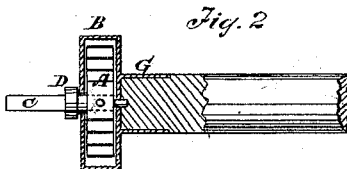
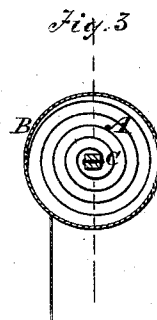
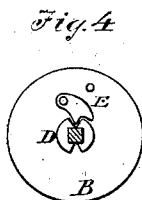
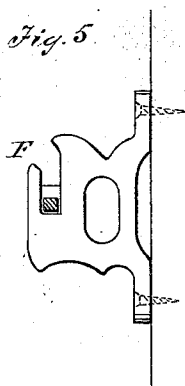
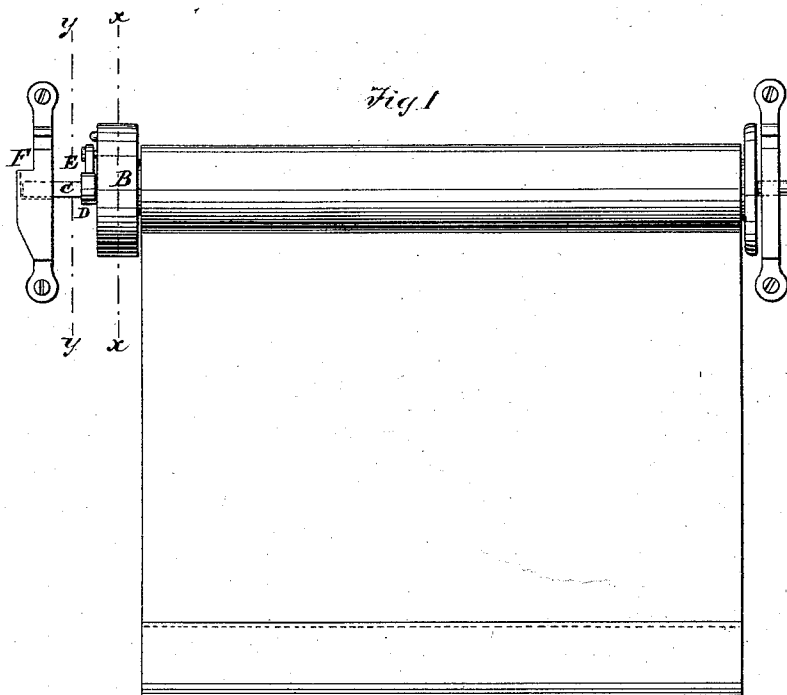


F. BACKOFEN.
CURTAIN FIXTURES.

No. 169,400.

Patented Nov. 2, 1875.



WITNESSES:

A. F. Terry

INVENTOR:

F. Backofen
BY *Munnell*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

FREDRICK BACKOFEN, OF WILLIAMSBURG, BROOKLYN, E. D., NEW YORK,
ASSIGNOR TO HIMSELF AND ISAAC H. WILLIAMS, OF SAME PLACE.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **169,400**, dated November 2, 1875; application filed
March 1, 1875.

To all whom it may concern:

Be it known that I, FREDRICK BACKOFEN, of Williamsburg, Brooklyn, E. D., in the county of Kings and State of New York, have invented a new and Improved Spring End for Shade-Rollers, of which the following is a specification:

The object of this invention is to provide a spring end which may be attached to an ordinary wooden roller, so that in event of changing one's residence, the shade-rollers may be altered at a trifling expense to suit the various-sized windows, the construction and operation of which will be understood from the following description, reference being made to the accompanying drawing, in which—

Figure 1 represents a front view, with shade attached. Fig. 2 is a sectional view of the spring-roller end. Fig. 3 is a section through the line *x x*. Fig. 4 is a section through the line *y y*. Fig. 5 is an end view of bracket.

Similar letters of reference indicate corresponding parts.

In the case here presented, A represents a coiled spring confined in the case B, one end of which being attached to the said case, and the other end to the spindle C. On the said spin-

dle, outside of the case, there is a notched wheel or ratchet, D, in which the dog E will catch, and hold the shade in any desired position. The outer end of the aforesaid spindle is made square, and rests in a slot in the bracket F, the object of which is to keep it from turning, so as to utilize the power of the spring in raising or winding the shade. The aforesaid case B has a flange or collar, G, which is slipped over the end of the wooden roller, and is secured thereto by small screws or tacks.

I am aware that it is not new to use a square spindle end, slotted bracket, and coil-spring to actuate roll, or to place upon the end of the roll a chamber containing a spring and the gearing by which the roll is turned; but

What I claim is—

A case, B, having spindle C and collar G, combined with coil-spring A, attached at one end to case, and at the other to spindle, as shown and described, to avoid all necessity for the use of gearing.

FREDRICK BACKOFEN.

Witnesses:

A. C. HOCKEMEYER,
ISAAC H. WILLIAMS.