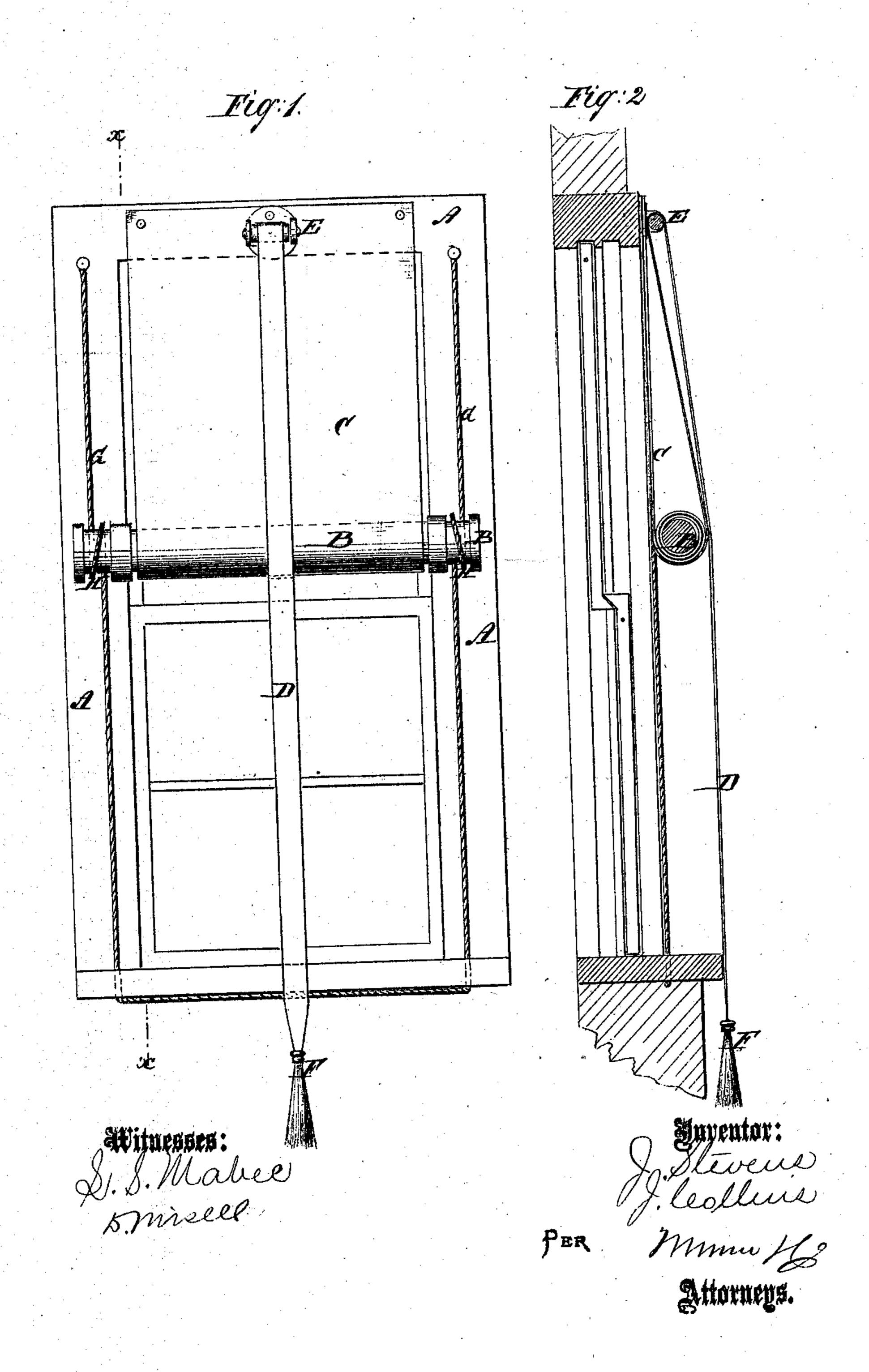
Stevens & Collins,

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No. 105508.

Patented July 19.18/0.



UNITED STATES PATENT OFFICE.

JOHN STEPHENS AND JAIRUS COLLINS, OF FAIRVIEW, OHIO.

IMPROVED APPARATUS FOR OPERATING WINDOW-CURTAINS.

Specification forming part of Letters Patent No. 105,508, dated July 19, 1870.

To all whom it may concern:

Be it known that we, John Stephens and Jairus Collins, of Fairview, in the county of Guernsey and State of Ohio, have invented a new and useful Improvement in Apparatus for Operating Window-Curtains; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to a new and useful improvement in method of raising and lowering window-curtains; and consists in the combination and arrangement of parts, as hereinafter described.

In the accompanying drawing, Figure 1 is a front view of a window provided with our improved curtain apparatus. Fig. 2 is a vertical section of Fig. 1, on the line x x, giving an edge view of the same.

Similar letters of reference indicate corre-

sponding parts.

A represents the window-casing. B is the curtain-roller. C is the curtain, the upper end of which is made fast to the top of the window-casing. The other end is attached to the curtain-roller B.

D is a band or cord, one end of which is attached to the top of the window-casing behind the curtain. The other end is carried up around or under the roller, and over the pulley E on the casing, and then brought down with a weighted tassel, F, to balance the weight of the roller.

It will be seen that from this arrangement the roller will be revolved and raised by pulling downward on the tassel. When the roller is relieved of the weight of the tassel, the roller will fall by its own gravity. The cur-

tain, being attached to the roller, will be wound up around the roller as the latter is raised, and be unwound as the roller descends.

To keep the roller steady and in a horizontal position as it is raised and lowered, its ends must be properly supported. This is done by means of the cords G. These cords extend from top to bottom of the side casing of the window, as seen in the drawing.

H H are grooves in the ends of the roller, and the cords are passed once around the roller in these grooves, as represented, so that as the roller is revolved up and down in operating and adjusting the curtain, the cords wind on and off, thus supporting and keeping the roller in its proper position without causing any obstruction to the proper action of the curtain. By this arrangement the curtain may be adjusted to any desired position. As the tassel balances the roller and curtain, the latter will remain just where it is placed.

This is a most simple, durable, and inexpensive apparatus, not liable to get out of order, and as easily managed as could be desired. Its advantages over the more costly and shortlived devices for the same purpose now in use must be obvious to all.

Having described our invention, we claim as new and desire to secure by Letters Patent—

The roller B, with the grooves H H, the cords G G, pulley E, and the band D, with the tassel or weight F, in combination with a window - curtain and window, when the same are arranged to operate substantially as and for the purpose set forth.

JOHN STEPHENS. JAIRUS COLLINS.

Witnesses:

ALLEN W. DARLING, JNO. C. BECKETT.