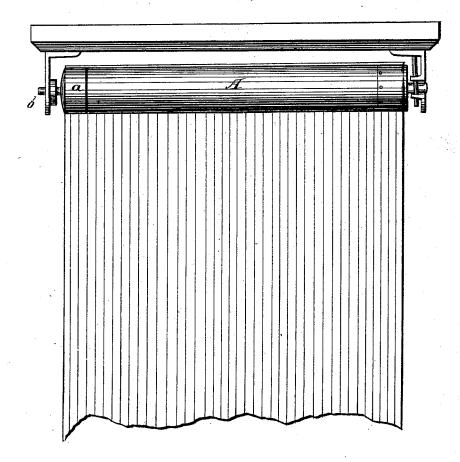
F. C. D. McKAY.

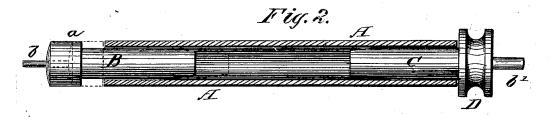
SHADE-ROLLER.

No. 188,253.

Patented March 13, 1877.

Fig.I.





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Terdinand O. D. M. May.

Per: C. H. Walson & Language.

UNITED STATES PATENT OFFICE.

FERDINAND C. D. McKAY, OF PATERSON, NEW JERSEY.

IMPROVEMENT IN SHADE-ROLLERS.

Specification forming part of Letters Patent No. 188,253, dated March 13, 1877; application filed February 8, 1876.

To all whom it may concern:

Be it known that I, FERDINAND C. D. MCKAY, of Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Shade-Rollers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to curtain or shade rollers; and it consists in a hollow or tubular roller, made of fibrous material, such as paper, paper-pulp, &c., as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a front elevation, the roller having spring attachment; and Fig. 2 is a longitudinal section, showing the ordinary spool attachment.

A represents the body of my curtain or shade roller, made hollow or in tubular form, of paper, pasteboard, or other suitable fibrous ma-

A roller made of this kind of material while it is light is yet strong and durable, and will not warp like the ordinary wooden rollers.

In one end of the roller A is inserted a cylindrical plug, B, of wood, formed with a shoulder, a, near its outer end, leaving the extreme end of the plug of the same diameter as the

diameter of the exterior surface of the roller. In the center of the outer end of the plug B is inserted the pin or pivot b, forming the journal at that end of the curtain-roller. In the other end of the roller-body A is inserted a similar plug, C, which has a pulley, D, formed upon its outer end, and the pin or pivot b' fastened in the center in the same manner.

The plugs B and C may be drawn out more or less, as required, so as to adapt the roller to any width of window; and, when adjusted, they may be held simply by a nail or screw being passed through the body A into each of the plugs.

This invention may be adapted to the ordinary cord-fixtures, or to such automatic devices as described in my Patent No. 150,877, or to any curtains or shades that have rollers.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A curtain or shade roller made in tubular form, of paper, pasteboard, or other suitable fibrous material, for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

FERDINAND C. D. McKAY.

Witnesses:

ALICE L. SAYLES, ABBIE S. WHITE.