

W. W. GRIER.

Rollers for Window Curtains.

No. 138,749.

Patented May 13, 1873.

Fig. 1.

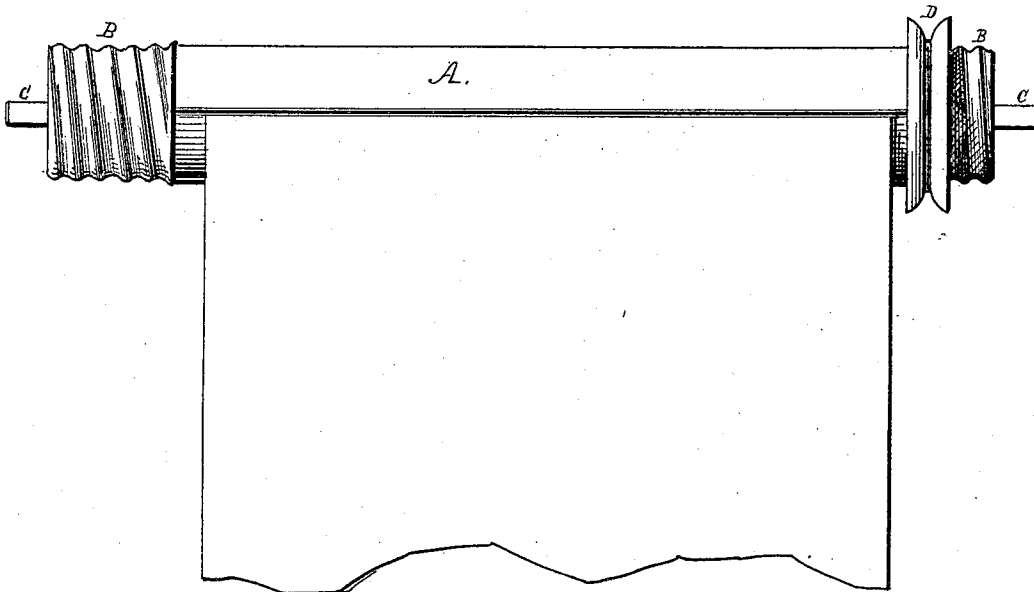


Fig. 2.

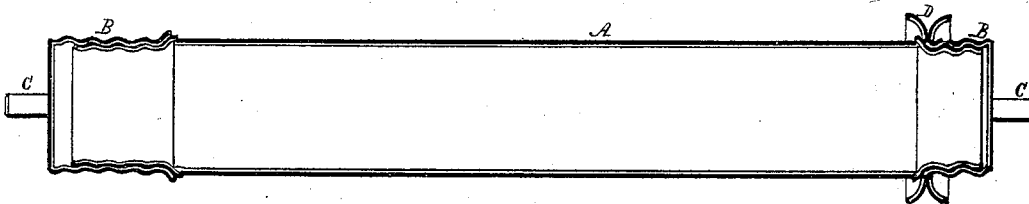
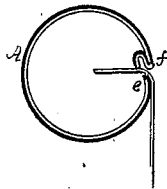


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM W. GRIER, OF HULTON, PENNSYLVANIA.

IMPROVEMENT IN ROLLERS FOR WINDOW-CURTAINS.

Specification forming part of Letters Patent No. **138,749**, dated May 13, 1873; application filed April 8, 1873.

To all whom it may concern:

Be it known that I, WILLIAM W. GRIER, of Hulton, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Rollers for Window-Curtains; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to an improvement in rollers for window-curtains, which are constructed of sheet metal bent into the form of a tube, each end of which is provided with screw-threads adapted to screw-threads in tubular caps or end pieces, each of which is provided with a pintle, which serves as an axis for the roller, the screw-threads on the ends of the roller, and in the end pieces being so constructed and arranged with relation to each other that the cloth or fabric used for the curtain will be clamped between the edges of the tube forming the roller.

To enable others skilled in the art to make and use my invention, I will proceed to describe more fully its construction and operation.

In the accompanying drawing, which forms part of my specification, Figure 1 is a side elevation of my improvement in rollers. Fig. 2 is a longitudinal section of the same. Fig. 3 is a transverse section at line *y* of Fig. 1.

A represents the roller, which is constructed of sheet metal, one edge of which is turned so as to form a recess for the reception of the other edge, as indicated in Fig. 3. The ends are then furnished with screw-threads adapted to the screw-threads of the end-pieces B. The end pieces are formed by means of suitable dies, or by the "spinning process." The pintles C are secured to the cups by the soldering process, their inner ends being provided

with a head for the purpose of giving firmness to the projecting portion of the pintle. These pintles serve as the axis for the roller A, which is suspended in suitable bearings in the ordinary manner. One end of the end pieces B is provided with a sheave, D, for receiving the cord used for operating the roller. This sheave may be constructed so as to be detachable, and secured to the end piece through the medium of screw-threads, as indicated in Fig. 2.

The edges of the plate of which the roller is formed may be, if desired, turned at right angles to the plane of the plate, and then formed into a tube with the turned edges projecting inward; and the sides of the edges, facing each other, may be corrugated so that the corrugations will mesh into each other, and thereby securely hold the end of the curtain placed between them when the said edges are clamped together through the medium of the end pieces B.

In securing the curtain to the roller A the upper end of it is inserted between the edges *e* and *f*. The end pieces are then screwed on the end of the roller, thereby clamping it in the groove formed on the inner side of the edge *f*, and firmly holding the curtain. The operation of the roller in other respects is the same as the ordinary roller.

Having thus described my improvement, what I claim as of my invention is—

A sheet-metal tubular roller, A, the ends of which are furnished with screw-threads, in combination with the tubular end pieces B, constructed and operating with relation to each other, substantially as herein described, and for the purpose set forth.

WILLIAM W. GRIER.

Witnesses:

A. C. JOHNSTON,
J. J. JOHNSTON.