

No. 622,968.

Patented Apr. 11, 1899.

H. W. MOWER.  
SHADE ROLLER ATTACHMENT.

(Application filed Nov. 19, 1898.)

(No Model.)

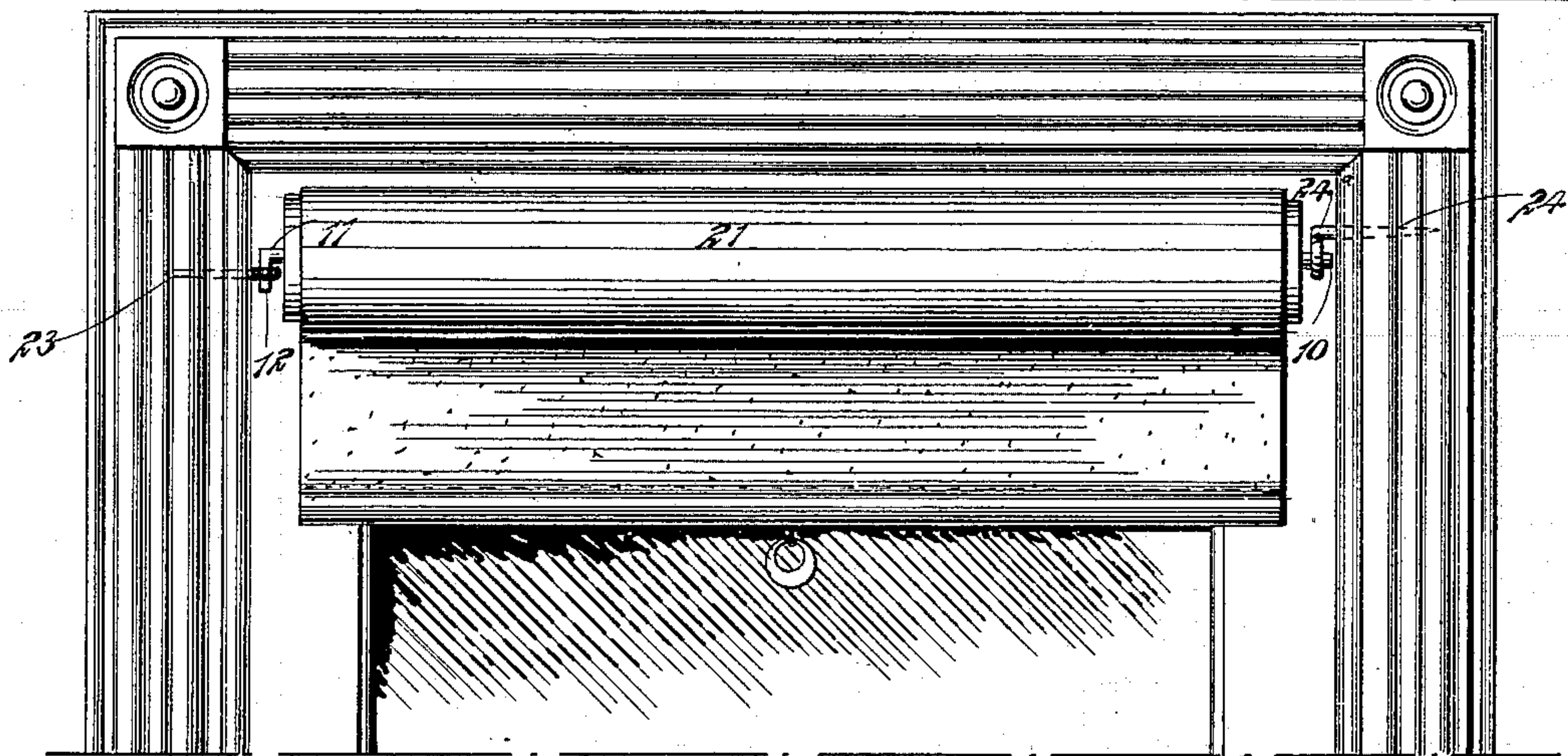


Fig. 1

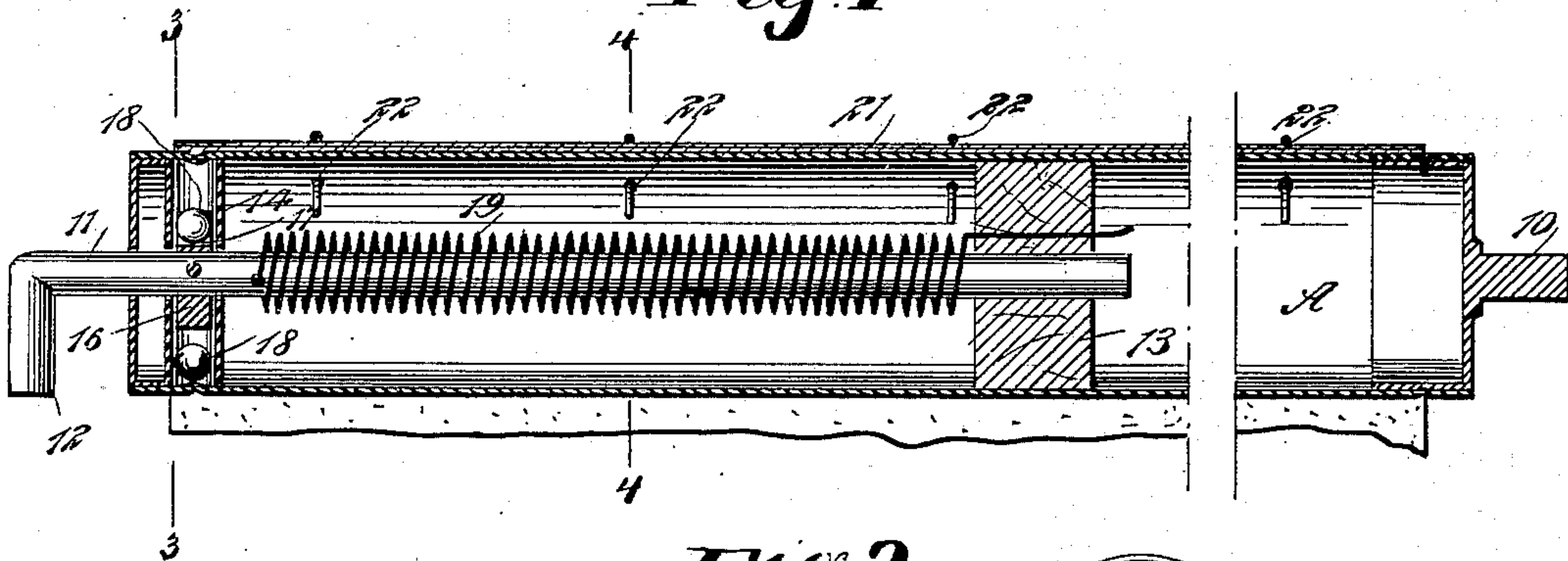


Fig. 2

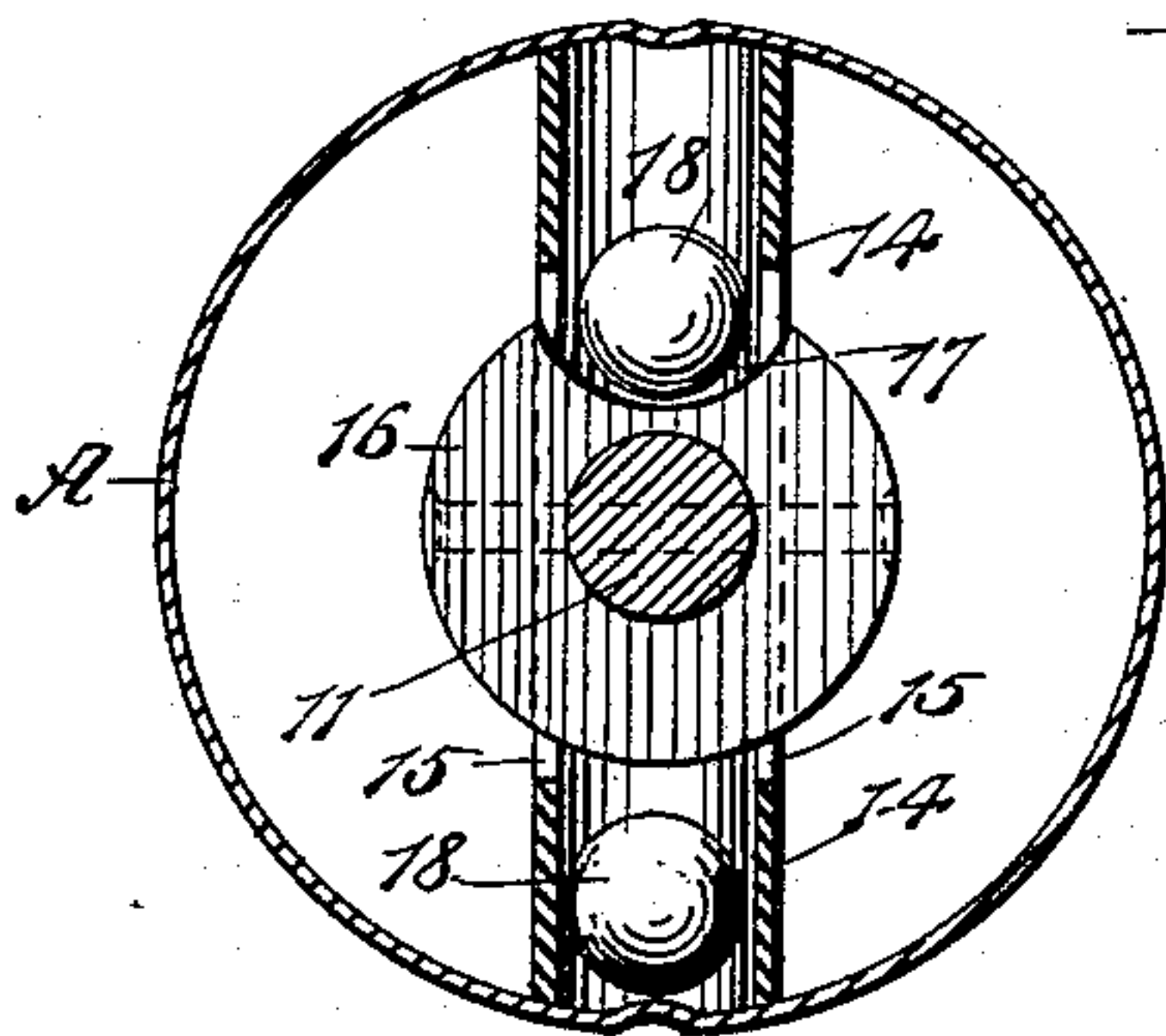


Fig. 3

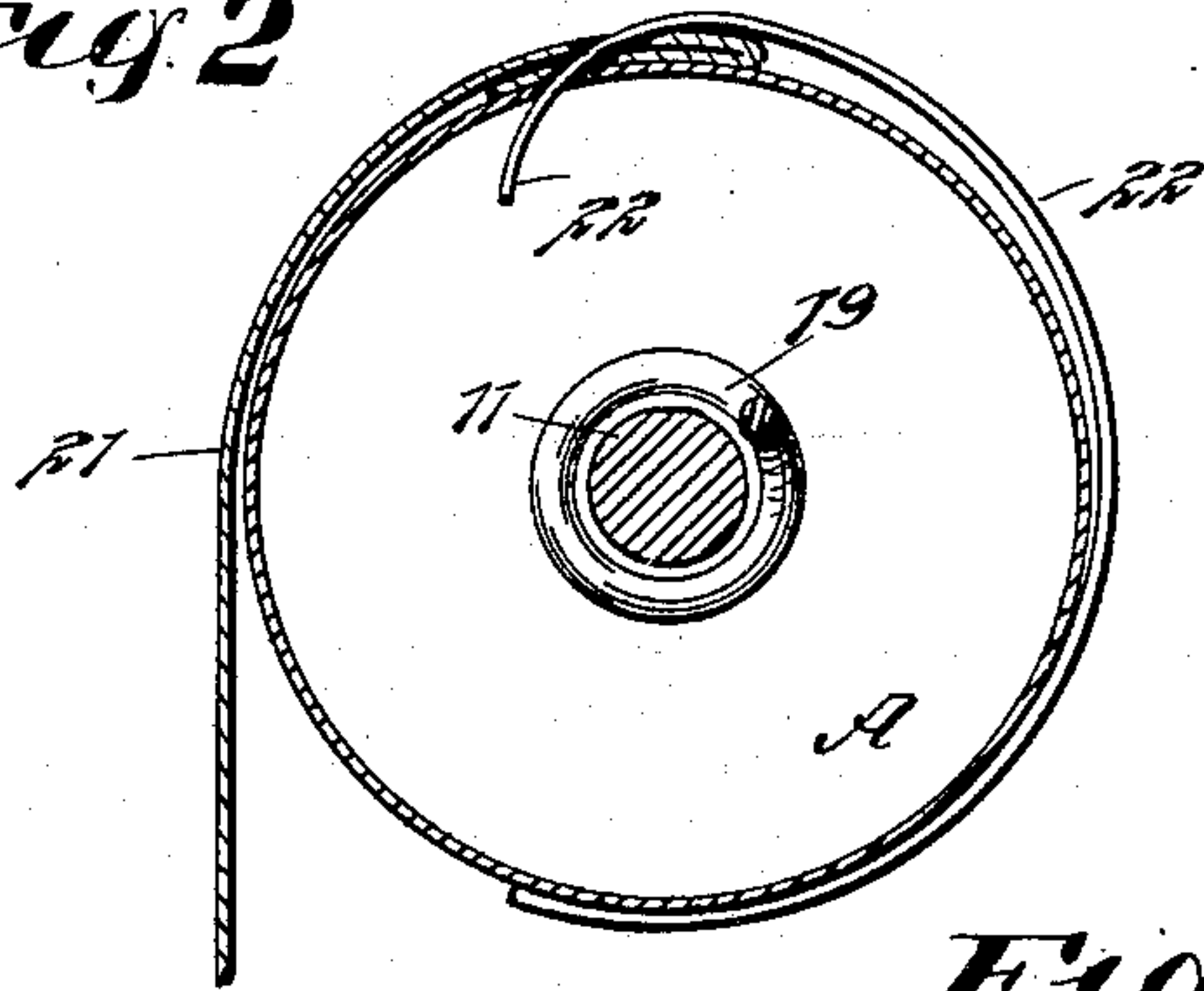
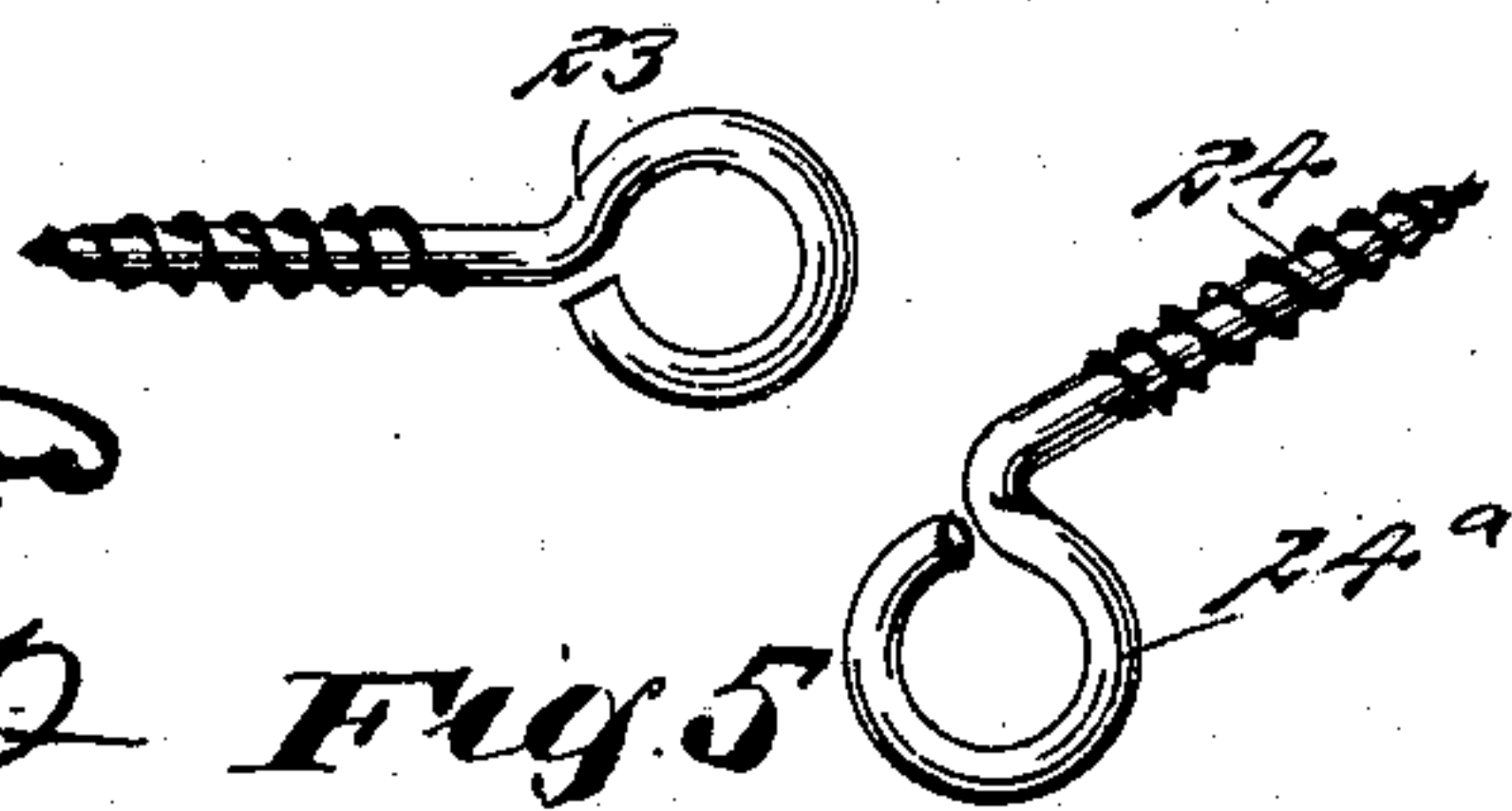


Fig. 4

WITNESSES:

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Fig. 5



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# UNITED STATES PATENT OFFICE.

HERBERT W. MOWER, OF NEWARK, NEW JERSEY.

## SHADE-ROLLER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 622,968, dated April 11, 1899.

Application filed November 19, 1898. Serial No. 696,897. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT W. MOWER, of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Shade-Roller Attachment, of which the following is a full, clear, and exact description.

The object of my invention is to provide a simple, durable, and economic form of a shade-roller capable of being made of metal, and, furthermore, to so construct the shade-roller that it may be expeditiously and conveniently hung either from the upper portion of a window-frame or from the sides.

Another object of the invention is to provide a means whereby the roller may be attached to window-frames of varying width and also to provide a brake for the spring-controlled trunnion that will be positive in action and simple in construction.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the upper portion of a window-frame, illustrating the improved shade-roller hung therein. Fig. 2 is a longitudinal section through the improved shade-roller. Fig. 3 is a transverse section taken substantially on the line 3 3 of Fig. 2. Fig. 4 is a transverse section taken substantially on the line 4 4 of Fig. 2, and Fig. 5 represents perspective views of brackets for hanging the improved roller.

The roller A is tubular and is constructed, preferably, of metal, being provided at one end with a fixed or integral trunnion 10, while at the opposite end of the roller a tension-controlled trunnion 11 is located, the outer end of the tension-controlled trunnion being bent at an angle to the body of the trunnion to produce a pendent bearing 12.

A block 13 is secured in the roller at a predetermined point near the end at which the tension-controlled trunnion is placed, the inner end of the said trunnion being made to pass through the said block 13, as shown in Fig. 2, and at a point quite close to the end

of the roller through which the tension-controlled trunnion passes a tube 14 is placed, extending from side to side of the roller, and the said tube is preferably held in place by indenting the outer surface of the roller, so that a portion of the roller will extend into the tube, as shown in Figs. 2 and 3. The transverse tube 14 is provided with opposing longitudinal slots 15 in order to accommodate a disk 16, which disk is attached firmly to the tension-controlled trunnion 11, which trunnion passes through the transverse tube 14. The disk 16 is provided with a concavity or recess 17 in its periphery, and the said concavity or recess is adapted to receive balls 18, one of which is located in each end portion of the transverse tube 14, as is illustrated in Fig. 3. When a ball 18 enters the recess 17 of the disk 16, the disk is prevented from turning until the ball is dislodged. A spring 19 is coiled around the trunnion 11 within the roller, being secured at one of its ends to the said trunnion and at its opposite end to the block 13, as is clearly shown in Fig. 2.

A shade 21 is preferably secured to the roller through the medium of springs 22, and these springs are passed at one end through apertures in the shade and through corresponding apertures in the shade-roller, the other end of the spring engaging with the outer peripheral surface of the roller, as shown in Fig. 2.

The hangers for the improved shade-rollers are best shown in Fig. 5. Both of said hangers are preferably screw-eyes, the eye of one of the hangers 23 being in longitudinal alinement with the screw-shank; but the eye 24<sup>a</sup> of the other hanger 24 is at a right angle to the screw-shank. The hangers 23 and 24 enable a shade to be hung from the upper portion of a window-frame or from the sides and also enable a roller to be fitted to a window-frame in which an ordinary roller of the same length could not be properly hung. The pendent bearing 12 of the tension-controlled trunnion 11 of the shade-roller is passed through the eye of the hanger 23, while the fixed trunnion 10 of the roller is made to enter the pendent eye of the opposing hanger 24.

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



1. The combination with a shade-roller provided with a fixed trunnion at one end and a spring-controlled trunnion at the opposite end, of a transversely-extending tube in the roller near the end thereof and provided with opposite longitudinal slots at its center through which the spring-controlled trunnion passes, a disk secured to the spring-controlled trunnion and provided with a recess in its periphery, said disk being of a greater diameter than the tube and projecting through the slots thereof and a ball in each end portion of the tube, substantially as described.

2. A shade-roller, comprising a metal roller having a fixed trunnion at one end and a spring-controlled trunnion at the other end, a tube in the end of the roller having the spring-controlled trunnion and provided with opposite longitudinal slots at its center, said tube extending from side to side of the roller and into the ends of which a portion of the metal of the roller extends, a disk secured to the said spring-controlled trunnion and provided with a recess in its periphery, said disk

being of a greater diameter than the tube and projecting through the slots thereof, and a ball in each portion of the tube, substantially as described.

3. A shade-roller, comprising a metal roller having a fixed trunnion at one end and a spring-controlled trunnion at the other end, said spring-controlled trunnion having its end bent at right angles to its body, a transverse tube secured in one end of the roller by indenting a portion of the metal of the roller into the ends of the tube, said tube being provided with opposite longitudinal slots at its center, a disk secured to the spring-controlled trunnion and provided with a recess in its periphery, said disk being of greater diameter than the tube and projecting through the slots thereof, and a ball in each portion of the tube, substantially as described.

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Witnesses:

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