

E. H. DUCHEMIN.  
CURTAIN ROLLER.

APPLICATION FILED JAN. 8, 1903.

NO MODEL.

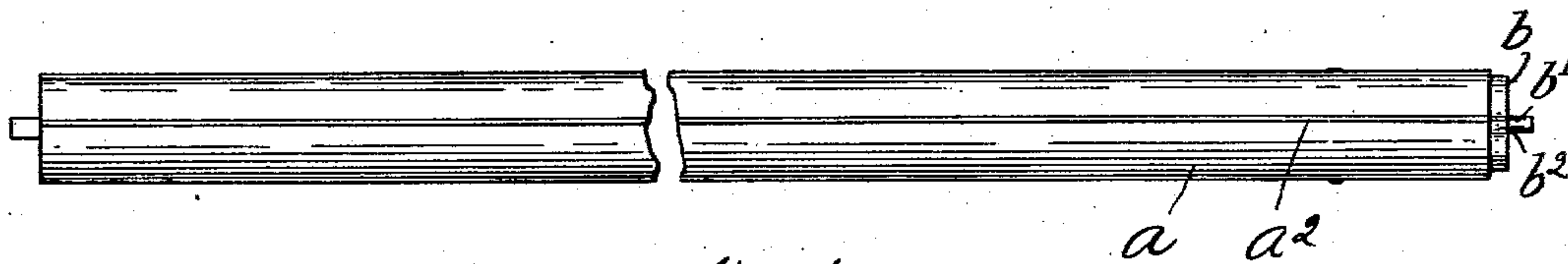


Fig. 1.

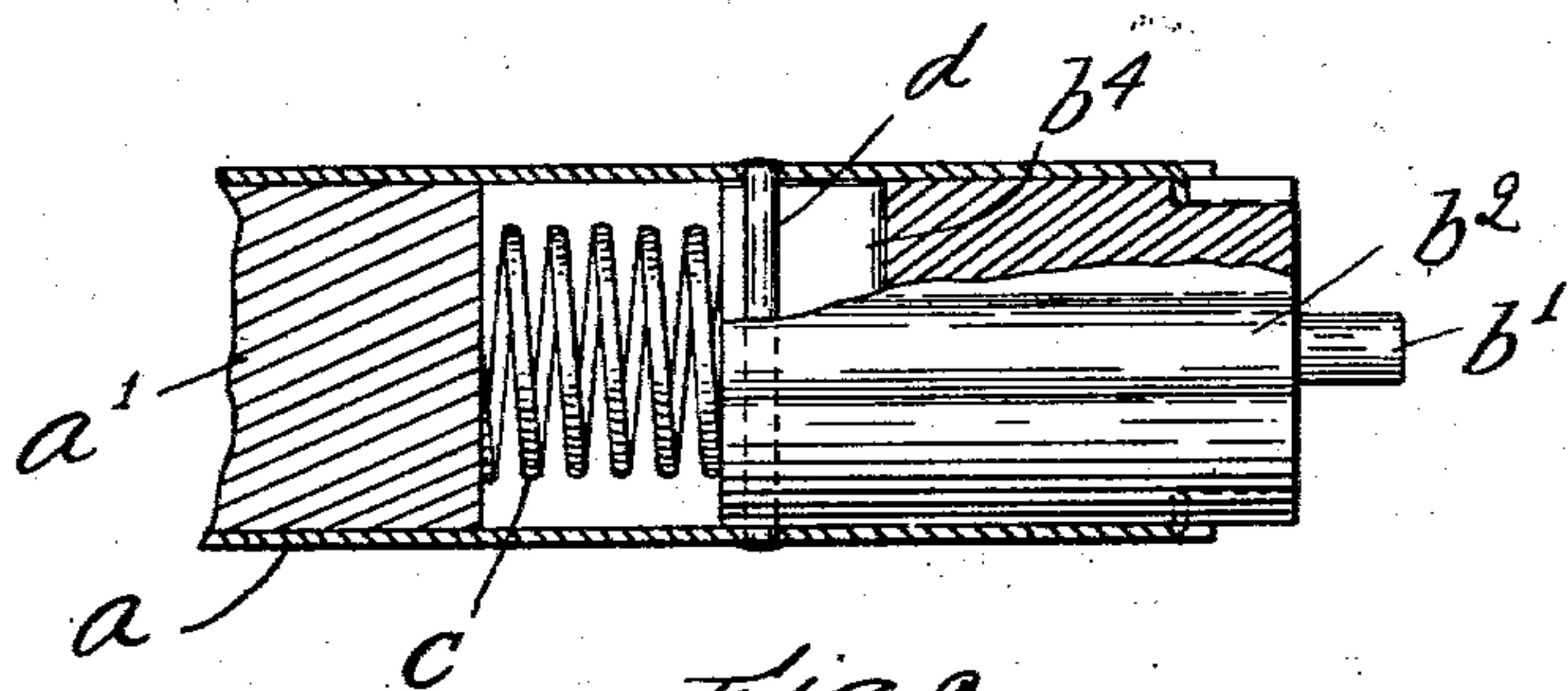


Fig. 2.

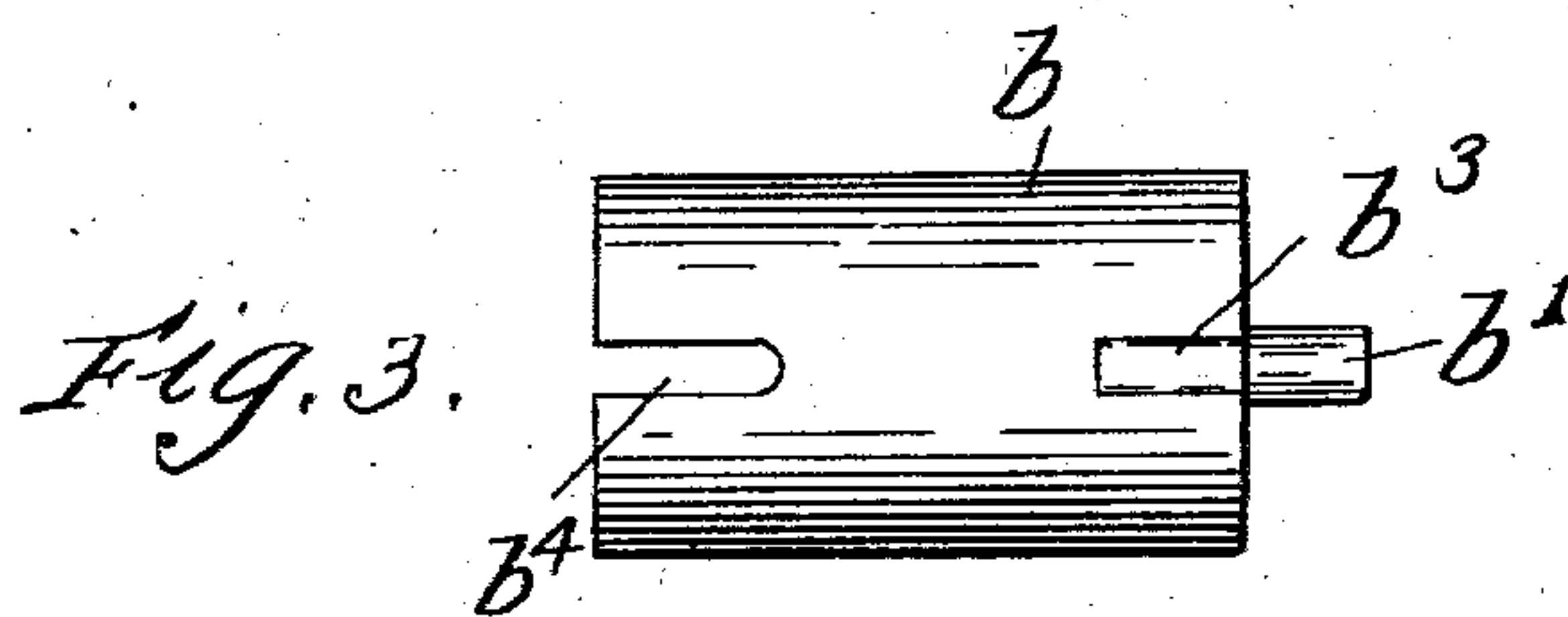


Fig. 3.

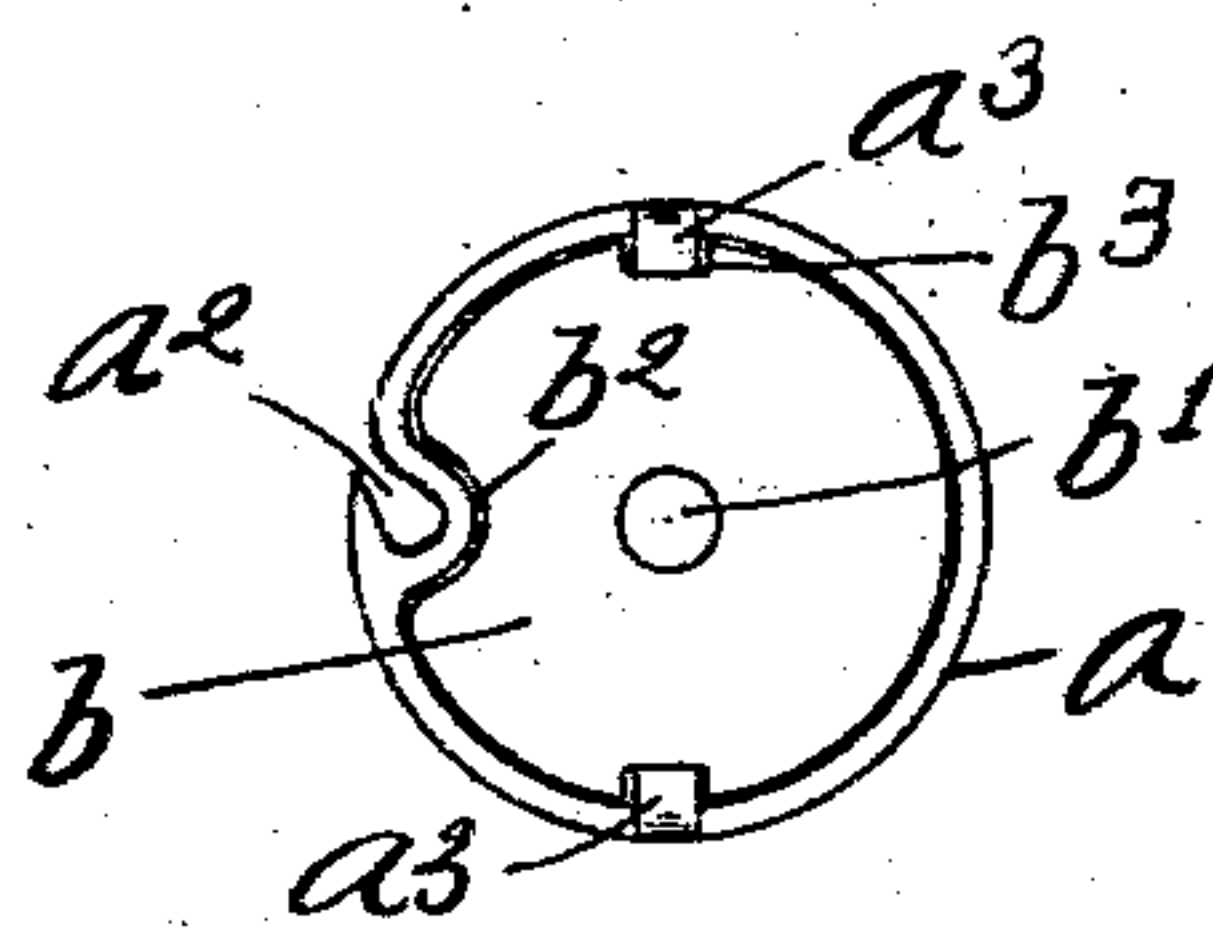


Fig. 4.

Witnesses:

H. B. Davis.

M. M. Piper.

Inventor:

Edmund H. Duchemin

by James H. Kammann  
Atty.



# UNITED STATES PATENT OFFICE.

EDMUND H. DUCHEMIN, OF NEWARK, NEW JERSEY.

## CURTAIN-ROLLER.

SPECIFICATION forming part of Letters Patent No. 730,444, dated June 9, 1903.

Application filed January 8, 1903. Serial No. 138,183. (No model.)

*To all whom it may concern:*

Be it known that I, EDMUND H. DUCHEMIN, of Newark, county of Essex, State of New Jersey, have invented an Improvement in Curtain-Rollers, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to curtain-rollers, and has for its object to provide a yieldingly-supported journal at one end of the roller of improved construction adapted to be pressed inward when the roller is applied to or removed from its bearing to thereby facilitate such operation and also to obviate the necessity of providing bearing-plates for the journals of the roller of a special form or construction, such as having slots or passages for the introduction and removal of the journals.

Curtain-rollers embodying my invention are especially adapted for use on street-cars, as there is no danger of the roller leaving its bearings, whereas if bearing-plates having slots or passages were provided for the journals of the roller when the car tips the roller has a tendency to fall out.

Figure 1 shows in elevation a curtain-roller having a yieldingly-supported journal at one end embodying this invention. Fig. 2 is an enlarged detail showing said yieldingly-supported journal. Fig. 3 is an enlarged detail of the block bearing the journal, and Fig. 4 is an end view of the curtain-roller.

The roller is or may be of any well-known or suitable construction, but is herein shown as comprising a tubular casing  $a$ , containing a cylindrical core  $a'$ . At one end of the roller the core  $a'$  terminates a short distance within the casing to thereby form a socket. A cylindrical block  $b$  is contained in said socket, which is provided at its outer end with a journal  $b'$ . This cylindrical block is movable in and out in the socket of the tubular casing. A spiral spring  $c$  is interposed between the end of the core  $a'$  and the inner end of the block  $b$ , which acts to thrust said block  $b$  outward. The block  $b$  has a longitudinal groove  $b^2$  extending its entire length,

which receives the usual rib  $a^2$  on the tubular casing and serves to guide the block  $b$ . The block  $b$  has at opposite sides of its outer end two short grooves  $b^3$ , which receive inwardly-turned ears  $a^3$ , projecting from the tubular casing, said ears abutting against the ends of the grooves when the block is thrust outward to thereby limit the outward movement of the block. The inner end of the block has a diametrically-disposed groove  $b^4$ , which receives a pin  $d$ , attached to and passing diametrically through the tubular casing, said pin serving as a stop which limits the inward movement of the block.

When the roller is applied to or removed from its bearing, the end block  $b$  will be thrust inward against the spiral spring  $c$ , which allows the opposite end journal to enter or be removed from its bearing.

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

1. A curtain-roller having a cylindrical socket at one end, a block contained in said socket having a journal, a spring interposed between the block and the bottom of the socket, grooves in the sides of said block, at its outer end, and inwardly-projecting ears on the roller which enter said grooves, substantially as described.

2. A curtain-roller having a cylindrical socket at one end, a block contained in said socket having a journal, a spring interposed between the block and the bottom of the socket, grooves in the sides of said block, at its outer end, and inwardly-projecting ears on the roller which enter said grooves, and a diametrically-disposed groove in the inner end of the block, and a pin attached to the roller which enters said groove, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDMUND H. DUCHEMIN.

Witnesses:

FREDK. JAY,  
ALONZO E. NUTTER.