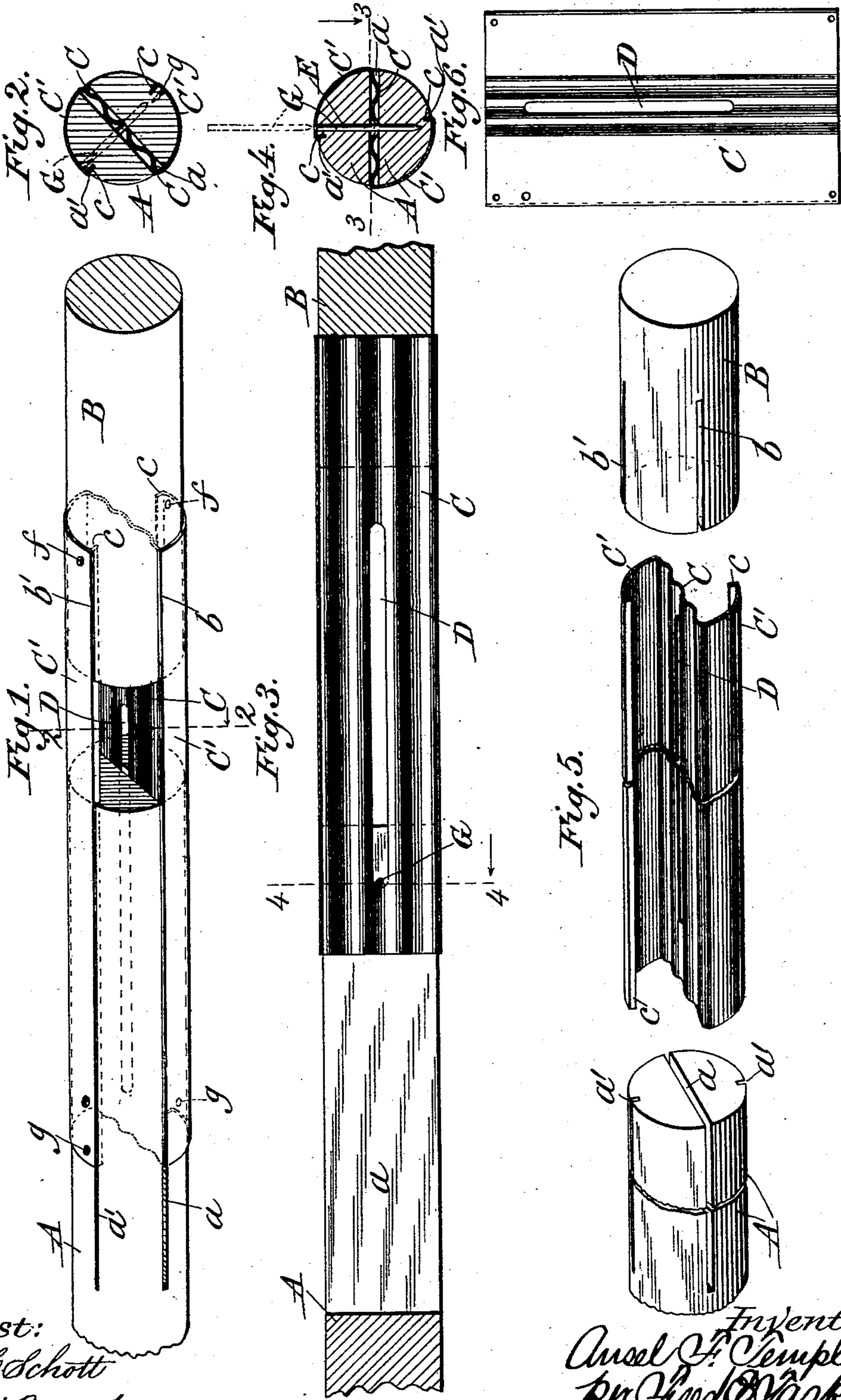


(No Model.)

A. F. TEMPLE.  
EXTENSION CURTAIN ROLLER.

No. 570,720.

Patented Nov. 3, 1896.



Attest:  
J. H. Schott  
A. W. Bayard.

Inventor  
Ansel F. Temple  
per Fred W. Wacker  
Att'y



# UNITED STATES PATENT OFFICE.

ANSEL F. TEMPLE, OF MUSKEGON, MICHIGAN, ASSIGNOR TO THE STEWART HARTSHORN COMPANY, OF NEWARK, NEW JERSEY.

## EXTENSION CURTAIN-ROLLER.

SPECIFICATION forming part of Letters Patent No. 570,720, dated November 3, 1896.

Application filed March 27, 1896. Serial No. 585,094. (No model.)

*To all whom it may concern:*

Be it known that I, ANSEL F. TEMPLE, a citizen of the United States, residing at Muskegon, in the county of Muskegon and State of Michigan, have invented certain new and useful Improvements in Extension Curtain-Rollers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has reference to certain new and useful improvements in curtain-rollers of the variety commonly denominated "adjustable" or "extension" rollers.

The object of the invention is to promote cheapness in the manufacture of such rollers as well as to insure the same stiffness and durability possessed by a roller constructed out of a single integral piece of material. Various attempts have heretofore been made to provide an extension-roller by the use of which the roller could be adjusted to any desired length and when so adjusted might be positioned in the window-frame and serve as well as if it were made of a single piece of material, yet efforts heretofore made in this direction have met with only partial success. My invention aims to make more perfect the construction of rollers of this class.

It therefore consists, essentially, in the construction, arrangement, and combination of parts substantially as will be hereinafter described, and then more particularly pointed out in the claims.

In the accompanying drawings, illustrating my invention, Figure 1 is a side elevation of my improved extension-roller. Fig. 2 is a transverse section on the line 2 2 of Fig. 3. Fig. 3 is a longitudinal sectional view on the line 3 3 of Fig. 4. Fig. 4 is a transverse section on the line 4 4 of Fig. 3. Fig. 5 is a perspective view showing in detail the contiguous end portions of the roller-sections and also the Z-shaped metallic connecting-strip. Fig. 6 is a detail plan view of the rectangular metallic blank out of which the Z-shaped connecting-strip is bent.

Similar letters of reference designate corresponding parts throughout the different figures of the drawings.

In carrying my invention into practical effect I first provide two sections or pieces, both of which are rolls and of substantially equal diameter, but, if desired, differing in length, one being comparatively long and the other comparatively short, although it is obvious that the relative lengths of the two parts are unimportant.

A and B designate examples of the two cylindrical pieces of wood employed together to constitute in conjunction with the connecting-strip my improved roller of the kind referred to, A being the longer piece and B the shorter piece, for example, although it makes no difference what the relative lengths of the two pieces are. Both of these pieces A and B are slotted at their contiguous ends with longitudinal central slots cut diametrically through the pieces and running from the contiguous ends for a certain desired distance through the roller-sections, the section A having the slot *a*, and the section B having the slot *b*.

In order to connect the two roller-sections A and B together, I employ a Z-shaped metallic connection, preferably made out of a single thin sheet of tin or other suitable material, as shown in Fig. 6. This tin blank is bent into the form shown in Fig. 5, where it is observed that the Z-shaped connection consists of a central part C of proper size to easily accommodate itself within the slots *a* and *b* in the roller-sections A and B, and said central part C having the reversely-bent portions C' C', which are curved sufficiently to enable them to easily overlap and embrace the portions of the periphery of the roller-sections with which they come in contact. The outer edges of the curved portions C' C' of the Z-shaped connection are intumed to form flanges *c c*, which flanges are designed to engage the external peripheral longitudinal grooves *a' a'*, which are cut in the roller-section A, and the grooves *b' b'*, which are cut in the roller-section B.

In assembling together the several parts just described it will be manifest that the Z-shaped connection will be placed with its central portion C within the slots *a* and *b*, its curved portions C' C' overlapping the external surface of the sections A and B, and its



inturned edge flanges *c c* entering the grooves *a'* and *b'*, all as clearly shown in Fig. 1, and that when the parts are in this position the roller-sections A and B may be adjusted to-  
 5 ward or away from each other and the resulting completed roller made of the desired length.

The **Z**-shaped connection is preferably provided with a central slot D, which terminates  
 10 a short distance from each end, and the central portion C of the **Z**-shaped connection is corrugated, as shown, the corrugation being for the purpose of strengthening this part of the connection and making it much stiffer  
 15 than it otherwise would be. When the slots *a* and *b* are cut in the sections A and B, enough material is taken out by the saw cut to give to the sections a certain amount of spring action. Now the corrugated central portion  
 20 of the tin connection is a little thicker than the saw cuts, and when it is introduced thereinto, as shown in Figs. 2 and 4, the result is to spring the wooden pieces outward to a certain extent, and thus the flanges *c c* are held  
 25 more firmly in the slots into which they fit. One end of the **Z**-shaped connection is fastened to the section B by means of pins or tacks *f f*, and the other end, after the adjustment has been effected, can be similarly fastened to the other section A by means of the  
 30 pins or tacks G G. The slot D, which is cut in the tin plate, receives a pin G, (see Figs. 3 and 4,) which is driven through one or the other of the roller-sections A or B, as the case  
 35 may be, and which prevents the rollers from being pulled apart and thus limits the extensibility of the roller.

Various changes in the precise shape, construction, size, and arrangement of the various parts may be made without departing  
 40 from my invention, and I reserve the liberty

of so modifying the construction of the various elements as may more thoroughly adapt them for use in various locations and to meet the exigencies of numerous cases which may  
 45 arise.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An extension-roller, consisting in the combination with the sections having longitudinal, diametrical slots, of the **Z**-shaped metallic connection inserted into said slots, said connection having overlapping reversely-bent curved edges which externally engage the  
 50 sections.

2. An extension-roller, consisting of a pair of sections, and an intermediate **Z**-shaped metallic connecting-strip having a central  
 60 corrugated portion and overlapping curved and flanged parts which engage slots in the external surface of the roller-sections, substantially as described.

3. An extension-roller, consisting of the roller-sections having longitudinal slots, and  
 65 a **Z**-shaped corrugated connection inserted within said slots and having overlapping flanged portions that engage grooves in the roller-sections.

4. An extension-roller, consisting of the  
 70 slotted sections, a **Z**-shaped connection having a central corrugated and slotted portion, and the reversely-bent curved overlapping portions that embrace the external face of the roller-sections, substantially as described.  
 75

In testimony whereof I affix my signature in presence of two witnesses.

ANSEL F. TEMPLE.

Witnesses:

GERTRUDE VOGEL,  
 HARRY M. CARPENTER.