

(No Model.)

A. C. WINN.  
CURTAIN ROLLER.

No. 302,368.

Patented July 22, 1884.

Fig:1.

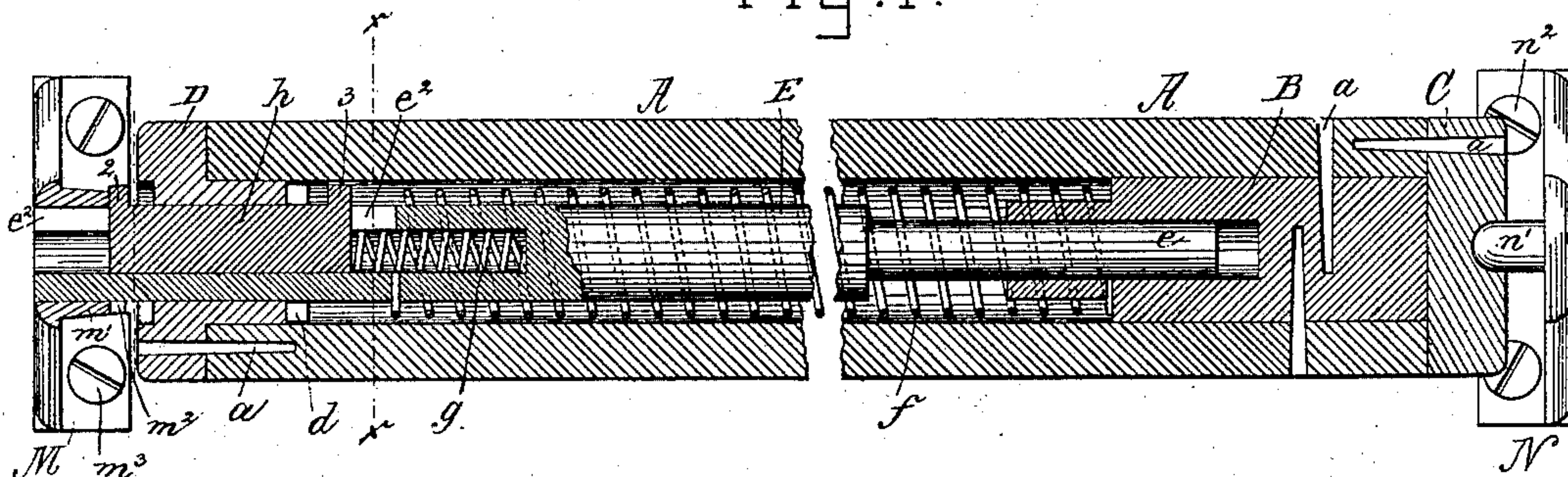


Fig:2.

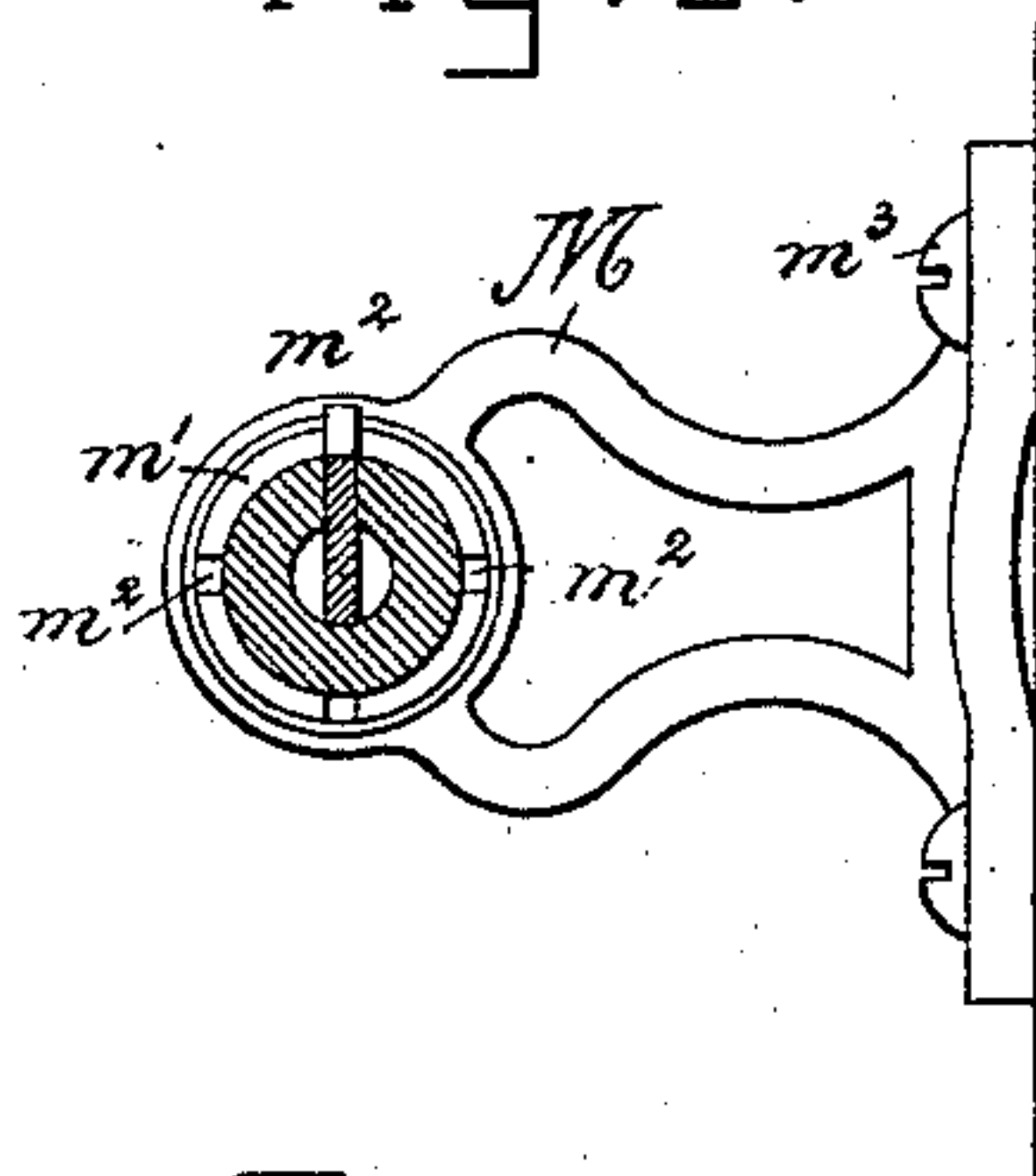


Fig:3.

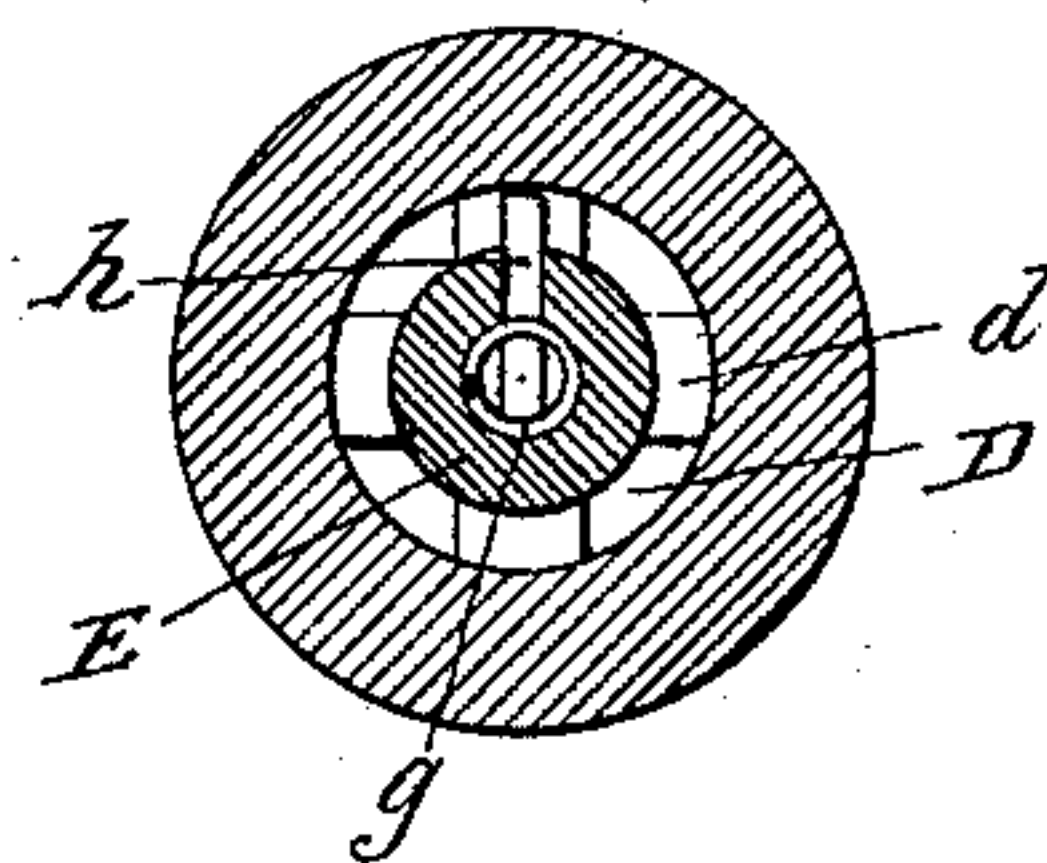
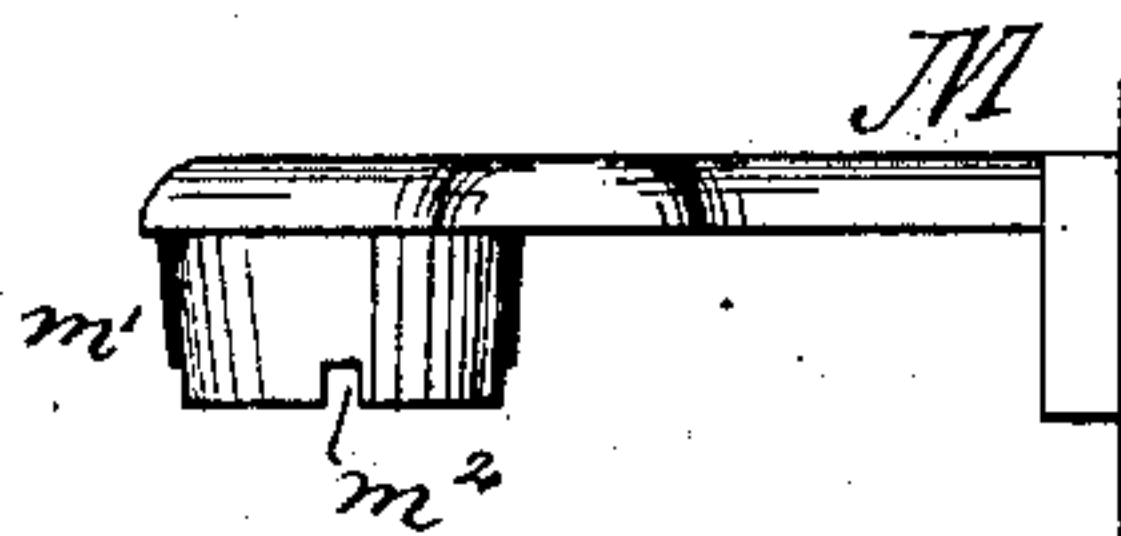


Fig 4



Witnesses.

*Arthur Lippert.*  
*Henry Marsh.*

Inventor.

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*by Crosby & Gregory Attys.*



# UNITED STATES PATENT OFFICE.

ALBY C. WINN, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO  
WILLIAM E. PAYNE, OF SAME PLACE.

## CURTAIN-ROLLER.

SPECIFICATION forming part of Letters Patent No. 302,368, dated July 22, 1884.

Application filed May 12, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, ALBY C. WINN, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Curtain-Rollers, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention is an improvement on that class of rollers wherein a spring acts to turn the roller in the direction to wind the curtain when the weight of the counter-balance on the curtain is lifted, and has for its object to provide simple and efficient means to effect the engagement of the spring-holding shaft of the roller with the bracket at one end of the roller, the connecting slide or plate and the bracket engaged by it being so constructed and operated as to keep the circular end of the roller pressed upon the pivot or center point of the bracket at that opposite end of the roller. The connecting slide or plate has been provided with a lug at both ends, whereby the said slide not only restrains the rotation of the spring-holding shaft, but also, when the roller is removed from its bracket, serves as a lock for the spring-holding shaft, as will be described.

Figure 1 is a longitudinal section of a curtain-roller embodying my invention, the same being in operative position between the brackets. Fig. 2 is an inside view of the notched bracket; Fig. 3, a section of the curtain-roller in the line  $x x$ , Fig. 1; and Fig. 4, a plan view of one side of the notched bracket.

The wooden shell A has fastened to it by suitable brads or nails, as at  $a$ , the core B, the head C, having a central depression, (see right of Fig. 1,) and the sleeved head D, provided at its inner end with the projections  $d d$ . The core B receives one end,  $e$ , of the spring-holding shaft E, which, in accordance with my invention, may be composed of wood, the outer end of the said shaft being extended through the sleeved head and entering the socket-piece or tubular projection  $m'$  of the bracket M, the said outer end itself serving as the end journal for the curtain-roller, and resting in the bracket as the shell and sleeved head D are rotated on the shaft. The shaft E is slotted at  $e^2$

for the reception of the slide or plate  $h$ —a thin flat metal plate provided at its opposite ends with dogs 2 and 3. The inner end of the spring  $f$  is connected with the core or shell, and its outer end with the shaft E, and when the shaft has been turned to wind up the spring sufficiently to enable it to perform the duty required of it the dog 3 of the slide  $h$ , under the action of the spring  $g$ , placed in a central opening in the shaft E, engages one of the projections  $d$  of the sleeved head D, and retains the said spring in wound-up condition. The bracket M (a novel one) has at one side of it the tubular projection  $m'$ , having radial notches  $m^2$  at its end, into which enters the dog 2 at the outer end of the slide or plate  $h$ .

When the curtain-roller, with the spring wound, is to be put up for use, the seat at the center of the head C is placed upon the pin or center  $n'$  of the bracket N, and the shaft E is pushed into the shell until its outer end is opposite the tubular portion  $m'$  of the bracket M, when the spring  $f$  is permitted to move the outer end of the said shaft into the said tubular portion of the bracket, as represented in Fig. 1, and at the same time the dog 2 at the outer end of the slide or plate  $h$  is permitted to enter one of the notches  $m^2$  of the tubular projection  $m'$ . The slide  $h$ , acted upon by the spring  $g$ , has its outer end or dog, 2, pressed into the notch  $m^2$  and against the base of the same with sufficient force to cause the central seat of the head C to be kept closely and snugly upon or in such relation to the pivot or pin  $n'$  as to avoid end-play of the shell, to which the curtain (not shown) is attached in any usual manner. The arrest of the slide or plate  $h$ , as described, by the notched part of the bracket when the hollow outer end of the shaft E is sliding into the said tubular projection  $m'$  causes the dog 3 at the rear end of the said slide-plate to be moved out from engagement with the projection  $d$ , which held it when the end of the shaft was pressed back to enable it to enter the bracket M, as described, the inward sliding of the plate  $h$  compressing the spring  $g$ , and effecting the disengagement of the dog 3 from the projection  $d$ , thus leaving the shell of the roller and the spring  $f$  in operative position. The shaft E cannot rotate so long as the



dog 2 of the plate engages one of the notches  $m^2$ ; but the shell A is free to rotate on the said shaft.

The curtain (not shown) will be provided at its lower end with a bar of sufficient weight to enable the curtain to be kept in any position in which it may be left by the hand of the person moving the same.

I claim—

1. The shell, head C, head D, provided with projections, the spring  $f$ , and the grooved spring-holding shaft extended beyond the end of the head D to form one of the journals of the roller, combined with the sliding plate provided with the dog 3, and with a spring,  $g$ , to operate substantially as described.

2. The shell, its head C, notched head D, spring  $f$ , loosely-held spring-holding shaft, sliding plate provided with dogs 2 3 at its op-

posite ends, and a spring,  $g$ , to act upon the said plate, combined with the bracket N to support the head C, and the bracket M, provided with a notched tubular projection to receive the end of the spring-holding shaft and the dog 2 at the end of the plate  $h$ , the said spring to operate substantially as described.

3. The bracket M, provided with the tubular extension having radial notches at its end, substantially as described.

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

ALBY C. WINN.

Witnesses:

G. W. GREGORY,  
B. J. NOYES.