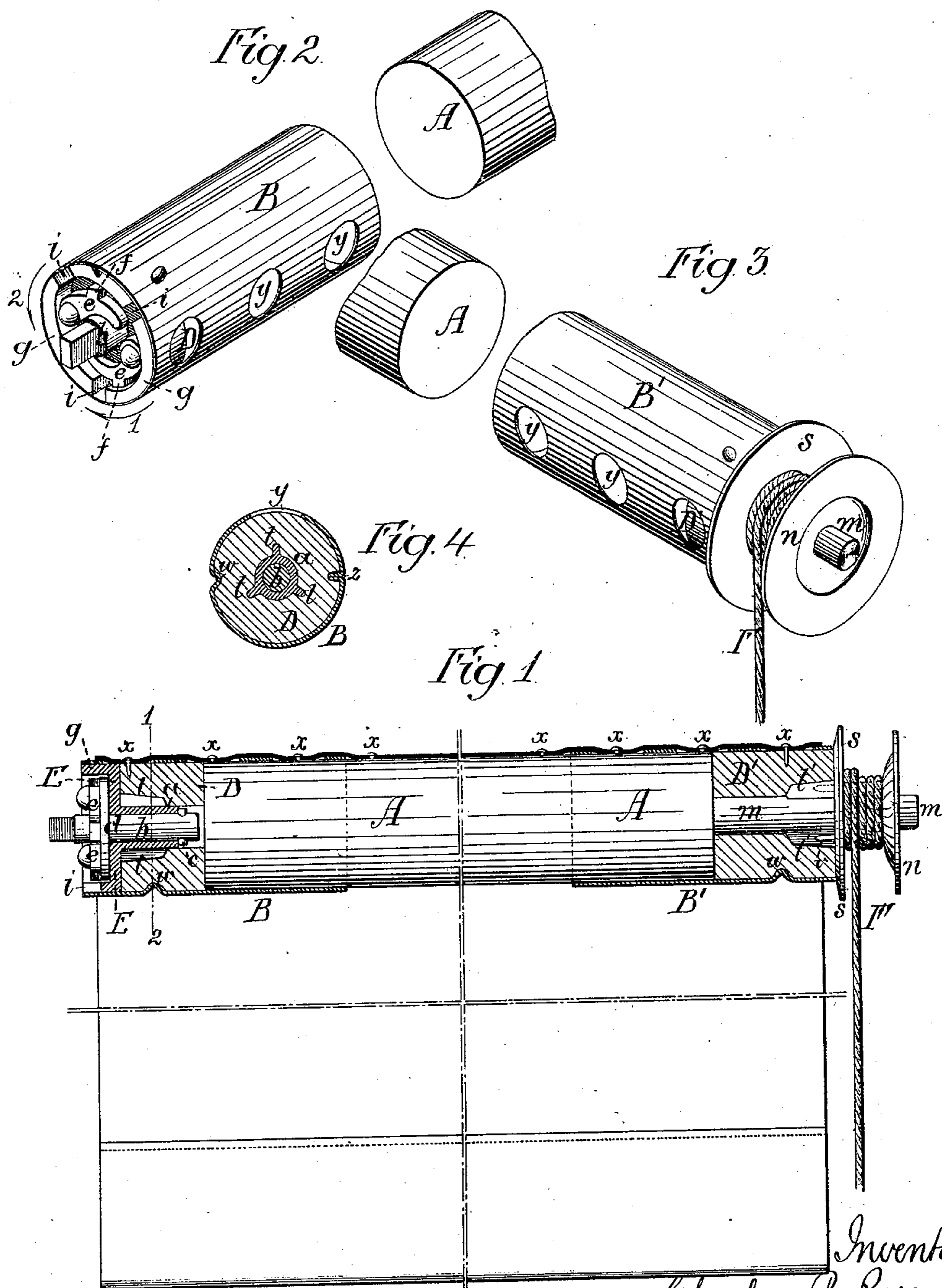


C. P. ROSE.
Shade Rollers.

No. 230,063.

Patented July 13, 1880.



Witnesses

Henry Howson Jr.
Harry Smith

Inventor
Charles P. Rose
by his Attorneys
Howson & Son

UNITED STATES PATENT OFFICE.

CHARLES P. ROSE, OF ALLENTOWN, ASSIGNOR OF ONE-HALF OF HIS RIGHT
TO RUDOLPH W. MOSTELLER, OF SLATINGTON, PENNSYLVANIA.

SHADE-ROLLER.

SPECIFICATION forming part of Letters Patent No. 230,063, dated July 13, 1880.

Application filed November 17, 1879.

To all whom it may concern:

Be it known that I, CHARLES P. ROSE, of Allentown, Lehigh county, Pennsylvania, have invented a new and useful Improvement in Window-Shade Rollers, of which the following is a specification.

The object of my invention is to provide means whereby an ordinary shade-roller may be readily changed into a stop-roller to be operated by a cord; and this object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal section of a shade-roller provided with the attachments which form the subject of my invention; Fig. 2, a perspective view of one end of the roller and its attachment, the latter being removed from the roller; Fig. 3, a perspective view of the opposite end of the roller and its attachment, the latter also being removed; and Fig. 4, a section on the line 1 2, Fig. 1.

A represents the curtain-roller, to one end of which is adapted a tube, B, and to the opposite end a tube, B', the ends of the roller abutting against the inner ends of blocks D D', carried by the said tubes B B'. Fitted within the tube B, and bearing against the outer face of the block D, is a flanged ring, E, which has a central tubular projection, *a*, adapted to an opening formed in said block D, the turning of which independently of the ring is prevented by ribs *t*, formed upon the latter and adapted to recesses in the block. To this tubular projection *a* is fitted a spindle, *b*, carrying a disk, *d*, and to the latter are hung two pawls, *e e*, each of which is provided with a projecting finger, *f*.

The flange *g* of the ring E has a number of slots, *i*, formed therein, and with these slots the tongue *f* of the lowermost pawl *e* engages when the roller A and the ring E are turned.

The spindle *b* is retained in its proper position within the tubular projection *a* by means of a transverse pin, *c*, and the outer end of the spindle is flattened for adaptation to a slotted bracket, whereby said spindle and its disk and pawls are prevented from turning with the roller A and ring E.

The object in using two pawls is to insure

the proper operation of the device irrespective of the position which the flattened end of the spindle occupies in the slotted bracket.

The character of the slots *i* and of the fingers *f* on the pawls *e* is such that the roller is free to turn at any speed in the direction of the arrow 1 for rolling up the shade, and can also turn in the direction of the arrow 2 without interference, provided it is turned rapidly, so as to prevent the engagement of the finger of the acting pawl with the slots *i*, a slow, or comparatively slow, movement in this direction, however, permitting the finger to fall into one of the slots, thereby arresting the movement of the roller and the descent of the shade.

The movement of the roller and shade is governed by a cord, F, wound round a pulley carried by the tube B', said pulley being formed by a spindle, *m*, a disk, *n*, thereon, and an annular plate, *s*. The spindle *m* is adapted to a central opening in the block D', and is prevented from turning independently of said block by ribs *t'*, the plate *s* being likewise prevented from turning by pins *v* projecting from the plate into the block. The end of the spindle *m* projects beyond the disk *n* for adaptation to a circular opening in a suitable bracket, whereby the spindle is supported in such a manner as to be free to turn.

Longitudinal or turning movement of the blocks D D' in the tubes B B' is prevented by indenting said tubes with a suitable instrument at certain points, so as to form inwardly-projecting lugs *w*, which bite into the blocks and hold the same securely in position. The same means may be adopted for securing the tubes B B' to the roller A, in addition to the security afforded by the tacks *x*, by which the shade is attached, said tacks passing through openings *y* formed in the tubes.

As an additional precaution against the turning of the tubes B B' independently of the roller A or blocks D D', internal ribs, *z*, may be formed on said tubes and adapted to slots cut in the roller and in the blocks, as shown in Fig. 4.

In order to insure the automatic descent of the shade, the lower end of the same should be suitably weighted.

By the use of the two tubes B B' (one car-

rying stop mechanism and the other provided with a cord-pulley) I am enabled in a very short time and at a slight expense to change an ordinary shade-roller into a stop-roller, all that is necessary being to drive the tubes onto the ends of the roller and secure the same in position prior to tacking on the shade, the presence of the blocks D D' obviating the necessity of boring or slotting the ends of the roller A.

10 The character of the stop mechanism employed may be varied to some extent without departing from the main features of my invention, the mechanism shown, however, being preferred on account of its simplicity and effectiveness.

15 I do not desire to claim, broadly, a curtain-roller having a cord-pulley and ratchet-stop mechanism; but

I claim as my invention—

20 1. The combination of a curtain-roller, A, with a tube, B, carrying pawl-and-ratchet stop mechanism with inwardly-projecting spindle and spindle-bearing, the tube projecting be-

yond said spindle and spindle-bearing, whereby the device may be attached to the end of the roller without slotting or boring the latter, as set forth.

2. The combination of the roller A with the tube B, the stop mechanism having an inwardly-projecting spindle, *b*, and bearing *a*, and the block D, having a central opening for the reception of said spindle and spindle-bearing, all substantially as specified.

3. The combination of the curtain-roller A with the tube B', having a block, D', the spindle *m*, having a disk, *n*, and ribs *t'*, and the annular plate *s*, independent of the spindle and having pins *v*, as set forth.

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

CHARLES P. ROSE.

Witnesses:

E. D. JEANES,

A. K. WITTMAN.