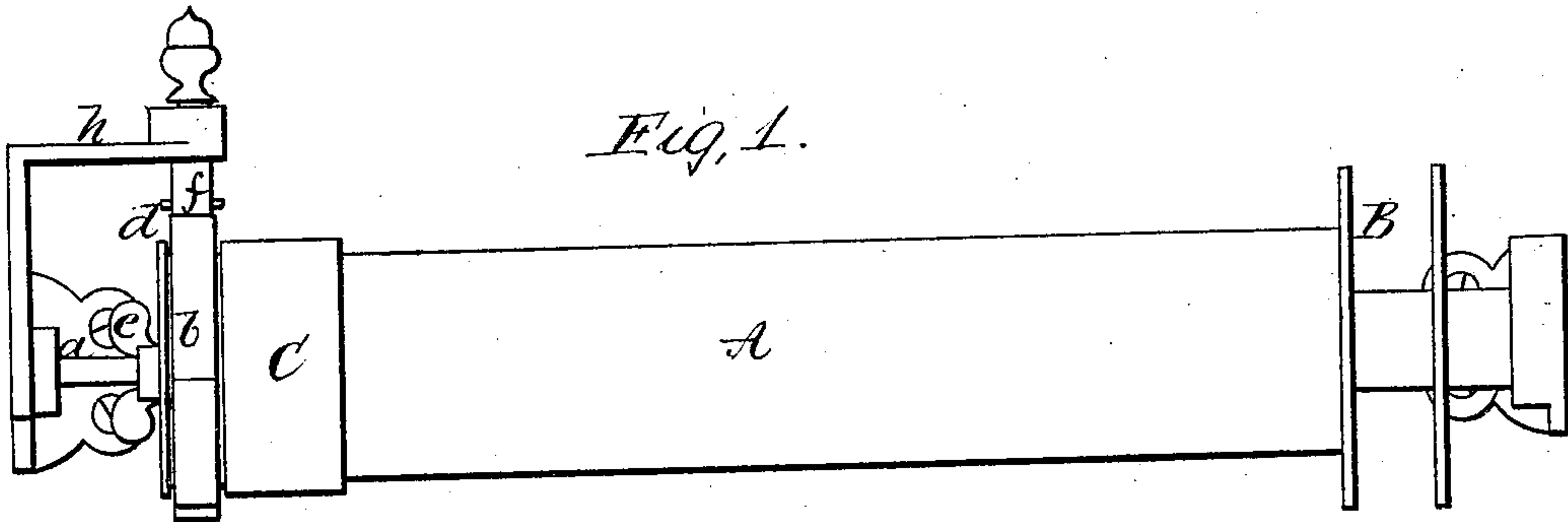


*J. P. Crawford.*

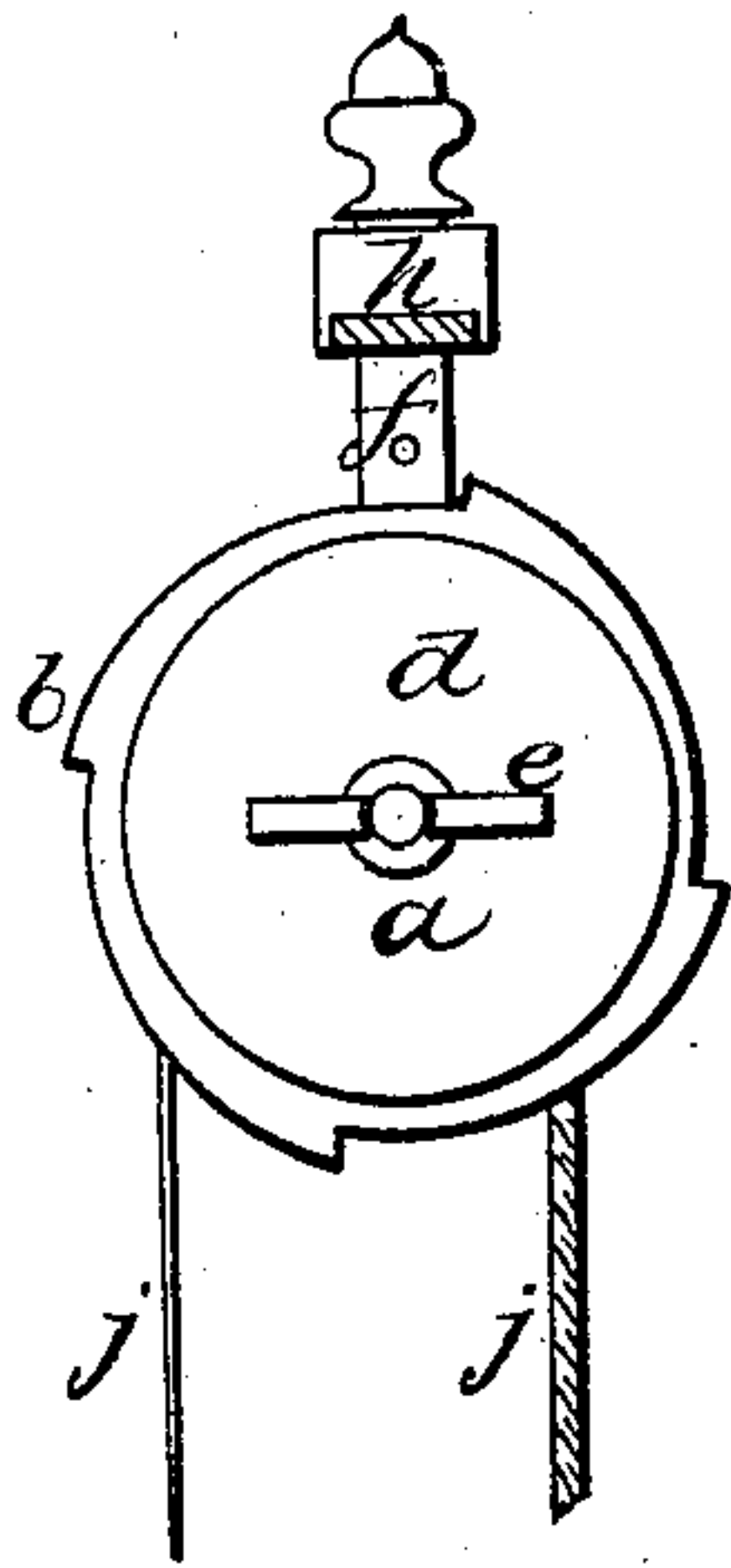
*Curtain Fixture.*

*N<sup>o</sup> 98,039.*

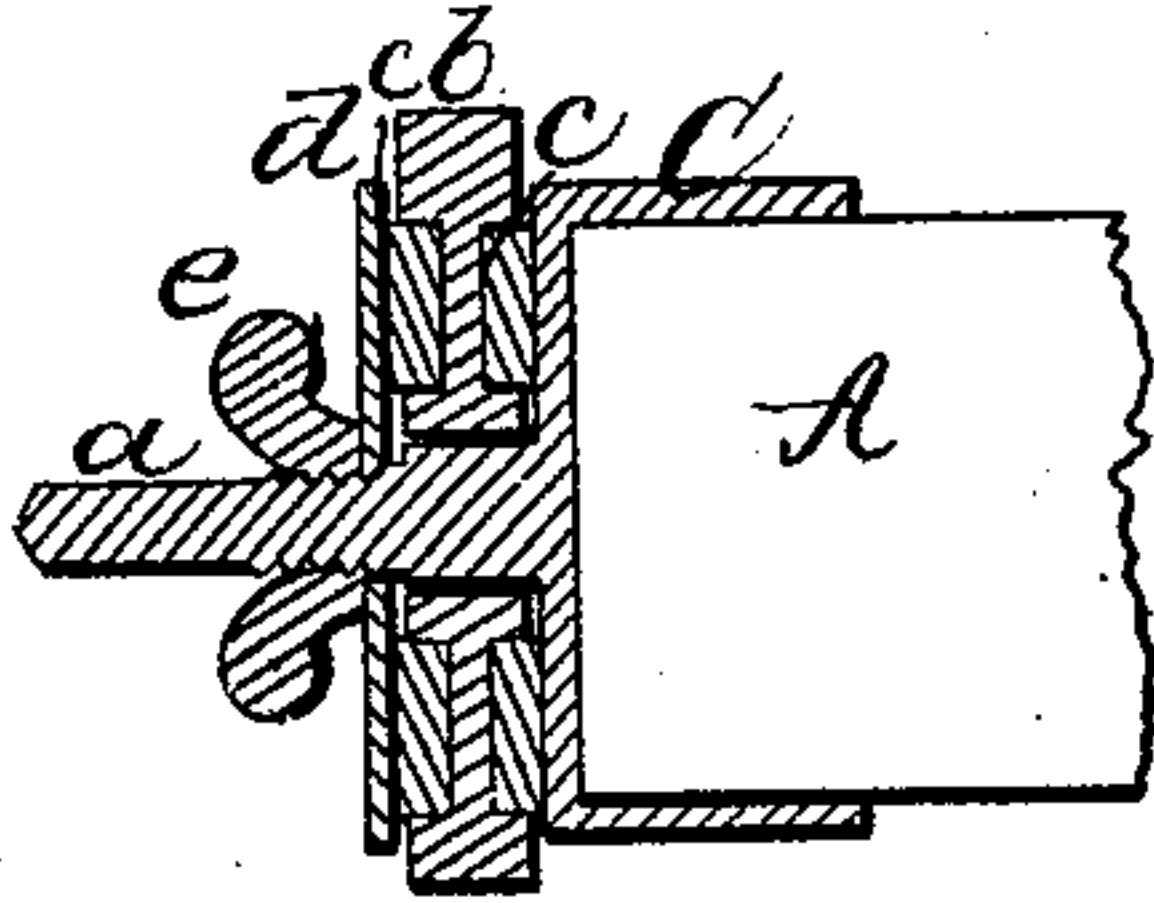
*Patented Dec. 21, 1869.*



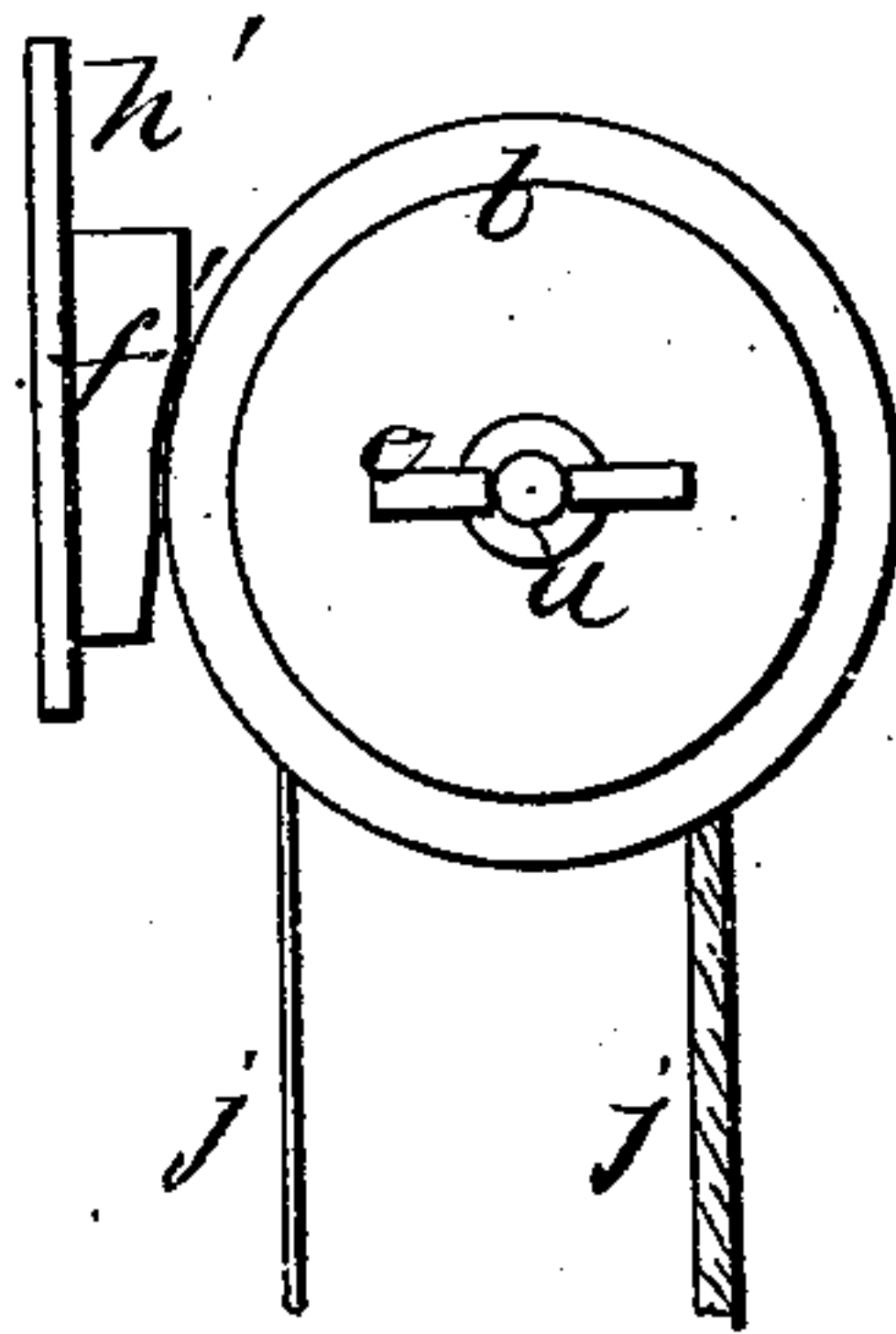
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Witnesses,  
Nettie Shepard  
Celia A Shepard.*

*Inventor,  
J. P. Crawford  
By James Shepard*

# UNITED STATES PATENT OFFICE.

J. P. CRAWFORD, OF CARMICHAELS, PENNSYLVANIA.

## IMPROVED CURTAIN-FIXTURE.

Specification forming part of Letters Patent No. 98,039, dated December 21, 1869.

*To all whom it may concern:*

Be it known that I, J. P. CRAWFORD, of Carmichaels, in the county of Greene and State of Pennsylvania, have invented certain Improvements in Curtain-Fixtures, of which the following is a specification.

My invention consists of an india-rubber or other elastic washer arranged on one or both sides of a suitable disk on the end of a curtain-roller, so as to retain the curtain in place by friction on the sides of said washers, as herein-after more fully described.

It also consists in the arrangement of a friction curtain-roller, whereby the friction which retains the curtain in place does not bear upon the roller when said roller is rotated by the cord for raising the curtain.

In the accompanying drawings, Figure 1 is a front elevation of my invention; Fig. 2, an end view of the same, with a portion of the bracket removed to better show the end of the roller; Fig. 3, a longitudinal section of the parts containing the friction-washers; and Fig. 4, an end view of same, with a sliding wedge substituted in place of the sliding stop-pin shown in Figs. 1 and 2.

A designates an ordinary curtain-roller, and B its spool, attached to one end. On the opposite end is firmly secured a socket, C, provided with a solid end and a shaft, *a*. On the shaft *a* is loosely fitted a disk, *b*, having an annular recess on both sides, in which recesses are fitted india-rubber washers *c c*, Fig. 3. If desired, one of the washers *c* may be dispensed with. These washers *c c* are a little thicker than the depth of the annular recesses in which they fit, so that said washers project outward from the sides of the disk *b* and bear against the end of the socket C and the side of the flange *d*, which flange is fitted so as to be adjusted endwise on the shaft *a*, but does not revolve on the same.

A portion of the shaft *a* is threaded and provided with a thumb-nut, *e*, by means of which thumb-nut the washers *c c* can be made to bear against the flange *d* and socket C, so as to create as much friction as is necessary to hold the weight of the curtain, and also to follow up all wearing away of the washers that may be occasioned by continued use.

The periphery of the disk *b* is provided with ratchet-teeth, and immediately above said disk

is a sliding pin, *f*, which freely rises and lowers in an arm of the bracket *h*.

In use the roller is placed in the brackets, as shown in Fig. 1, and the curtain *i* and cord *j* are attached in any proper manner. The pin *f* engages with one of the ratchet-teeth on disk *b* and prevents the same from rotating toward the bracket *h*, while the friction of the washers *c c* (if the thumb-nut *e* is properly adjusted) is sufficient to retain the curtain in place.

To lower the curtain *i*, simply pull upon the same, and the roller A, socket C, shaft *a*, and flange *d* will revolve and unroll the curtain while the disk *b* is held by the pin *f*. To raise the curtain, pull upon the cord *j*, when the pin *f* will slide over the ratchet-teeth of disk *b* and allow the same to easily revolve, thus raising the curtain without any friction of the washers, and consequently with but little strain upon the cord *j*. If desired to have the curtain roll from the other side of the roller, the disk *b* can be taken off and changed, so that the teeth of the ratchet face the other side of the pin *f*.

As an equivalent for the pin *f*, a sliding wedge, *f'*, Fig. 4, might be arranged in the bracket *h'*, so as to freely rise and lower, while the periphery of the disk *b* should be plane. As the curtain is pulled down, the wedge *f'* will be drawn between the bracket *h'* and the disk *b* and hold said disk from rotating; but as the cord is pulled and the roller rotated in the opposite direction the disk will raise the wedge *f'* sufficiently to allow the disk to revolve freely, and thus remove the friction of the washers *c c*.

If desired, the disk *b* and its appendages may be placed by the side of the spool B.

The first part of my invention—viz., the employment of the friction-washers, with their disk, flange, and thumb-nut—might be used with the disk fixed so as not to revolve in either direction. This part alone would be an improvement over others, as the thumb-nut enables the friction to be adjusted to light or heavy curtains, so that there is no more friction used than is requisite to support the curtain.

Ordinary friction curtain-rollers are objectionable, as in raising it is necessary to raise the weight of the curtain together with the amount of friction requisite to hold the same



in place. This not only requires a strong pull at the cord, but the strain on the same is such as to soon cause it to wear and break, much to the annoyance of the operator. By my invention the above objection is entirely overcome.

I claim as my invention—

1. The combination of the thumb-nut *e*, shaft *a*, flange *d*, disk *b*, washers *c c*, and socket *C*, all constructed and operating substantially as and for the purpose described.

2. In combination with the foregoing, the sliding pin *f*, or it equivalent, constructed and operating as described, whereby the disk *b* can be revolved in a given direction only, substantially as described, and for the purpose set forth.

J. P. CRAWFORD.

Witnesses:

JAMES S. PATTERSON,  
H. BOONE.