

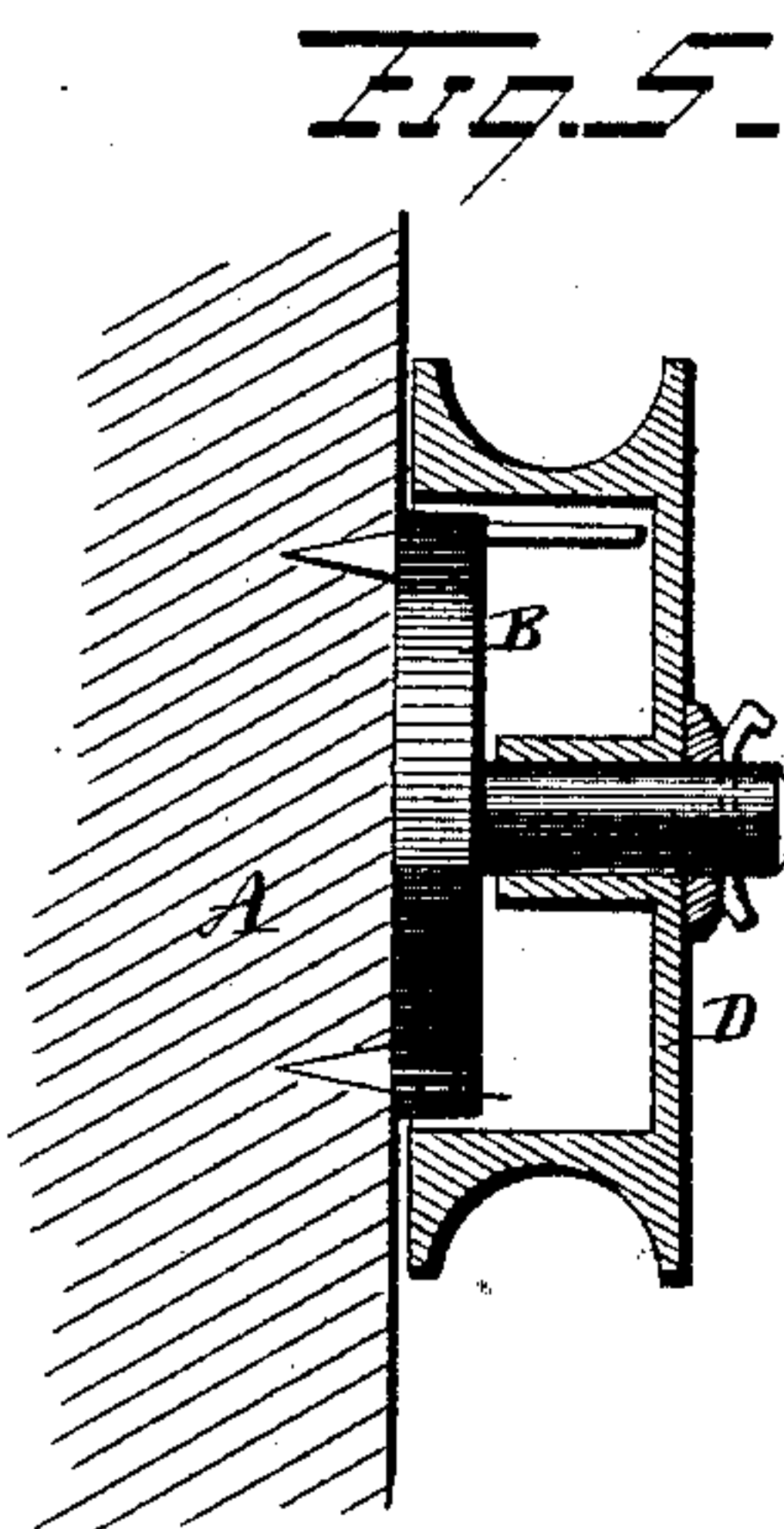
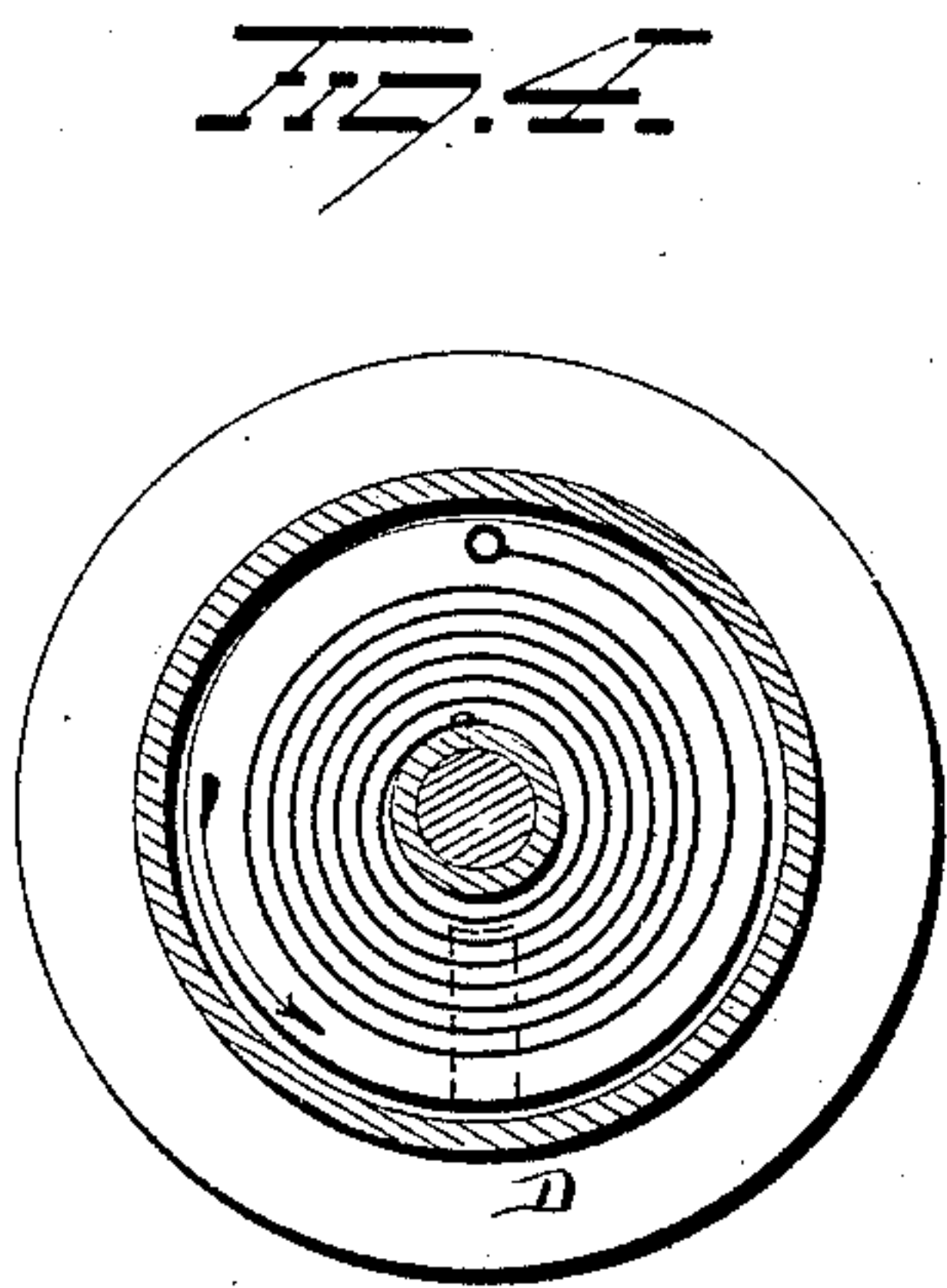
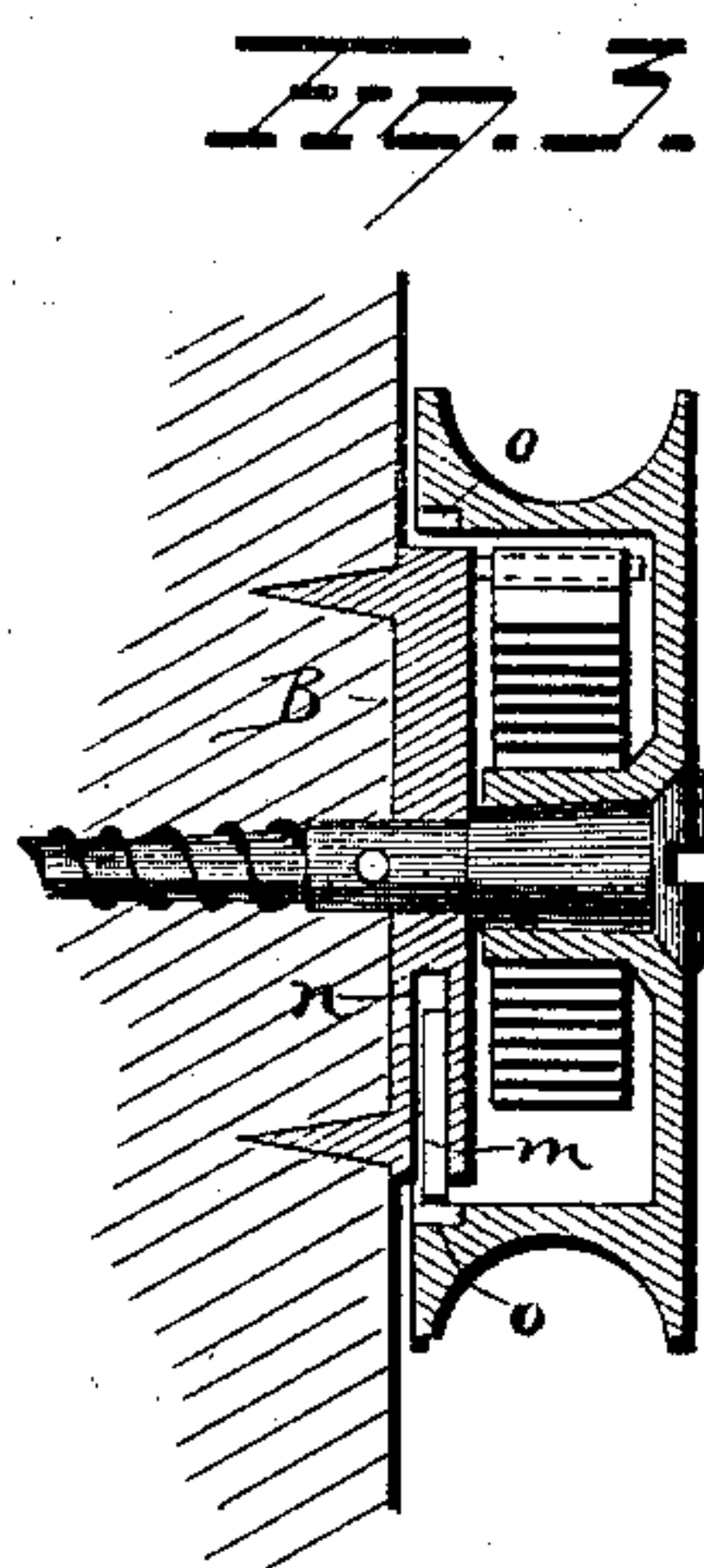
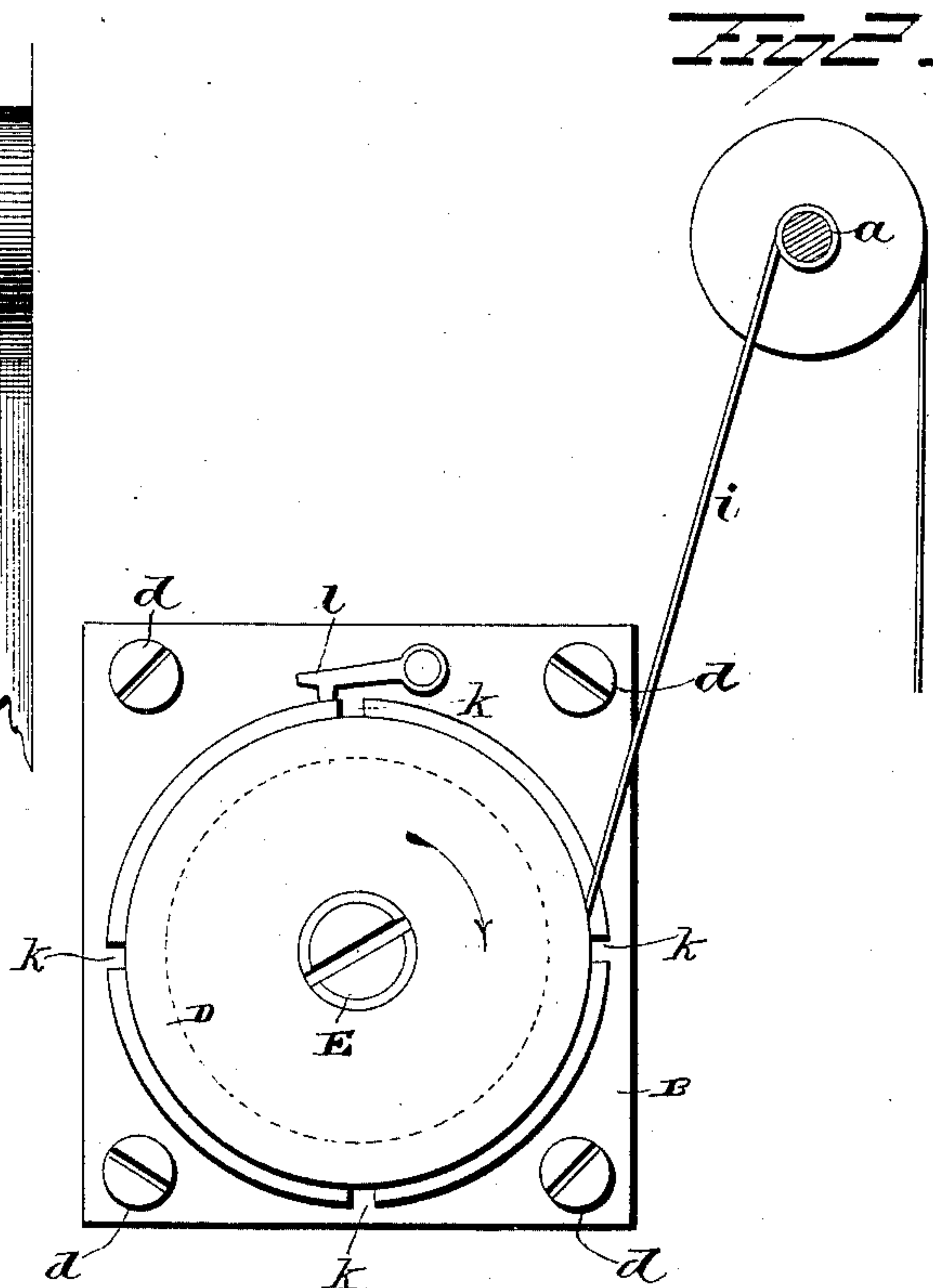
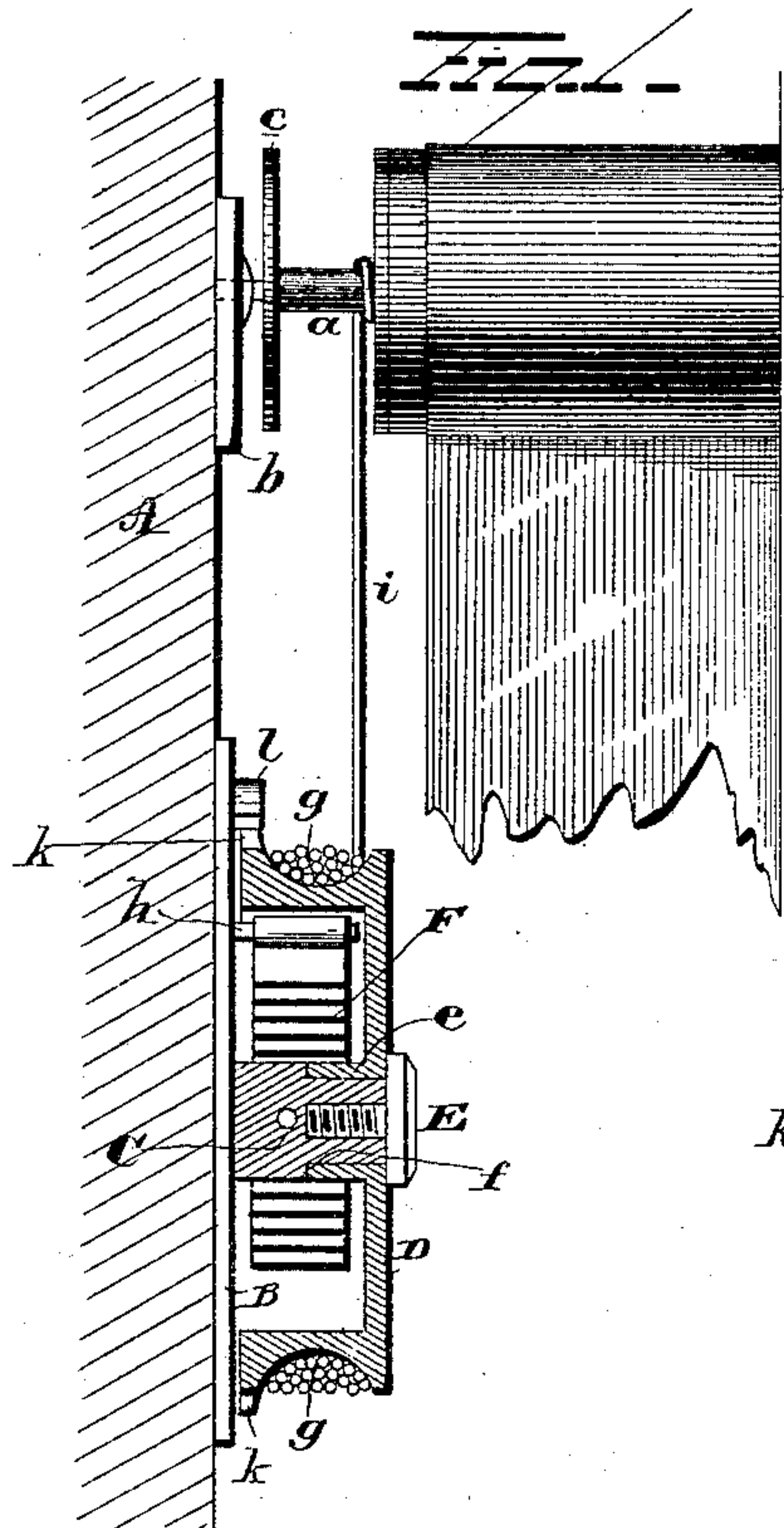
(No Model.)

J. HILDITCH.

SELF ACTING MECHANISM FOR SHADES AND BLINDS.

No. 315,029.

Patented Apr. 7, 1885.



WITNESSES

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SELF-ACTING MECHANISM FOR SHADES AND BLINDS.

SPECIFICATION forming part of Letters Patent No. 315,029, dated April 7, 1885.

Application filed September 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, JACOB HILDITCH, a subject of the King of Norway, residing in Christiania, in the Kingdom of Norway, have invented certain new and useful Improvements in Self-Acting Mechanism for Shades and Blinds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in devices for automatically raising window-curtains, the object being to provide a device which may be easily and readily applied to curtain-fixtures of ordinary construction, and which shall be simple and economical in construction and free from all liability of getting out of order.

With these ends in view my invention consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional view of my improvement. Fig. 2 is a front view thereof, and Figs. 3, 4, and 5 are modifications.

A represents a window-frame, in the upper portion of which is mounted a curtain-pole, *a*, the ends fitting into bearings *b*, said pole *a* being provided near one end with a vacant portion, and, if desired, with a disk, *c*, said pole forming a reel for the cord to wind on, as will be hereinafter explained, the disk *c* serving to prevent the cord from getting on the end of the pole and interfering with its turning in the bearing.

To the frame A is secured a metal plate, B, to the center of which is secured or formed integral therewith the stud or projection C, the said plate B being secured to the frame by means of the screws *d*.

On the plate B is adapted to fit the roller D, centrally provided with the inwardly-extending collar, *e*, which fits on the stud C and allows the roller to turn thereon, the stud being provided with a shoulder, *f*, against which fits the end of the collar *e*, and prevents the roller from bearing against the front face of the plate B. The rim of the roller is preferably grooved or hollowed out, as shown at *g*, and in vertical

line with the reel *a*, said roller being retained in its proper position by means of a screw, E, fitting into a screw-threaded hole in the stud C, the head of the screw fitting against the outer face of the roller, but not tight enough to prevent the roller from turning. Within the roller is a coiled spring, F, the outer end of which is secured to a pin, *h*, formed on or secured to the plate B, the inner end of the spring being secured to the collar or flange *e*, formed on the roller. When the roller is turned in one direction, the spring, being secured to the collar, is uncoiled, and as soon as the roller is released the spring immediately returns to its normal condition and turns the roller in the opposite direction. The curtain-pole *a* is also turned by the spring in a similar manner by means of the cord *i*, which is secured thereto, and which is secured to the roller, said cord being adapted to be wound around the curtain and the grooved rim of the roller. When the curtain is lowered, the roller is turned by means of the cord *i* and the spring F uncoiled; but, as before explained, if the curtain is released, the spring immediately turns the roller, winding the cord thereon, and thereby raising the curtain. The inner edge of the roller is provided with notches *k*, in which is adapted to fit a lug or projection on the one of a pawl pivoted to the plate B. When the roller is revolved slowly, the pawl catches in the notches and holds the roller stationary; but when the roller is revolving rapidly the pawl rides across the notches and allows the roller to continue revolving.

I would have it understood that I do not limit myself to the exact construction shown and described, as many slight changes might be made therein without departing from the spirit of my invention—as, for instance, instead of forming a stud or bearing on the plate, a screw is passed through the collar and through the plate B into the frame A, holding the parts in position, as shown in Fig. 3. Again, the stud may be used and a washer and pin employed to keep the roller in position, as shown in Fig. 5. Again, instead of employing a pawl, as shown in Figs. 1 and 2, a sliding pin, *m*, may be used in lieu thereof, said pin fitting in a groove, *n*, in the plate B,

adapted, when the roller is revolving slowly, to drop a notch or recess, *o*, formed on the inner edge of the roller.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a curtain and curtain-pole, of a spring-actuated roller journaled on a stud secured to the window-frame, and provided with a notched periphery, a pawl for engaging the notched periphery of the roller, and a cord connecting the roller and curtain-pole.

2. The combination, with a plate secured to the window-frame and provided with a stud, of a pulley provided with an inwardly-ex-

tending collar fitting on said stud, and having its periphery grooved, a screw fitting in said stud and against the pulley, a spring secured to the pulley and plate, a curtain-pole, a cord connecting the latter with the pulley, and a pawl secured to the plate and engaging the notches formed in the pulley, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JACOB HILDITCH.

Witnesses:

SÖREN H. STROM,
JOHAN HOPZAARD.