesses:

HENRY M. HUXLEY,
MILTON MILLER.