

No. 854,878.

PATENTED MAY 28, 1907.

J. DUDLEY.  
WINDOW SHADE ROLLER.  
APPLICATION FILED APR. 9, 1906.

Fig. 1.

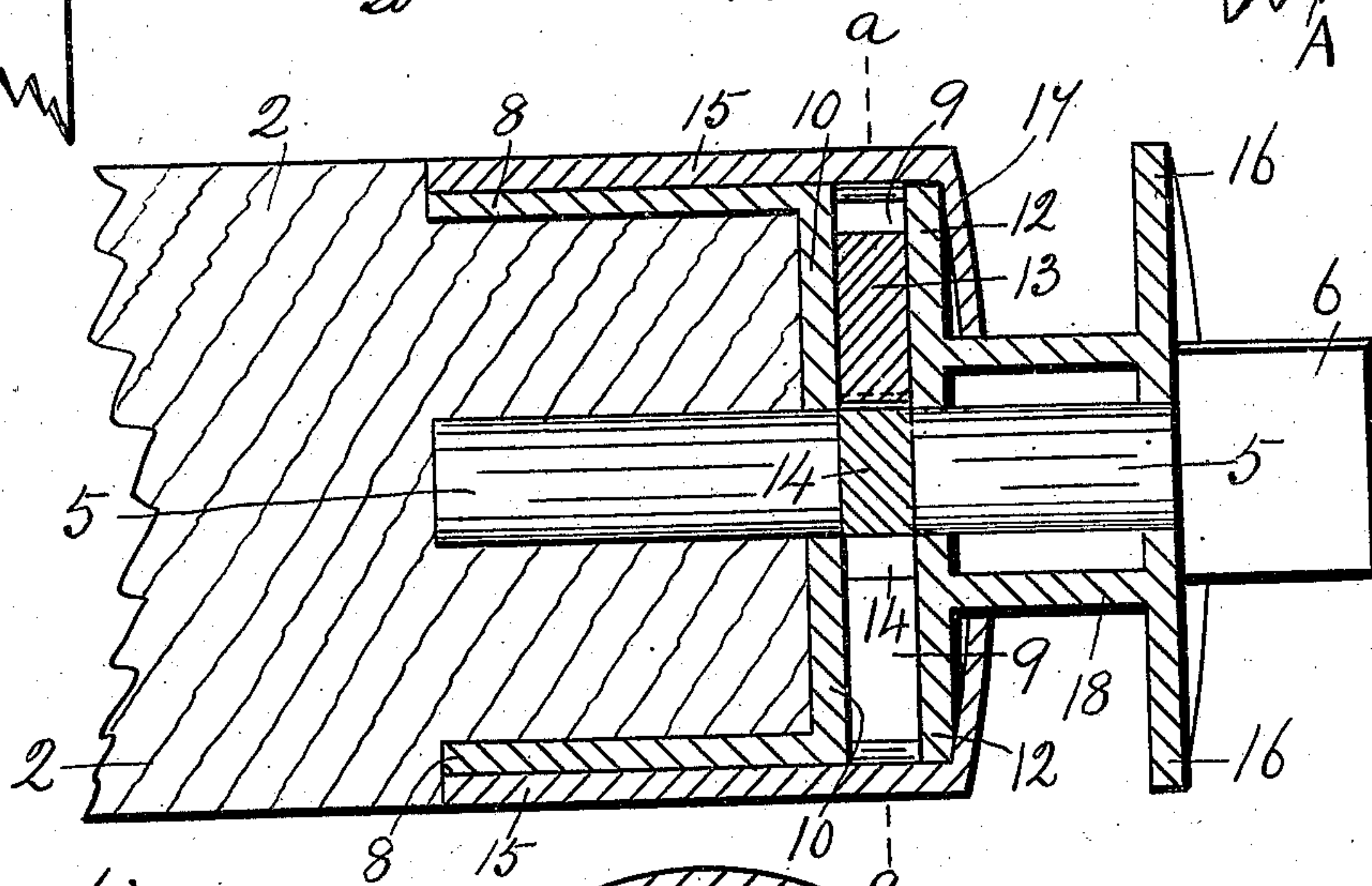
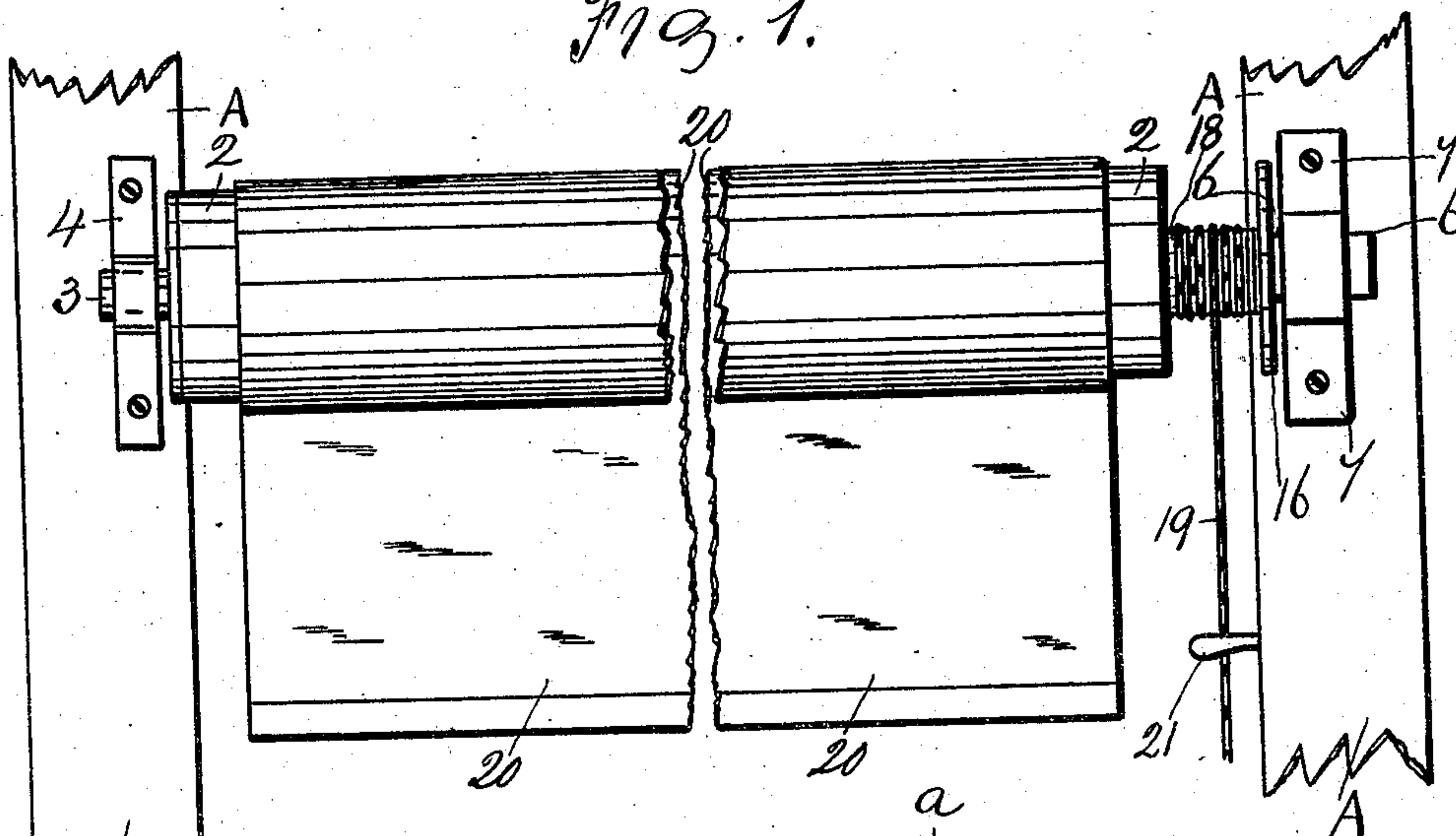


Fig. 2.

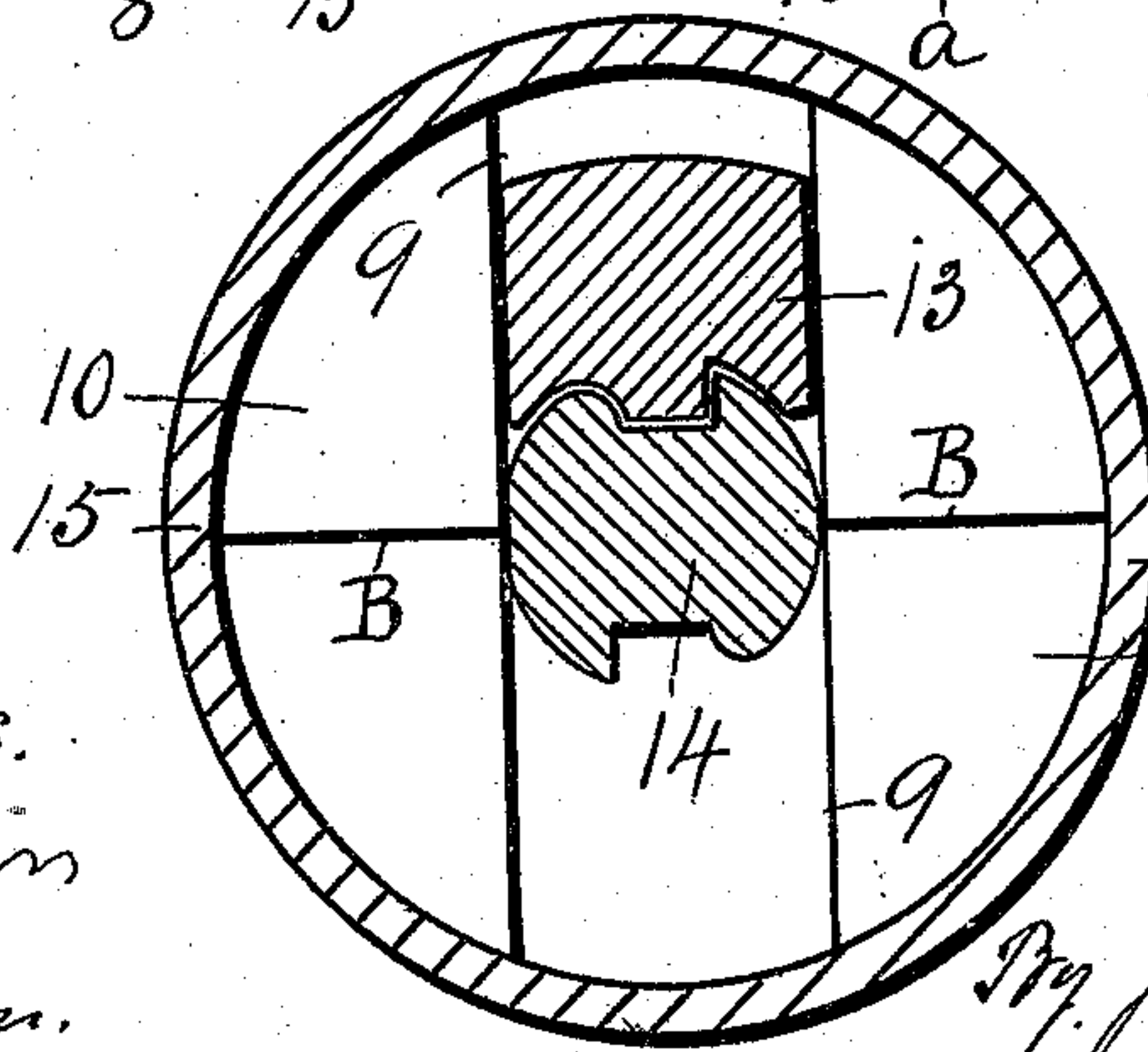


Fig. 3.

Witnesses.  
Hugh Whitcomb  
Jas H. Jackson.

Inventor.  
Jas H. Dudley  
By Jm B. Hendry  
His Atty.



# UNITED STATES PATENT OFFICE.

JOB DUDLEY, OF HAMILTON, ONTARIO, CANADA.

## WINDOW-SHADE ROLLER.

No. 854,878.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed April 9, 1906. Serial No. 310,598.

*To all whom it may concern:*

Be it known that I, JOB DUDLEY, a subject of the King of Great Britain, residing at Hamilton, in the county of Wentworth and Province of Ontario, Canada, have invented certain new and useful Improvements in Window-Shade Rollers, of which the following is a specification.

My invention relates to improvements in window shade rollers in which a horizontal roller is provided at one end with a central stationary journal having a stop cam device, and a stop block, which is adapted to slide in a transverse track in the roller, and engage said cam, by gravity, thereby stopping the roller from revolving in one direction, and freedom to the roller to revolve in an opposite direction, and under certain conditions to allow the roller to revolve in either direction.

The object of my invention is to provide a device of few parts, for raising and lowering a window shade, or blind, and holding the same to desired position. I attain this object by the mechanism illustrated in the accompanying drawing in which:—

Figure 1, is an elevation of a window shade on a roller shown broken, and the ends of the roller in stationary window frame brackets, the shade being up, and the hanging cord on the opposite side to the shade. Fig. 2, is an enlarged sectional elevation of one end of the roller, and wherein my invention consists. Fig. 3, is a sectional end elevation of the roller, through the broken vertical line *a, a*, of Fig. 2, of the drawing.

Similar letters refer to similar parts throughout the several views.

In the drawing the horizontal roller is indicated by 2, and has a round end journal 3, to revolve in the stationary bracket 4, on the window frame A. The opposite end of the roller 2, has a rigid journal 5, which extends a distance into the roller 2, to support the same, and beyond the end of the roller, and is flattened at 6, to fit rigidly in the stationary similar secured window frame bracket 7, to support the end of the roller. This end of the roller has a ferrule 8, which is secured on this end part of the roller, and extends beyond the roller and is adapted to revolve with the roller, on the journal 5. On the journal 5 is a two-part or split drum having end flanges or walls 12 and 16 and intermediate neck 18. Opposite radial or transverse tracks 9, are formed between the walls 10,

and 12, and in which is a stop block 13, which is adapted to slide in the track 9, and engage with the stationary stop cam 14. One block 13, is operative, though a similar block in conjunction therewith and in the opposite track 9, may be employed, if deemed expedient.

15, is an outer ferrule cover, for the end part of the roller, and to act as outer end stops to the tracks 9. The ferrule cover 15, is secured to the ferrule 8, and roller 2, and revolves therewith.

Around neck 18 is coiled a cord 19, to revolve the roller in order to raise and lower the shade 20.

21, is an eyelet secured to the frame A, and which acts as a guide for the cord 19.

The flange 17, is the end of the ferrule 15. The ferrule 8, together with its wall 10, and the drum parts 12, 18, and flange 16, are made in two parts, to introduce, to position, the cam 14 and the journal 5, the dividing line of the said two parts being shown at B in Fig. 3.

The shade roller is adapted to operate without any springs whatever, whereas other shade rollers have springs of various kinds.

The operation of the device is as follows: When the cord 19, is suddenly pulled downward, the shade 20, at the same time rises and immediately the block 13, leaves the cam 14, and slides to the outer part of the paralleled track 9, that is, to the ferrule cover 15, by centrifugal force. When the cord 19, is allowed certain freedom and the shade 20, allowed to fall downward by gravity and by manipulating the cord, the roller may be set stationary by allowing the block 13, to fall into the stationary cam. No matter in what high or low position the shade is, it can be raised or lowered by means of manipulating the cord 19, and held in desired position. When the block 13, is engaged with the cam as shown in Figs. 2, and 3, of the drawing, the roller can revolve only in one direction, but when the block 13, leaves its contact with the cam 14, the roller may then be revolved in either direction, in one said direction by means of the cord, and in an opposite direction by means of the shade, or by the gravity of the exposed end of the shade.

What I claim as my invention and desire to secure by Letters Patent, is:—

1. The combination with a window shade roller, of a stationary spindle extending into

and journaling the roller and provided with a cam, a separable two-part drum or pulley rotatable with the roller and journaled on the spindle, a ferrule holding the parts of the drum together a cord adapted to wind on the drum or pulley, and a gravitally and centrifugally acting stop-block or catch carried by the roller and engageable with the cam to lock the roller.

10 2. The combination with a window shade roller, of a spindle projecting thereinto and provided with a cam, an inner separable two-part ferrule embracing the roller, a separable two-part drum or pulley around the spindle,

an outer ferrule surrounding the inner ferrule and one of the flanges of the said drum or pulley, the adjacent faces of the inner ferrule and of the flange on the pulley being provided with radial grooves, and a gravitally and centrifugally acting stop-block slidable in said grooves and adapted to engage the cam aforesaid. 15 20

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

JOB DUDLEY.

Witnesses:

JOHN H. HENDRY,  
M. MEDLEN.