

T. ARNDT.
CURTAIN-FIXTURES.

No. 185,470.

Patented Dec. 19, 1876.

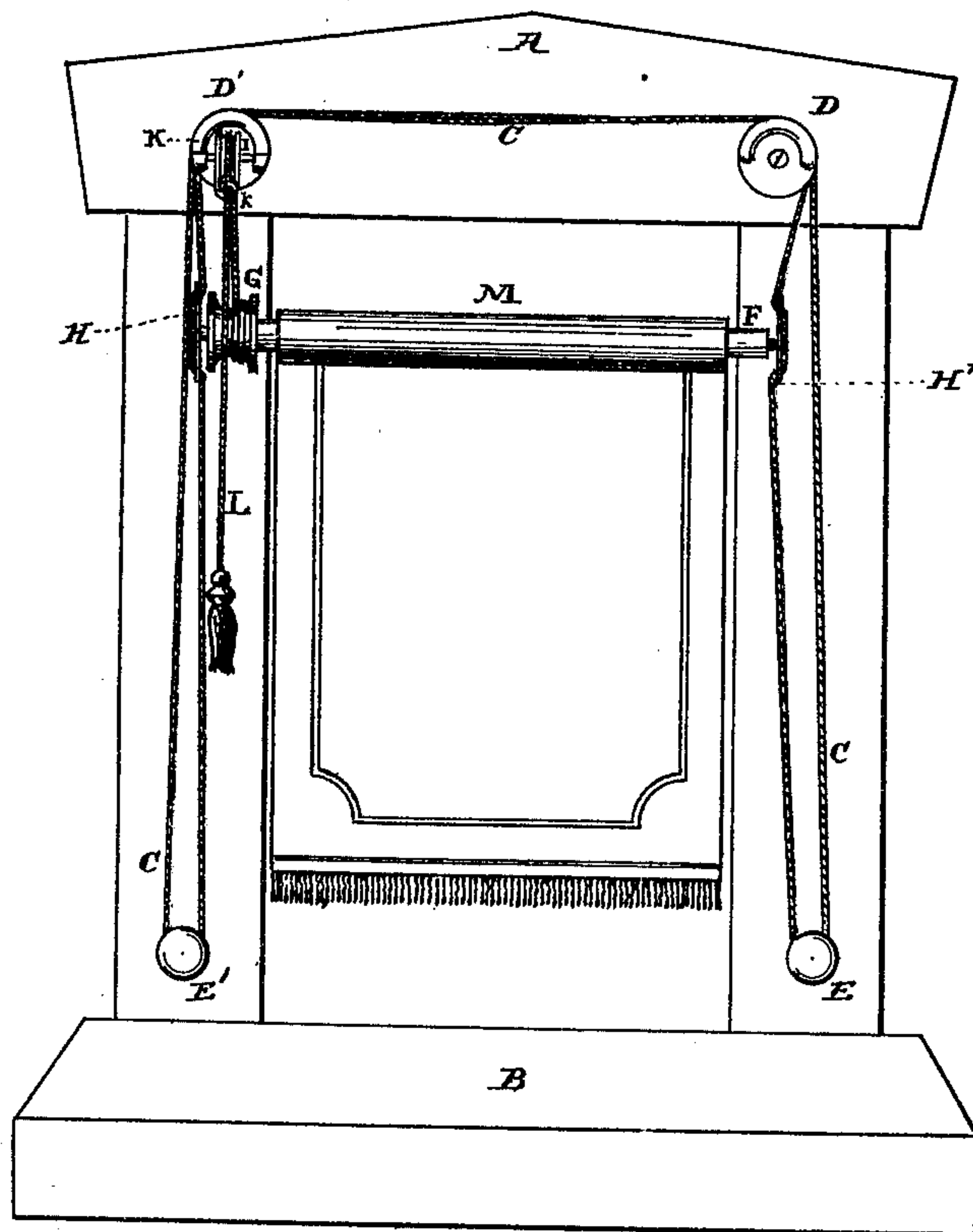


Fig. 1

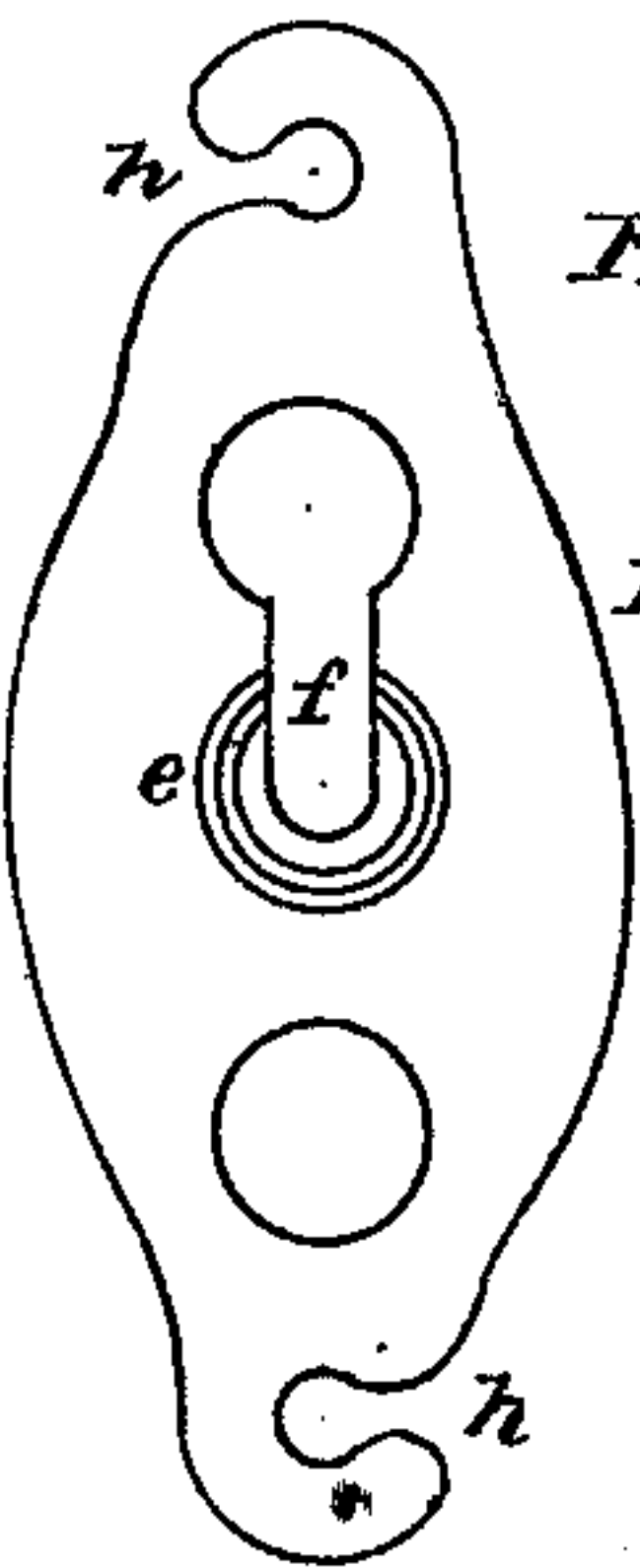
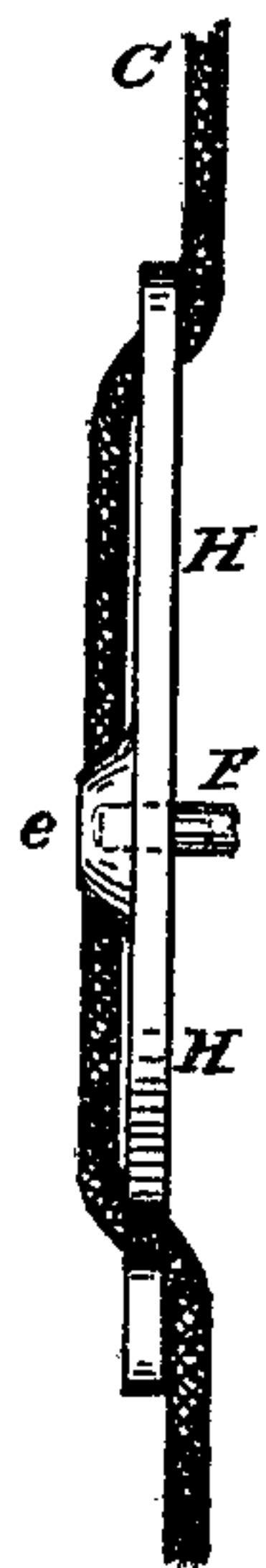


Fig. 2

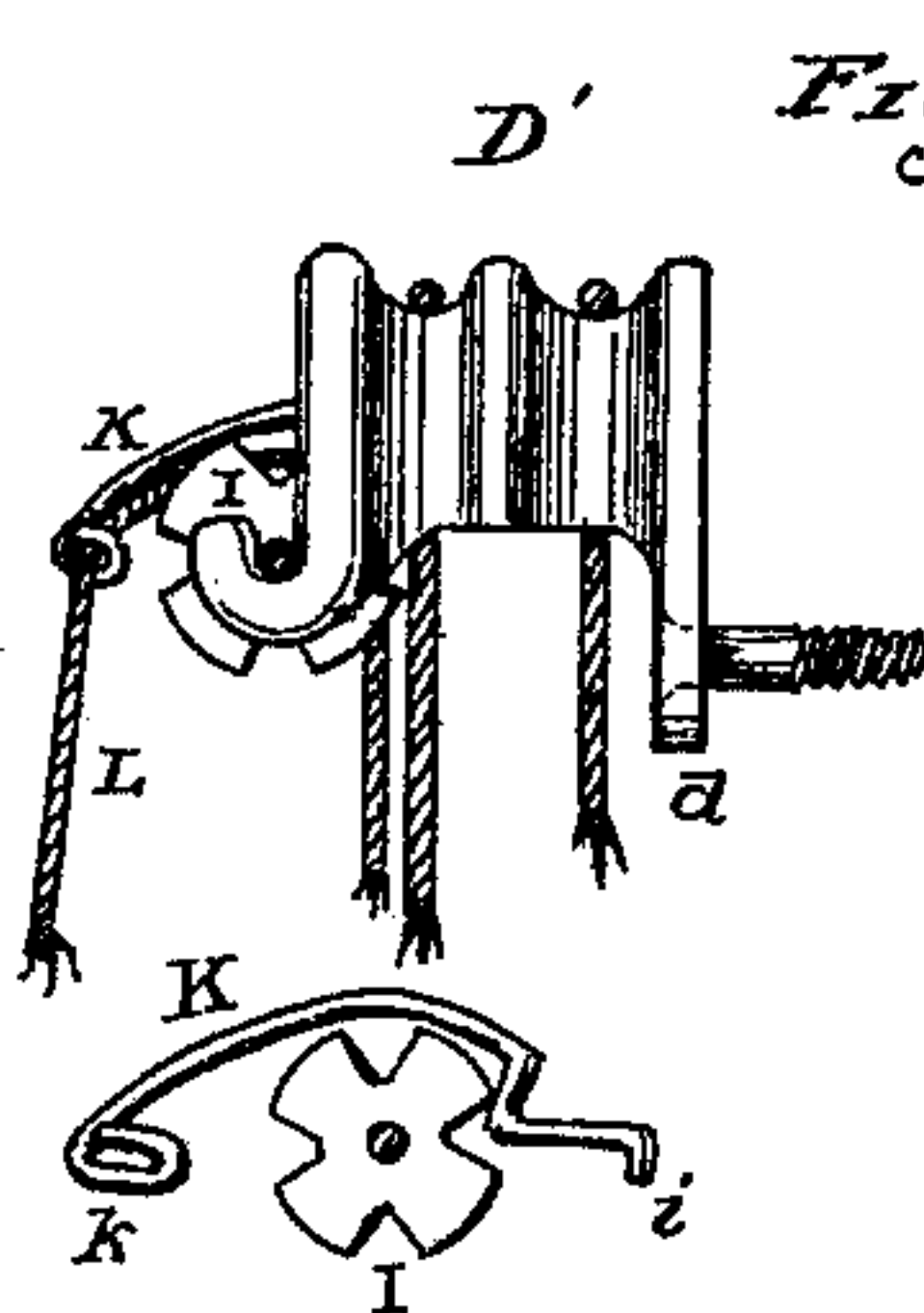
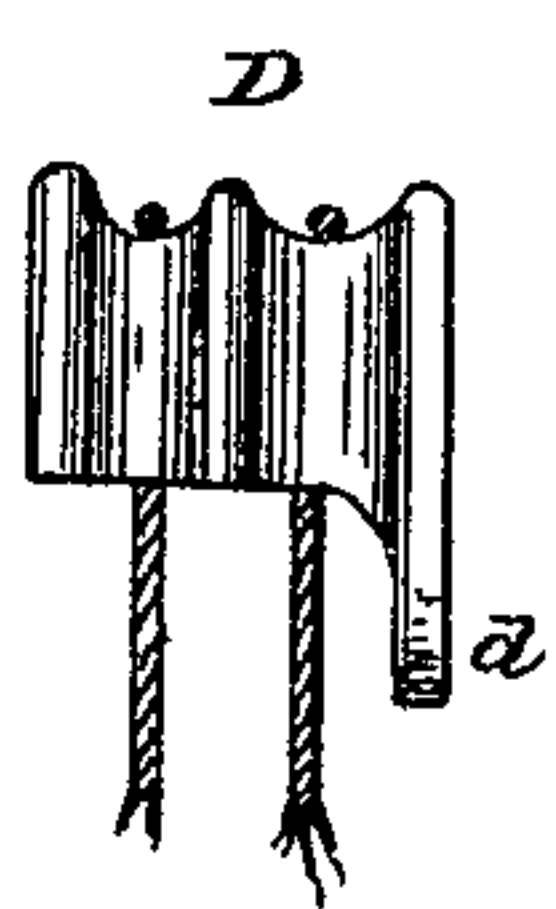


Fig. 3



Chas H. Feller
William Brehm
Witnesses

Theophilus Arndt
Inventor

By

Jacob Stauffer. Attorneys

UNITED STATES PATENT OFFICE.

THEOPHILUS ARNDT, OF MOUNT JOY, ASSIGNOR OF ONE-HALF OF HIS RIGHT
TO CHRISTIAN H. NISSLEY, OF LANCASTER COUNTY, PENNSYLVANIA.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **185,470**, dated December 19, 1876; application filed
October 4, 1876.

To all whom it may concern:

Be it known that I, THEOPHILUS ARNDT, of Mount Joy, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Hanging Window-Shades, of which the following is a specification:

This invention relates to a class of window-shade fixtures whereby the shade can be lowered from the top and elevated from the bottom, so as to stand at any desired elevation, to promote ventilation from above and the exclusion of the rays of the sun below.

To accomplish this I employ a continuous cord doubled back on the knobs, used disconnected from the other fixtures, and tension journal-bearings, which are readily attached, adjusted, or removed, and which support the shade and roller at any desired point upon the fixed cord.

The accompanying drawing, with the letters of reference marked thereon, together with a brief description, will enable those skilled in the art to make and use the same, and in which—

Figure 1 is a front elevation of a window-frame and the fixtures in place. Fig. 2 represents the face and edge view of the tension journal-bearings enlarged; Fig. 3, the double-grooved upper cord guides or supports and appliances.

The upper cord-holders D' and D agree in being formed of a projecting arch, having two grooves for the cord. The rear portion extends below the arch, and is perforated, so as to be attached with a screw in the part D. The arch is provided with projecting ears below, in front, for bearings for the pulley-ratchet I, hereinafter described. Below, on the window-casing, ordinary smooth knobs E may be affixed. The cord C is continuous—that is, the two ends are united.

To describe: begin at the splice shown at H', then down and around the lower knob E, outward and up over the front groove in D, then across and over the hind groove in D', then down and inward around the knob E', and up again over the front groove in D', then (so that the cord is made to cross itself) across over the back groove in D down to the place of beginning, where the two ends

are spliced together, the cord being tightly drawn on its supports. This endless cord, so doubled back, has thus far no connection with the shade, or journal-bearings, but is ready for attachment to the tension-bearings, in which turn the journals of the shade-roller F, with its pulley G, for the single or winding cord L, used to roll up and unroll the shade M. These tension-bearings, Fig. 2, have the ends provided with an open slot and eye, *h*, to slip over the cord C, so as to cause traction by passing the cord above from its inner side across the outer face, and carried through the lower slot to the inner side, as shown. There is a central open slot, *f*, enlarged above, to allow the easy introduction of the journal or shaft of the roller F, to set down to its proper bearing in the journal-box *e* or hub-like provision.

It is easy to insert the roller and to adjust it with the shade to a truly horizontal position, by sliding one of the bearings up or down on the cord. The tension is sufficient to hold it effectually at any desired elevation on the cord.

In order to roll up or unroll the shade, I employ a simple winding-pulley, G, on one end of the roller, to which the cord L is attached, and carried over the grooved and notched ratchet-pulley I, from the inner side out over the top, and through the loop *k* of the combined tripper and pawl K.

The notches of the pulley I are cut deep, so that the bite of the pawl is direct upon the cord also, and the heavier the shade and roller the harder will it gripe.

The pawl works on a pivot end in the arched cord-holder D', and is connected with the loop, through which loop the single cord L is passed, and terminated by the ordinary tassel, by which it is readily operated, as in those where the tripper, ratchet, and pawl are all combined with the winding-pulley on one end of the roller. The combination with the endless cord-supporter D' differs, however, substantially in the arrangement; therefore,

What I claim as my invention is—

1. As a new article of manufacture, the cord-supporter D', having a double groove upon its upper surface, and provided with

the ratchet-pulley I and tripper-pawl K, the whole being constructed and combined as and for the purpose specified.

2. In curtain-fixtures, having a rising and falling roller, M, the combination, with the cord-pulleys G, of the ratchet-pulley I, and tripping-pawl K, the pulley being mounted

upon the hooked pendant of the cord-supporter D', as and for the purpose set forth.

THEOPHILUS ARNDT.

Witnesses:

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