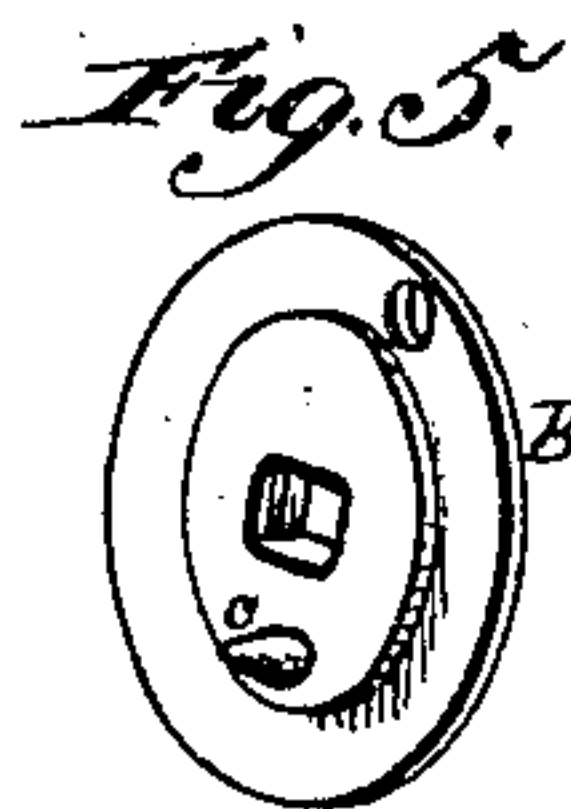
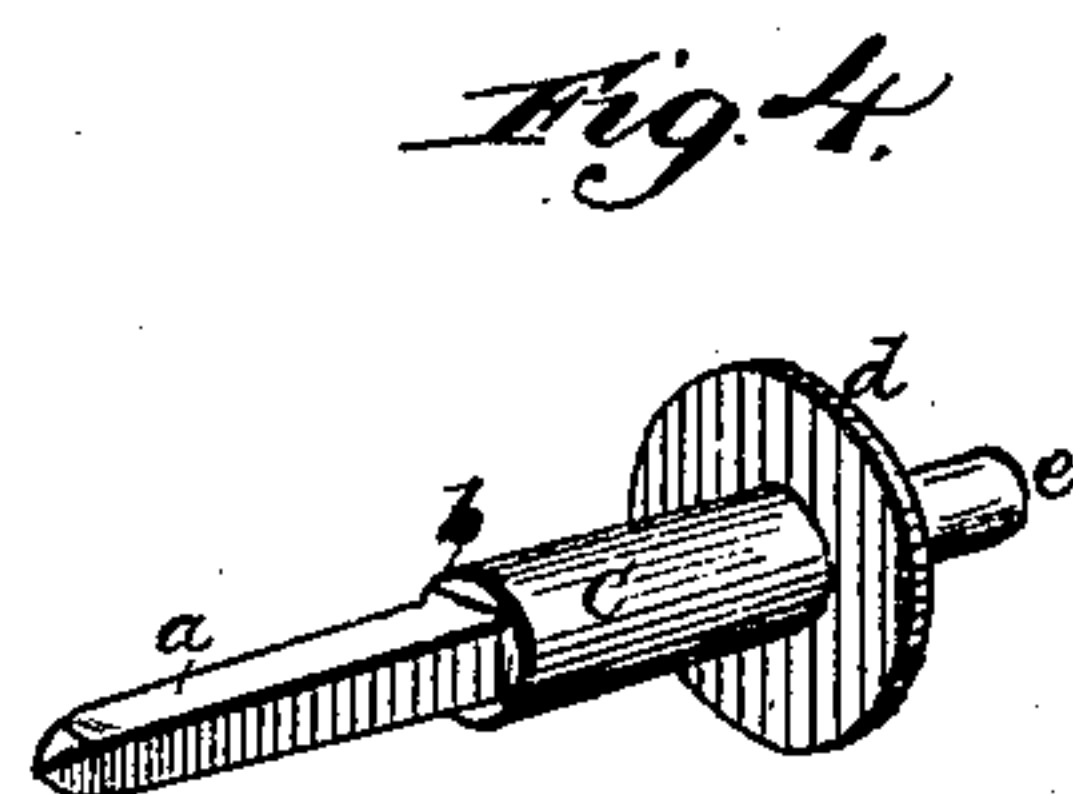
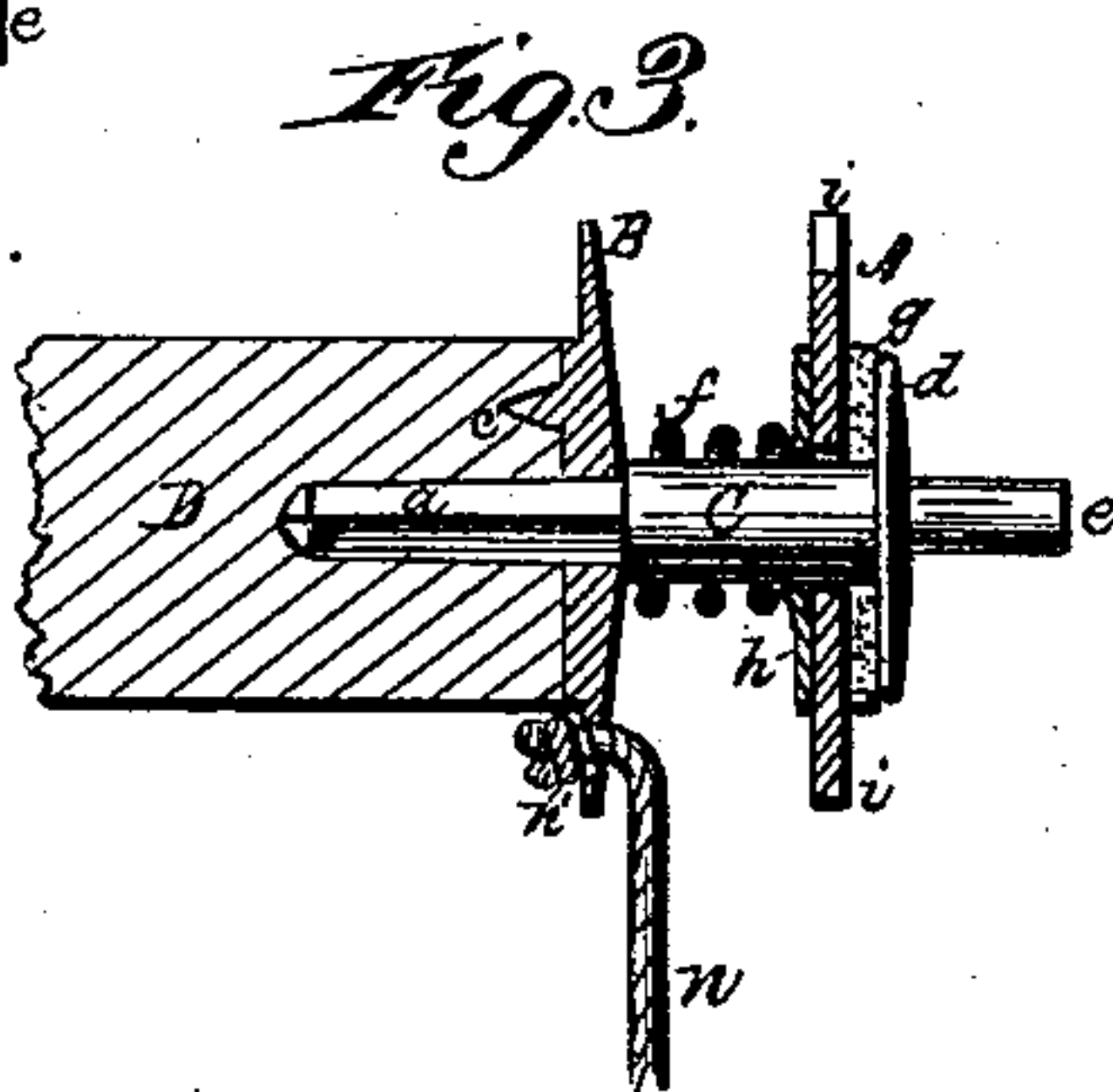
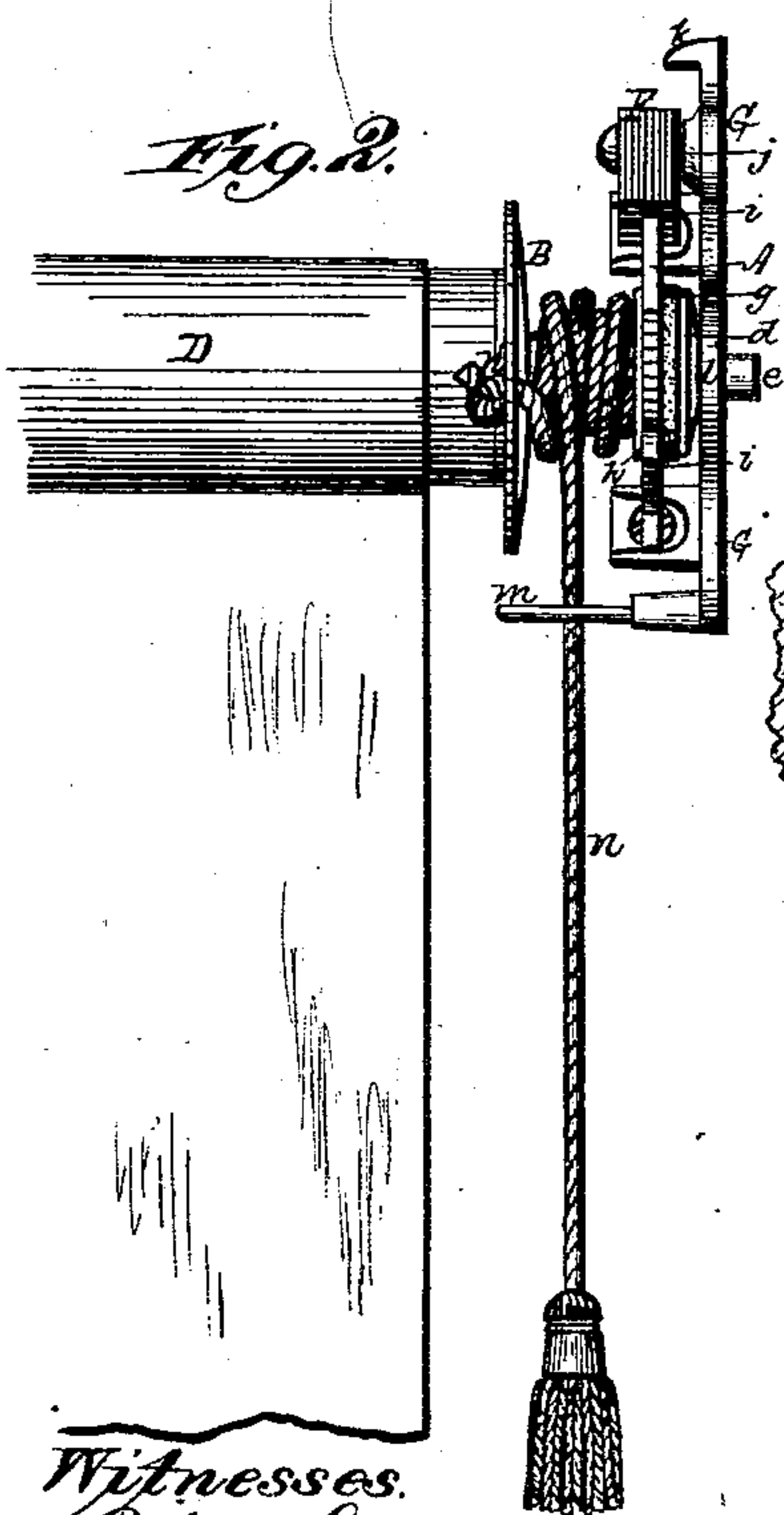
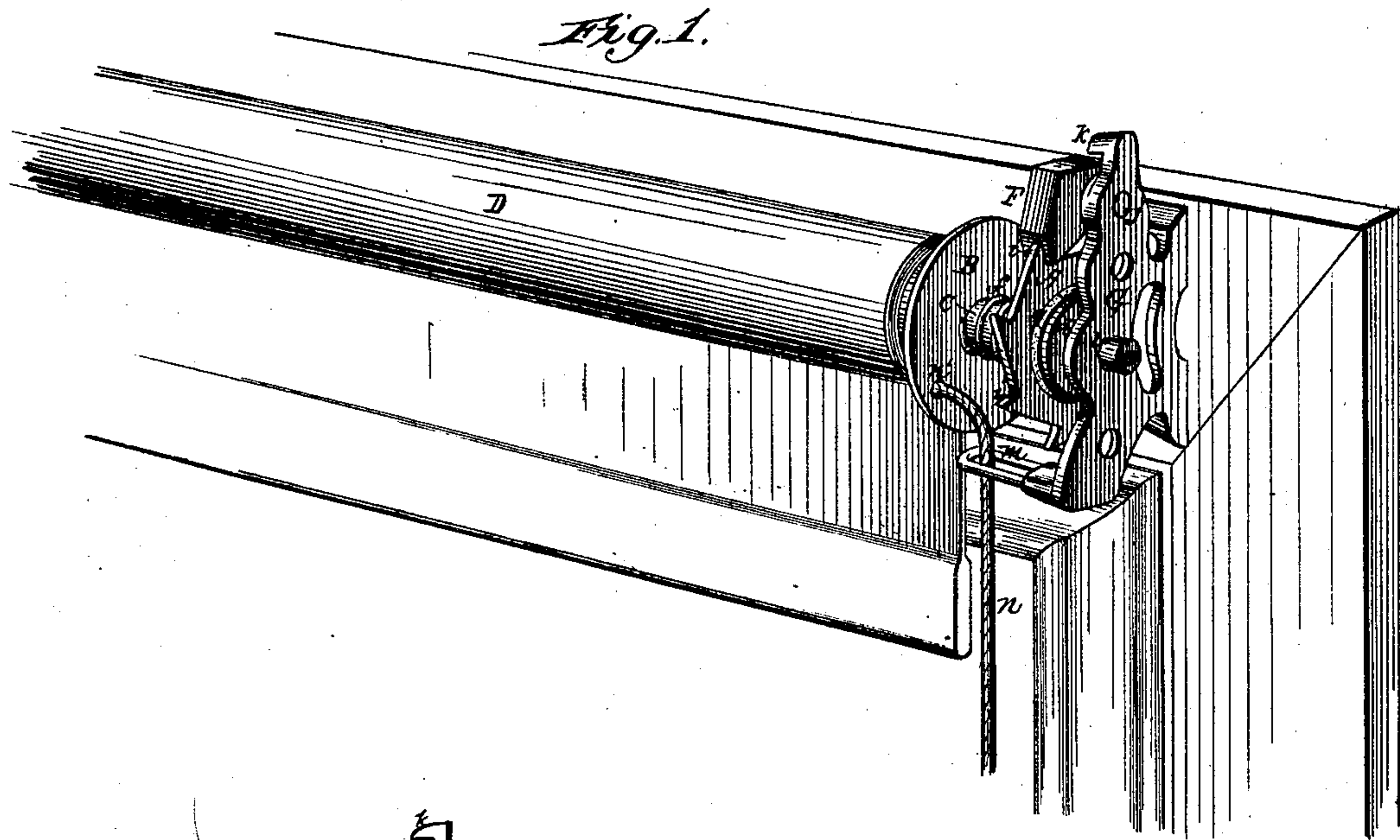


(No Model.)

J. SHOREY.
Curtain Fixture.

No. 243,465.

Patented June 28, 1881.



Witnesses.
Robert Emmett
E. A. Dick

Inventor.
John Shorey
By *M. Bailey* Atty.

UNITED STATES PATENT OFFICE.

JOHN SHOREY, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO THE SHOREY
SPRING BED AND SHADE ROLLER COMPANY, OF SAME PLACE.

CURTAIN-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 243,465, dated June 28, 1881.

Application filed April 26, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN SHOREY, of Lowell, in the State of Massachusetts, have invented certain new and useful Improvements in Shade-Rollers, of which the following is a specification.

My invention relates to that kind of shade-roller which is operated by a cord to roll up the shade and is provided with a friction disk or device which sustains the shade at any height and offers resistance to the unrolling of the shade, but which is inoperative and out of action when the roller is revolved in a direction to roll or wind up the shade.

My invention consists in a certain novel construction and arrangement of devices for this purpose, which will be first described by reference to the accompanying drawings and then specifically pointed out in the claim.

In the drawings, Figure 1 is a perspective view of so much of a shade-roller, shade, and roller-supporting bracket as needed to illustrate my invention. Fig. 2 is a front elevation of the same. Fig. 3 is a longitudinal central section through that portion of the roller to which my improvement is applied. Fig. 4 is a perspective view of the spindle which carries the friction-disk and cord-spool. Fig. 5 is a perspective view of the plate which is fitted to one end of the roller and forms one of the heads of the cord-spool.

The spool for the cord to wind on is formed by the two plates or disks A B, and spindle C, which passes through these disks. That end of the spindle which is driven into the roller D is made square, as indicated at *a*, and at the junction of the square part with the cylindrical part of the spindle is a small shoulder, *b*, which bears against the plate B, said plate fitting the end of the roller, and having on its inner face a point or spur, *c*, which, when the spindle is driven home, is forced into the end of the roller, as seen in Fig. 3, and prevents movement of the plate independently of the spindle and roller. The spindle, near its outer end, is formed with a flange, *d*, leaving sufficient length of spindle beyond for a journal, *e*. The plate or disk A is what I have hereinbefore termed a "friction-disk." It is mounted

and is pressed up against the flange *d* by a spring, *f*, which encircles the spindle between the two disks A B, as shown. Between the friction-disk and the flange *d*, I put a washer, *g*, of felt or other suitable material, in order to prevent noise and also to increase the friction, and I also interpose between the spring *f* and the friction-disk a metallic or other suitable washer, *h*, to prevent the spring from rubbing against the said disk. The friction-disk, for the purpose hereinbefore referred to, should be provided with suitable retaining-projections, which, in this instance, consist of a series of ratchet-teeth, *i*, formed upon the periphery of the disk and adapted to operate in connection with a pivoted or vibratory pawl, F, on the bracket G. Said pawl, preferably made of wood or other sound-deadening material, is pivoted at *j* to the bracket in a position where its free end will overhang and rest upon the notched or toothed periphery of the friction-disk. The bracket, at a point above the pawl, is provided with a projection, *k*, to prevent the pawl from getting out of place. It is also provided with a bearing, *l*, for the spindle-journal, and with a guide eye or staple, *m*, for the cord *n*, which prevents the latter from getting off the spool. The cord is made fast at *n'* to the roller. The bracket and bearing at the other end of the roller may be of any usual or suitable kind, and are not shown.

Under the arrangement described it will be noted that the shade is held at any point by means of the pawl engaging the friction-disk, and thus causing the roller, by reason of the frictional connection between its spindle and the friction-disk, to uphold the shade.

In Fig. 1 the shade is rolled up and the cord entirely unwound from the spool. In order to unroll the shade it is pulled down, in which operation the resistance offered by the friction-disk (which is held stationary by the pawl) prevents the shade from unwinding too freely, and as the shade is unrolled the cord is wound upon the spool, as indicated in Fig. 2. If, now, it be desired to raise the shade, the cord is pulled down, which has the effect of rolling up the shade, the roller in so doing moving in a direction which will permit the pawl to ride freely over the ratchet-teeth of the friction-disk.

tion-disk, which thus can move with the roller without restraint, so that the cord is relieved from overcoming any friction due to disk A, and is required only to lift the weight of the shade. The means employed by me for accomplishing this result are readily manufactured and cheap, and their arrangement is such as to insure a device which, as a whole, is simple, not liable to get out of order, and entirely effective.

I am aware that a toothed friction-disk has before been mounted upon the spindle of a shade-roller, beyond the outer head of the cord-spool, with an interposed spring between said head and the disk, and this I do not claim. Under my improved arrangement the friction-disk becomes one of the heads of the spool, which is not the case in the device referred to.

What I claim, and desire to secure by Letters Patent, is—

The combination, with the roller, spindle formed with flange and journal, and the bracket provided with pawl and cord eye or staple, as described, of the plate B and the toothed friction-plate, constituting the heads of the cord-spool, the spring interposed between said plates, and the felt or friction-producing washer interposed between the friction-plate and the flange on the spindle, these parts being constructed and arranged for joint operation substantially as herein shown and set forth.

In testimony whereof I have hereunto set my hand this 22d day of April, 1881.

JOHN SHOREY.

Witnesses:

J. Y. BRADBURY,
JOSEPH MILLER.