A. F. TEMPLE.

Curtain Fixture.

No. 219,185. Patented Sept. 2, 1879.

FIG. 1.

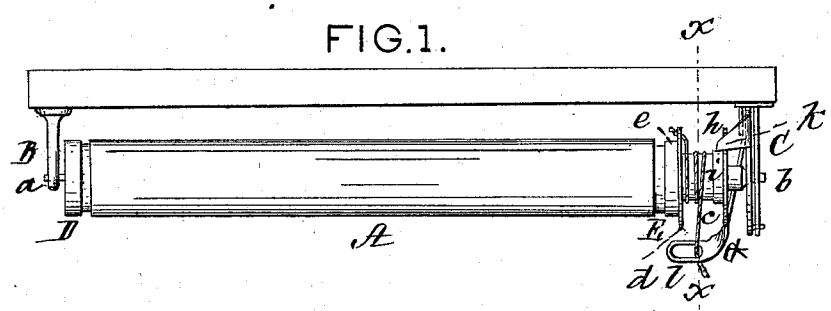


FIG. 2.

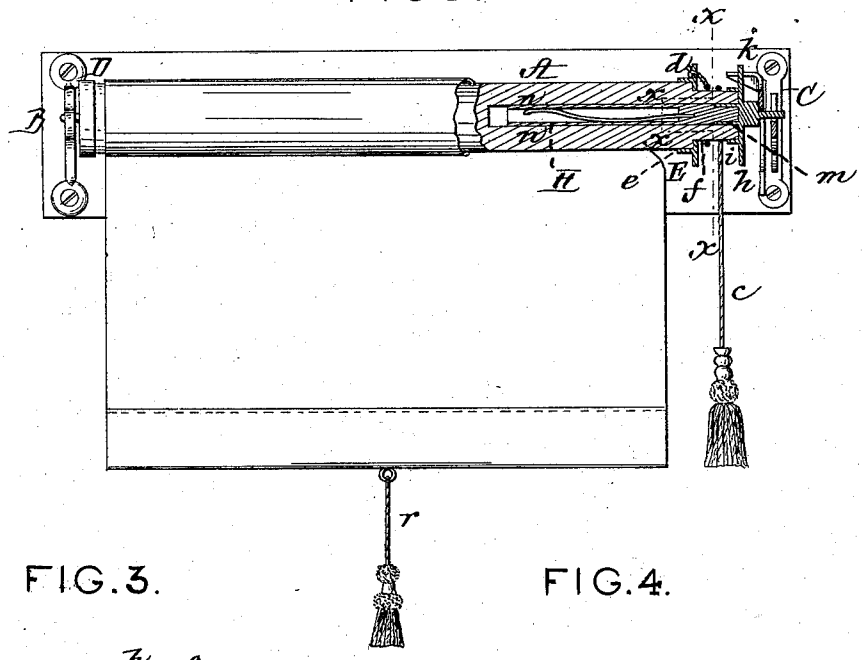


FIG. 3.

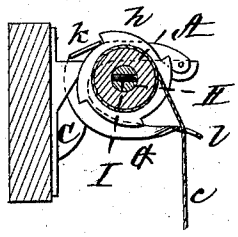
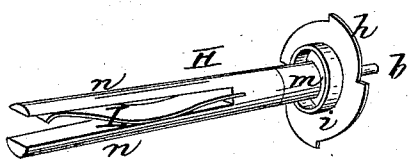


FIG. 4.



WITNESSES

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IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **219,185**, dated September 2, 1879; application filed April 4, 1879.

To all whom it may concern:

Be it known that I, ANSEL F. TEMPLE, of Montague, in the county of Muskegon and State of Michigan, have invented certain Improvements in Curtain-Fixtures, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a top view of a curtain-fixture constructed in accordance with my invention. Fig. 2 is an elevation of the same, partly in section. Fig. 3 is a transverse section on the line *x x* of Figs. 1 and 2. Fig. 4 is a perspective view of the essential feature of my invention detached.

Shades provided with devices for holding them at any desired height when nearly or entirely wound up will not descend by their own weight when unlocked, and cannot be drawn down while unlocking, for the reason that it is very inconvenient and frequently impossible to use both hands in performing these operations simultaneously. Furthermore, shades provided with locking devices only are liable to be pulled so hard when it is desired to draw them down that they are either often torn or the fixtures disarranged or broken.

This invention relates to that class of curtain-fixtures in which the roller turns freely upon and independently of the shaft when the latter is held stationary by a locking device during the operation of drawing down the shade, the roller and shaft turning together in the same direction when the shade is being raised; and my invention consists in a split spindle provided with a bent spring for creating the necessary friction between the spindle and the interior of the end of the roll, which is provided with a socket to receive it, the tension of this spring being readily increased or diminished by simply changing its curvature, so as to increase or diminish the friction necessary for supporting shades of different sizes, said construction admitting of the use of one size of spindle, if desired, for any size or weight of shade, and being adapted for universal application to any locking device.

My invention also consists in a spool formed of two separate and independent metal disks with a reduced portion of the curtain-roll between them, said means of attachment being extremely simple and inexpensive.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents the curtain-roll, and B C the fixtures or brackets secured to the window-frame and forming the bearings for the pins *a b* projecting from the caps D E covering the opposite ends of the roll. The cord *c* is wound around a spool composed of two plates fitting over the reduced portion *f* of the roll, one plate, *d*, being circular or disk shape, and provided with a flange, *e*, fitting over the inner end of the reduced portion *f*, and the other plate being notched, so as to serve as a ratchet, *h*, and having a flange, *i*, fitting over the outer end of the reduced portion.

To the outer end of the bracket C is pivoted a long bent lever, G, which extends in toward the base of the bracket, and is provided with a projection, which serves as a pawl, K, for engaging with the ratchet *h*, this lever G also extending around under the end of the roll, and having at its lower end a looped guide, *l*, for the passage of the winding-up cord *c*. The drawing down backward on the cord raises the pawl and releases the ratchet, which allows the shade to descend, while the pulling forward of the cord *c* depresses the pawl and arrests the ratchet, thus holding the shade at any desired height. This portion of the mechanism is, however, of well known construction.

Projecting from the inner face of the ratchet *h* is a short tubular portion, *m*, into which is fitted the outer end of the cylindrical portion of a split spindle, H, within the space or opening formed between the bifurcations *n n* of which is located a bent flat spring, I, of the form seen in Figs. 2, 3, and 4, the inner end of the spring being fixed securely to the spindle at the inner or closed end of the split, and the outer end of the spring being unconfined and free to move on the inner flat surface of one of the bifurcations *n*, by which construction the stiffness of the spring of the wooden split spindle is increased, and consequently a greater degree of friction is produced between it and the inner or socket surface of the roll, whereby when the cord *c* is pulled

down and the shaft released the roll and the spindle will turn together, and the curtain will be raised, as required, whereas when the shade is to be lowered by drawing down on the central tassel-cord, *r*, the friction between the spring-spindle H and the roll is overcome and the roll revolves independently of the shaft or spindle.

The tension of the spring I, and consequently the amount of friction required for different shades, may be instantly adjusted by changing the curvature of the spring.

A split spring-spindle constructed in accordance with my invention may be readily applied to a curtain-roll, whether provided or not with any kind of locking device, and but one size of spindle is required for any length of roll or weight of shade, which especially recommends it for large shades used in store-windows, as the weight of such shades is constantly changing when they are suspended at different heights.

The device described in Patent No. 200,314 seeks to accomplish the movement of the roll independently of the shaft by the binding of the fibers of the wood and their adhesion to a smooth cylindrical shaft; but this is found to be inoperative when applied to heavy shades for store-windows, as the weight of the shade when lowered overcomes the friction between the cylindrical shaft and the wooden roll into which it is driven.

The method I adopt for attaching the portions of the spool to the roll is simple, convenient, and inexpensive.

I claim—

1. In combination with a curtain-roll provided or not with a mechanism for holding the shade at any desired height, the bifurcated spindle H, provided with a spring, I, for increasing or reducing its friction upon the interior of the roll, substantially as and for the purpose described.

2. The spool composed of the disk *d*, with its flange *e*, and the ratchet *h*, with its flange *i*, in combination with the reduced portion *f* of the roll between them, when constructed substantially as set forth.

Witness my hand this 24th day of March, 1879.

ANSEL F. TEMPLE.

In presence of—

DAVID MCLAUGHLIN,

M. L. STEPHENSON.