

No. 756,238.

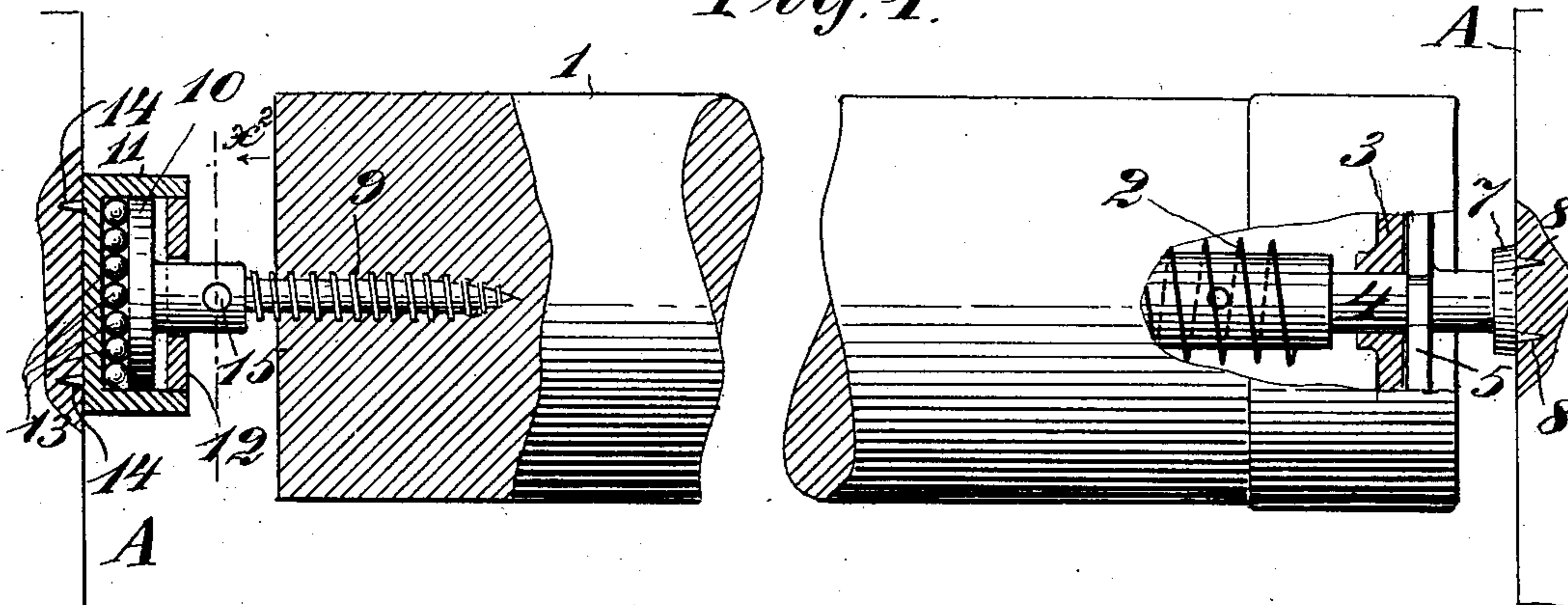
PATENTED APR. 5, 1904.

B. F. JACKSON.  
SHADE ROLLER.

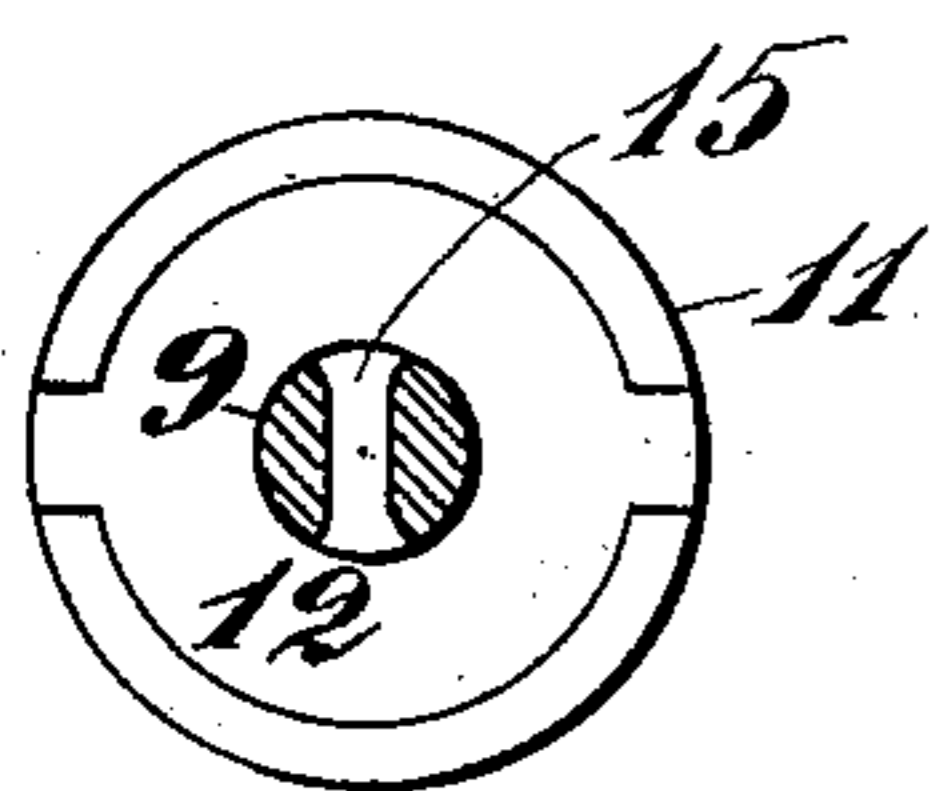
APPLICATION FILED JUNE 17, 1903.

NO MODEL.

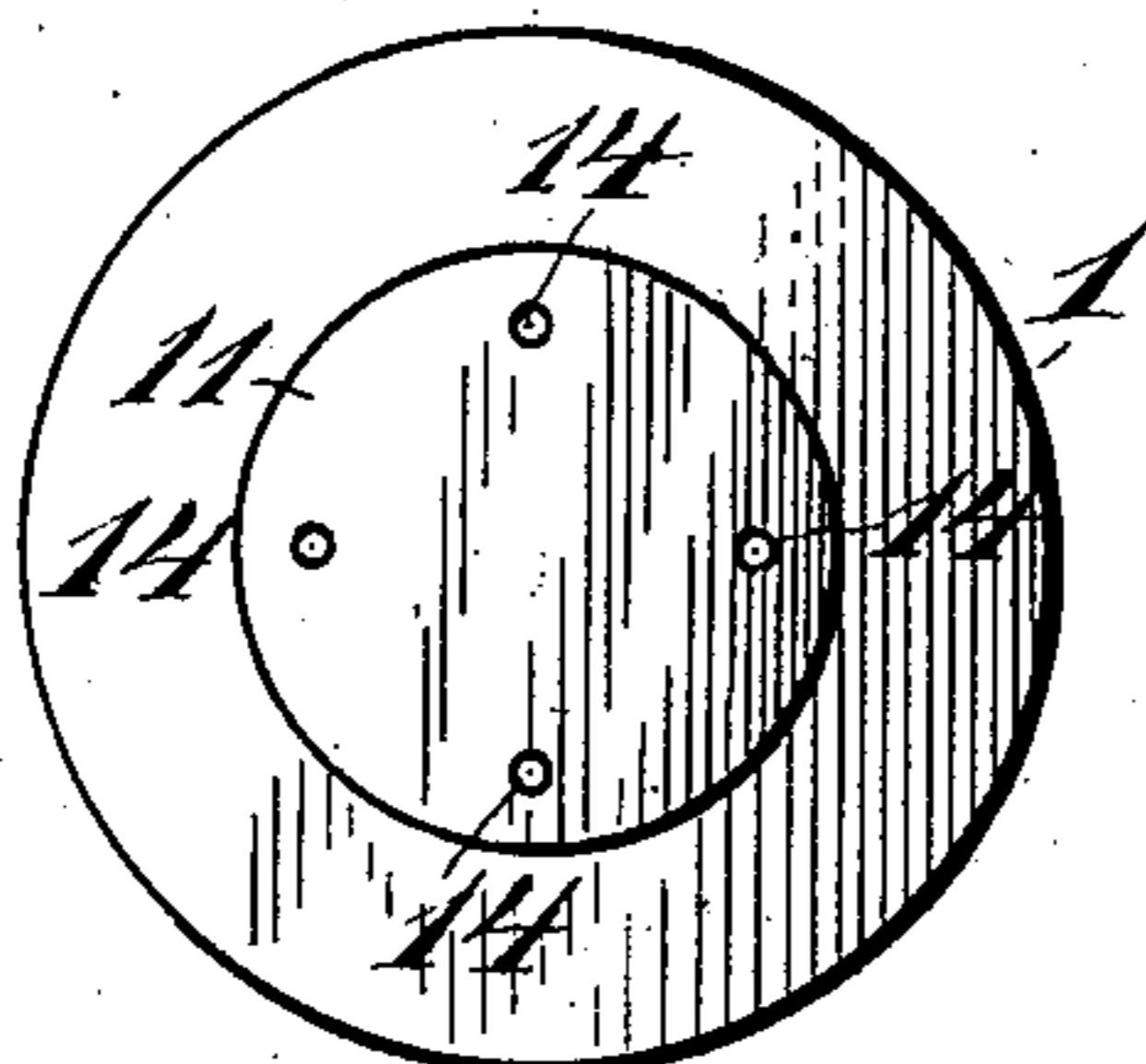
*Fig. 1.*



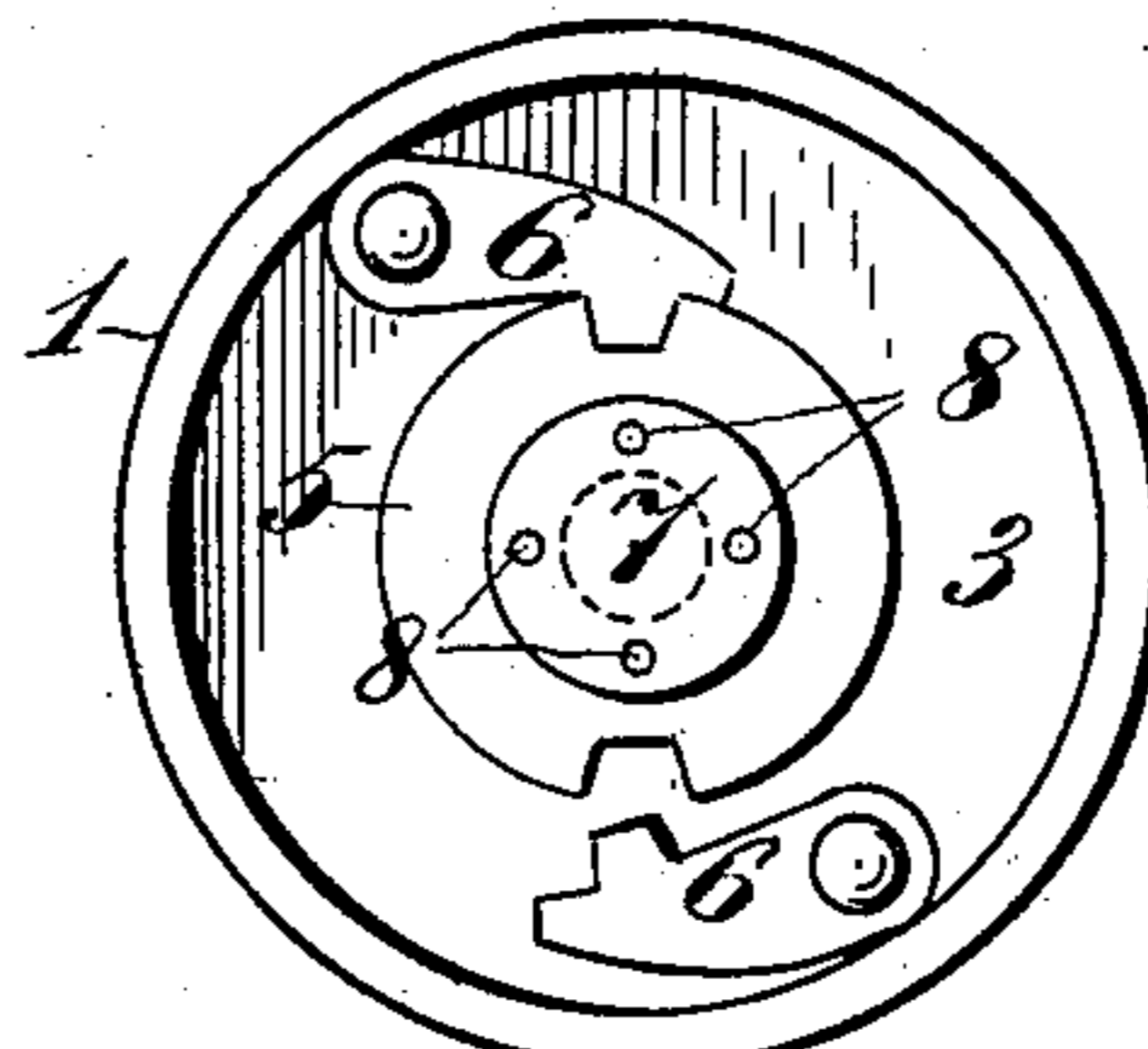
*Fig. 2.*



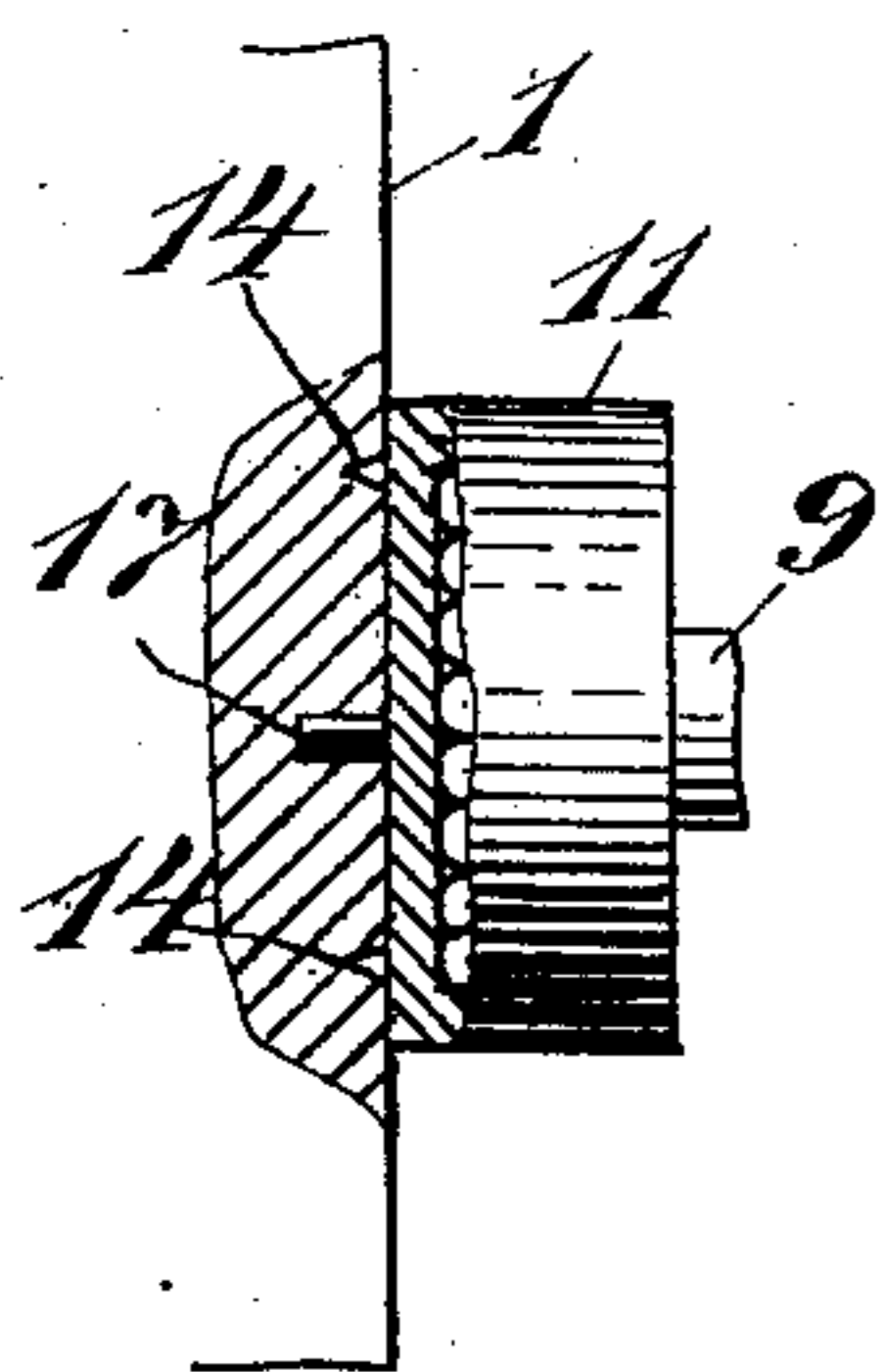
*Fig. 3.*



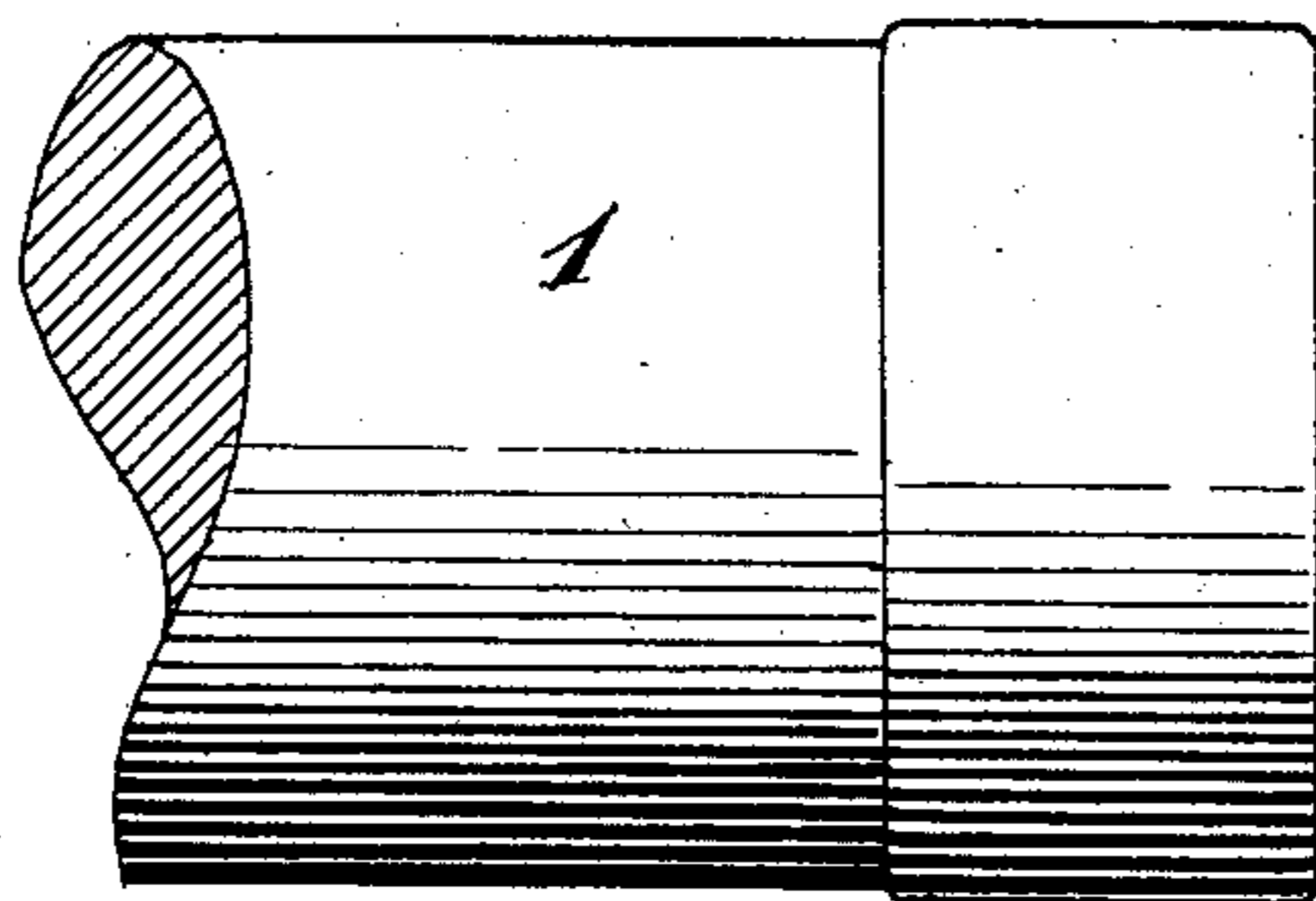
*Fig. 4.*



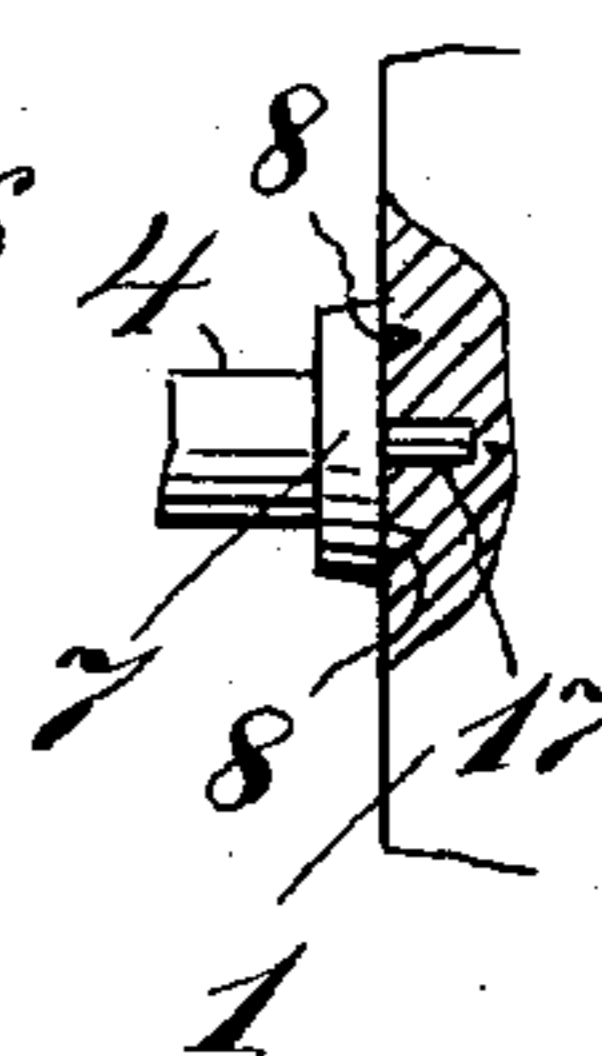
*Fig. 6.*



*Fig. 5.*



*Fig. 7.*



WITNESSES:

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INVENTOR

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# UNITED STATES PATENT OFFICE.

BESSIE F. JACKSON, OF NEW YORK, N. Y.

## SHADE-ROLLER.

SPECIFICATION forming part of Letters Patent No. 756,238, dated April 5, 1904.

Application filed June 17, 1903. Serial No. 161,807. (No model.)

*To all whom it may concern:*

Be it known that I, BESSIE F. JACKSON, a citizen of the United States, residing in the borough of Brooklyn, in the county of Kings and city and State of New York, have invented certain new and useful Improvements in Shade-Rollers, of which the following is a specification.

This invention relates to rollers for window-shades, and is especially adapted to the class of spring-rollers commonly known as the "Hartshorn." Such shade-rollers are commonly mounted in brackets, which are secured to the respective faces of the window-casings and are known as "inside" brackets; and the object of the present invention is to provide a construction whereby such extraneous brackets are unnecessary and may consequently be dispensed with, the shade-roller carrying with it all of the devices necessary to mounting it on the window-casing.

In the accompanying drawings, which illustrate an embodiment of the invention, Figure 1 is a side elevation of a shade-roller embodying the invention. In this view the middle portion of the roller is broken away as unnecessary for illustration, and some other parts are broken away the better to illustrate the construction. Fig. 2 is a cross-section at  $x^2$  in Fig. 1 looking toward the left. Fig. 3 is an end view of the left-hand end of the roller, as seen in Fig. 1. Fig. 4 is an end view of the right-hand end of the roller, as seen in Fig. 1. Fig. 5 illustrates a slight modification. Figs. 6 and 7 illustrate centering means for the roller.

In this class of shade-rollers one end of the roller is provided with a journal which rotates with the roller, turning in some form of bearing on the window-frame, and the other end of the roller has a spindle which is non-rotative, the spindle being secured to the roller-spring and fixed in some way to the window-frame and the roller turning about or on it.

A A designate in Fig. 1 the casings of the window, on which or between the faces of which the shade-roller is to be mounted.

1 is an ordinary shade-roller, which may be of wood or any other suitable material, and 2 is its spring. (Seen at the right in Fig.

1, where the roller 1 is partly broken away.) 3 is the end plate of the roller, and 4 is the spindle rotative in said end plate. On this spindle is the ratchet-disk 5, to be engaged by pawls 6. (Seen best in Fig. 4.) These features so far as described are common to the ordinary spring shade-roller; but in the present construction the spindle 4 is not so constructed as to rest in a bracket, as in the common shade-roller, but has means whereby it may be secured non-rotatively in the wood of the window-casing A. In Figs. 1 and 4 this securing means comprises a disk 7, having spurs 8, which sink into the wood of the casing, as indicated in Fig. 1, and not only support that end of the shade-roller, but hold the spindle 4 against rotation. At its other or journal end (seen at the left in Fig. 1) the roller 1 has a screw-journal 9, adapted to be driven more or less deeply into the end of the roller 1. This journal has a circular or disk-like head 10, which is rotative in a circular box 11, the closing-cover 12 of which has an aperture in which the journal turns. Within the box 11 and between its bottom or outer end are incarcerated ordinary metal balls 13 to form a ball-bearing, and on the outer face of this head of the box are spurs 14 (seen in Figs. 1 and 3) to sink into the wood of the window-casing and support this end of the shade-roller.

To put up a shade-roller of this character, the roller 1 is cut off at its left-hand end (in Fig. 1) in the usual way to the proper length and the journal 9 screwed into this end a little farther than is proper for a fit. This is to allow the spurs at the ends of the roller to pass in between the window-casings. The roller is now placed in position and the journal 9 unscrewed, so as to lengthen the roller and drive in the spurs at its ends. This brings the head 10 on the journal into full bearing on the balls 13 in the box. This is all that is required for setting the shade-roller in place, and it may be taken down by the reverse operation—namely, unscrewing the screw-journal 9 until the spurs become disengaged.

As a convenient means of rotating the journal 9 for driving it in or withdrawing it, the shank thereof is provided with a transverse

hole 15 to receive a pin for rotating it. However, the invention is not restricted to this particular means for rotating the journal. Any means may be employed. Nor is the invention restricted to the particular number of spurs 8 and 14 that may be employed. Indeed, any device for taking into the wood to support the roller and prevent rotation of the part may be used. In Fig. 5, for example, the plate 7 and spurs 8 are omitted from the spindle 4 and the end of the spindle flattened and made sharp, as seen at 16, to enter the wood.

It will be understood that I do not broadly claim an extensible shade-roller mounted directly in the wood of the window-casing. The distinctive feature of my construction is that the journal of the roller that rotates with the latter rotates in a special ball-bearing box which is fixed to the wood, and the journal does not rotate in the wood. The balls 13 are of course for antifriction purposes, and their number or special arrangement are not material.

It may be convenient for placing and replacing the shade-roller to provide the box 11 and disk 7 each with a central stud 17 a little longer than the spurs to enter a socket made with an awl in the wood of the casing.

Having thus described my invention, I claim—

1. A shade-roller, having a journal which screws into its end and is provided with a disk-like head, a box which incloses said head and is provided exteriorly with projections to enter the wood of the window-casing, and balls in the box upon which the head on the spindle bears.

2. A shade-roller, having at one end a screw-journal provided with a disk-like head, a box which incloses said head and has exteriorly-disposed projections to enter the wood of the window-casing, balls in said box for the head of the journal to bear on, and a spindle, at the opposite end of the roller from said journal, said spindle having an enlargement at its end provided with a plurality of spurs to enter the wood of the window-casing.

3. A shade-roller, provided at its end with a screw-journal 9, having a disk-like head 10, a circular box 11, inclosing said head, said box having a closing-cover 12 with an aperture for the passage of the journal, and spurs 14, and balls 13 incarcerated between the outer end of the box and the head 10 of the journal, substantially as set forth.

In witness whereof I have hereunto signed my name, this 10th day of June, 1903, in the presence of two subscribing witnesses.

BESSIE F. JACKSON.

Witnesses:

EVA H. SIMPSON,  
TH. S. BECKETT.