J. R. SMYTH.

WINDOW-SHADE ROLLERS.

No. 192,663. Patented July 3, 1877.

Fig. I

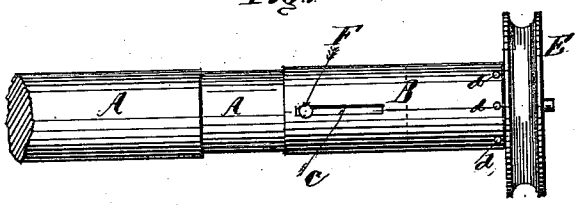
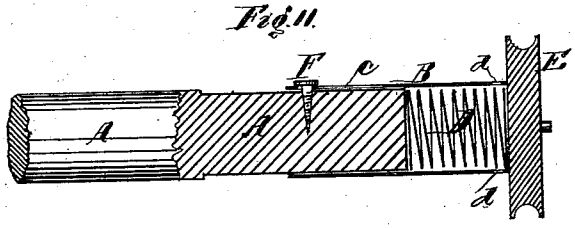


Fig. II.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES R. SMYTH, OF NEW YORK, N. Y.

IMPROVEMENT IN WINDOW-SHADE ROLLERS.

Specification forming part of Letters Patent No. **192,663**, dated July 3, 1877; application filed November 14, 1876.

To all whom it may concern:

Be it known that I, JAMES R. SMYTH, of New York city, county, and State of New York, have invented new and useful Improvements in Attachments to Window-Shade Rollers; and I hereby declare that the following is a clear and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

The object of my invention is to provide for a self-adjustable extension attachment to the commonly-used window-shade rollers, to which the shade is fastened by aid of nails or otherwise.

By the aid of my improved attachment the roller is automatically made shorter or longer, as may be required, the roller being cut somewhat shorter than the distance between the bearings or journals fastened to the inner sides of the window-frame; but no very exact measure is required to be taken of the length of the roller, as the attachment makes up for all deficiency in the accuracy in the measuring.

My invention consists in devices as described and claimed.

I construct a metallic cylinder, which will fit the roller in such a manner that it will readily slide over the end of the same; or the roller at the end may be reduced in size to somewhat less than the bore of the cylinder. To the end of this cylinder, which is provided with a longitudinal slot, is fastened the sheave for the shade-cord, and inside the cylinder is placed a spiral spring. The cylinder is perforated at the end near to the sheave with two rows of holes, for the purpose of fastening the shade to the metallic cylinder by aid of a threaded needle. This cylinder is placed over the end of the roller, and is held to the cylinder by aid of a screw or nail, which is inserted in the forementioned slot and screwed or driven into the roller, near to the end of the same.

It will readily be understood that the spiral spring inside the cylinder pressing against the side of the sheave, attached to the cylinder and against the end of the roller, forces the sheave with its axle against the journal or bearing fastened to the window-frame, and thus prevents the roller from becoming accidentally detached from its bearings.

Referring to the drawings, Figure 1 is a side view of my improved shade-roller attachment. Fig. 2 is a longitudinal sectional view of the same.

A is the shade-roller. B is the cylinder, with slot *c* and the two rows of holes *d d*. D is the spiral spring. E is the sheave. F is the screw or nail.

I am aware that a patent was granted to D. H. Chamberlain, August 21, 1855, No. 13,481, for a similar purpose, but differently constructed; and I therefore do not wish to be understood as claiming, broadly, an adjustable sleeve at the end of a shade-roller; but,

What I desire to claim is—

The cylindrical sleeve B, having slot *c* and holes *d d*, and carrying at its end the sheave E, in combination with the spring D, and the shade-roller A, having the screw or nail F, substantially as described, and for the purpose set forth.

JAMES R. SMYTH.

Witnesses:

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