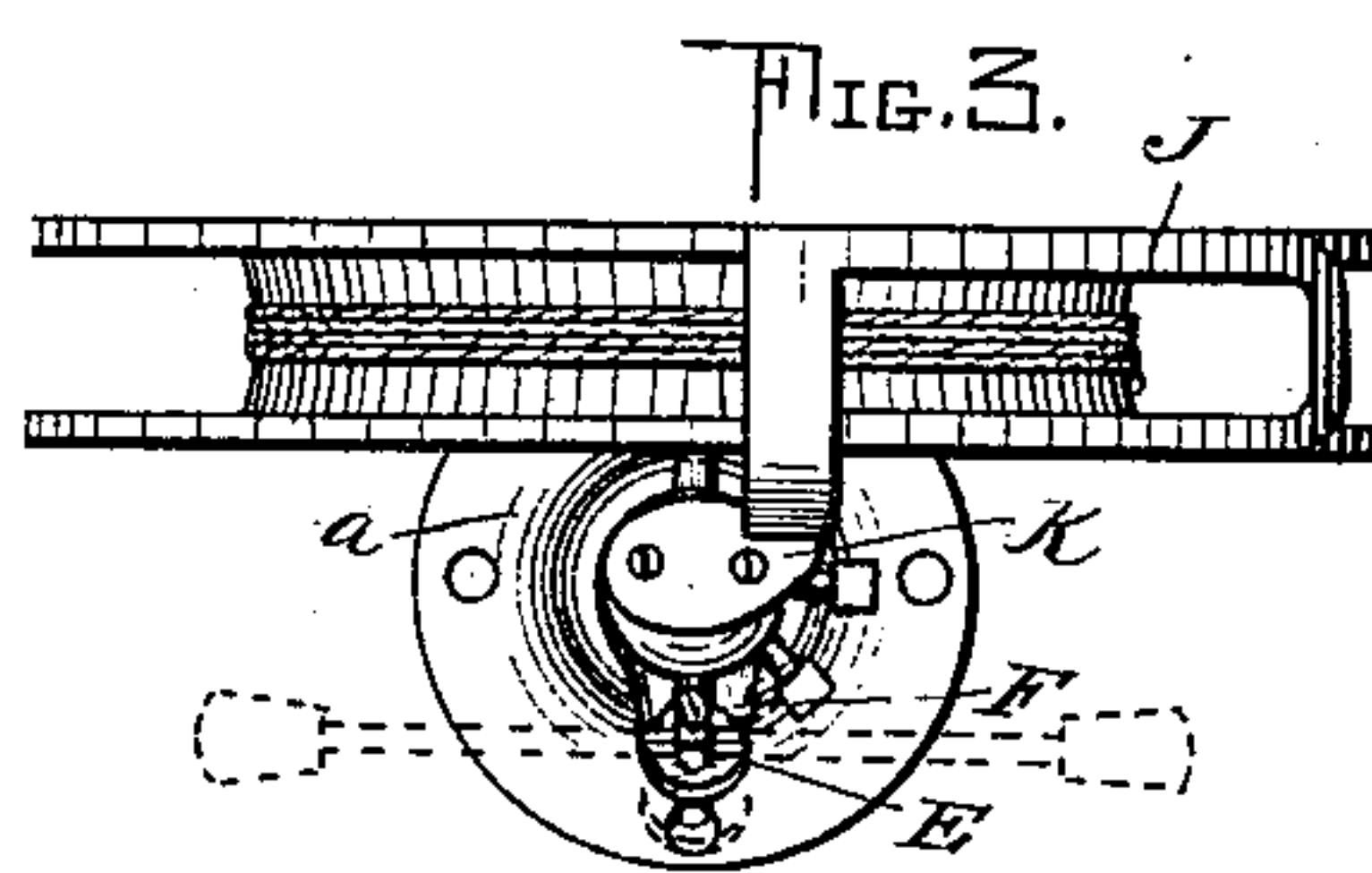
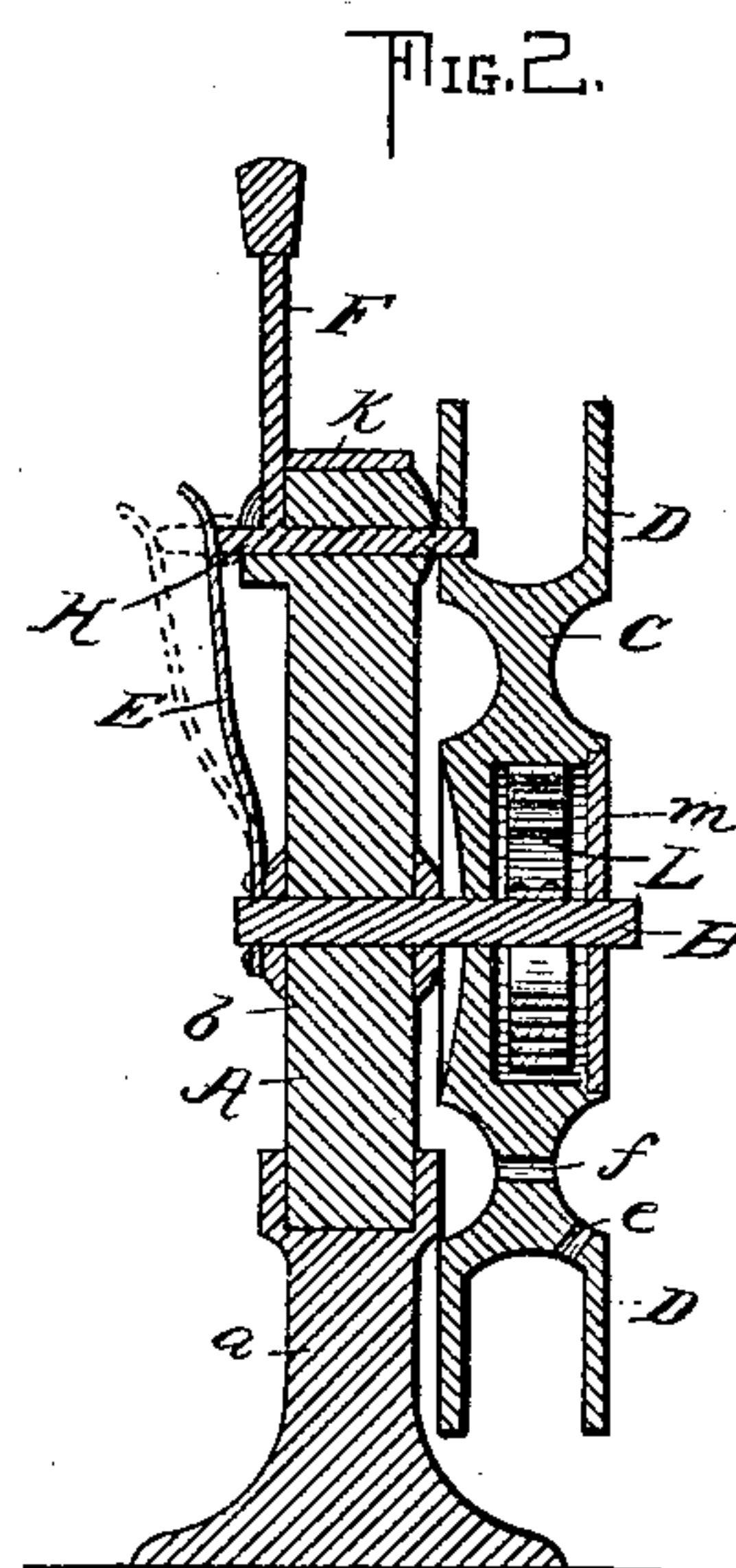
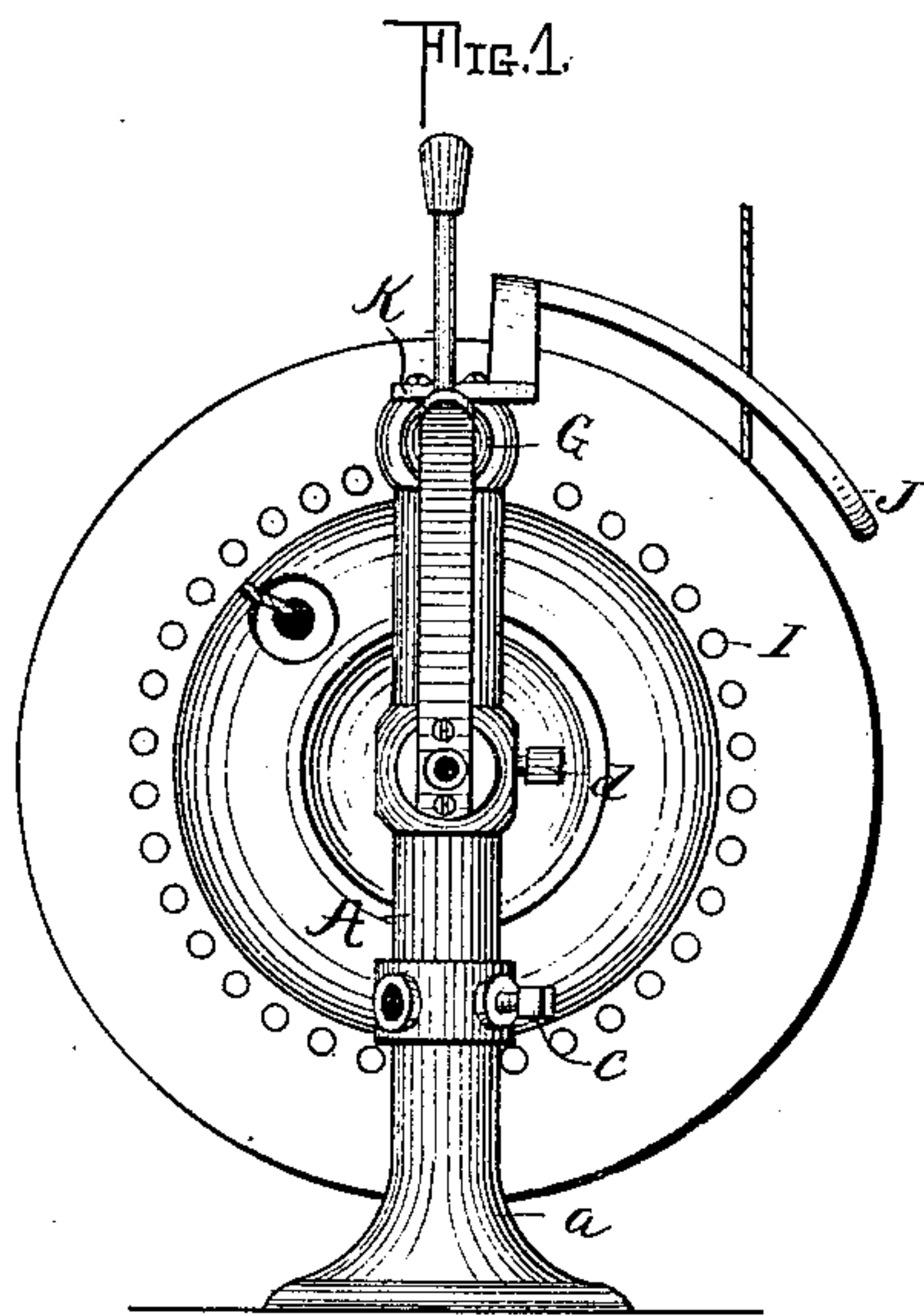


(No Model.)

J. R. H. HINTON.  
SPRING ACTUATED DRUM.

No. 329,836.

Patented Nov. 3, 1885.



WITNESSES.

Wm. Rheem.

David H. Mead.

INVENTOR.

Joseph R. H. Hinton

By W. E. McIntire

ATTY.

# UNITED STATES PATENT OFFICE.

JOSEPH R. H. HINTON, OF BALTIMORE, MARYLAND, ASSIGNOR TO THE  
CONTINENTAL STORE SERVICE COMPANY, OF NEW YORK, N. Y.

## SPRING-ACTUATED DRUM.

SPECIFICATION forming part of Letters Patent No. 329,836, dated November 3, 1885.

Application filed October 5, 1885. Serial No. 179,017. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH R. H. HINTON, a citizen of the United States, residing at Baltimore, Maryland, have invented new and useful Improvements in Spring-Actuated Drums, of which the following is a specification.

This invention relates to certain improvements in store-service apparatus of the class in which the cars carrying the cash or parcel run upon a way which is raised and lowered at one end to give the required inclination to the track, and the car taken from and restored to the way by means of one rope; and the invention relates particularly to means for taking up the slack given the rope in the various operations of the device. Heretofore some difficulty has been experienced in the use of these devices, caused by the swaying to and fro of the rope when slack, and its consequently imperfectly winding upon the drum intended for its reception; also, no convenient means has been provided for locking the drum upon which the rope is wound at any desired point in its revolution.

The object of the present invention is to provide a drum for taking up the slack of the operating-rope to be used in the same way as that shown in Patent No. 321,360, granted me on June 30, 1885, and which shall automatically guide the slack of the operating-rope to the drum and wind it thereon under all circumstances; and, further, the object is to provide simple means for locking the drum at any desired point in its revolution.

With these objects in view my invention consists, essentially, of a spring-actuated drum having a grooved periphery and a guide for directing the cord to the said drum.

Further, the invention consists in a novel locking device combined with said drum, consisting of a circular series of holes in the side of the drum, entered by a spring-actuated pin mounted upon the standard upon which the drum is secured; and, further, the invention consists in various details of construction, whereby the objects of the invention are accomplished.

In order that those skilled in the art to which my invention relates may thoroughly understand the construction and advantages of the same, I will now proceed to describe it in con-

nection with the accompanying drawings, in which—

Figure 1 is a side elevation of the device, the locking-pin being shown as in position to lock the wheel against turning. Fig. 2 is a central vertical section of the device, the section being taken in a line with and through the axle of the drum, the locking-pin being shown in full lines in a position to lock the drum against turning, and the dotted lines showing the same drawn out to allow the wheel to turn; and Fig. 3 is a plan view, the dotted lines showing the different positions of the lever for operating the locking-pin.

In the drawings, A represents a standard, preferably of cast-iron, and made up of the base portion, *a*, which is fastened rigidly to the floor, and has a socket in its upper end, and the upper portion, *b*, which rests in the socket in the upper end of the base-section, and may be turned therein to bring the parts which are carried by the said upper portion into any desired position relative to the apparatus which it is used in connection with. This upper portion is held in any position to which it may be turned by means of the set-screw *c*, which projects through the shell of the socket in the top of the section *a*, and bears against the lower end of the section *b*.

B represents a pin, which is set at right angles to the standard and secured thereto by means of a set-screw, *d*, which passes through the standard and bears against the said pin and holds it in place. The upper portion, *b*, of the standard is made thicker at the point where the pin B enters than at any other point for the purpose of qualifying it to successfully withstand the strain which may be imposed there. Upon this pin B is mounted the wheel or drum C, which is provided with the grooved periphery D, for the reception and retention of the rope which is wound upon it. This drum is provided with a central chamber which is closed by a plate, M, and in this chamber I place the coil-spring L, one end of which is fixed to the pin B and the other end to the side of the chamber, so that as the cord or wire is drawn from the drum the spring is contracted, and its resiliency serves to turn the drum in the opposite direction.

With a view to the prevention of imperfect



winding of the cord upon the drum, caused by swaying, &c., of the cord, I provide the guide J, which is secured to the standard A, and through which the cord passes in being wound  
5 upon or drawn from the drum.

The preferred means of attaching the end of the operating-rope to the drum is shown in Figs. 1 and 2 of the drawings. This consists in providing the tread and the central portion  
10 of the wheel with holes *e* and *f*, respectively, through which the rope is passed and secured at the side of the wheel by a button, cross-pin, or the like.

The means for securing the wheel against  
15 turning will now be described. The side of the wheel C is provided with a circular series of holes, I, which are entered by a pin, H, mounted on the top of the standard. This pin H is provided with a right-angular projection,  
20 F, for operating the same. A spring, G, is fastened at its lower end to the standard A, and its upper free end bears against the pin H, and constantly exerts a tendency to force the said pin into any one of the holes in the  
25 wheel which may be opposite the pin.

In order that the pin may be capable of being withdrawn from contact with the wheel by simply turning the right-angular portion F to one of the positions shown in dotted lines in Fig. 3,  
30 I provide that part of the standard with a projecting portion, K, having its front face provided with a V-shaped indentation, in the apex of which the vertical portion F rests when the pin is in engagement with the wheel C. The  
35 sides of the indentation are slightly curved outward, so that when the pin A is turned down at either side it will readily ride over the face of the indentations and withdraw the pin.

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

1. A drum for use in connection with a cash or parcel carrying apparatus of the kind described, provided with a grooved periphery,  
45 and a guide for directing the rope to the said periphery.

2. A drum for use in connection with store-service apparatus of the kind described, having a grooved periphery having combined  
50 therewith a guide for directing the rope to the said groove, and a locking device, substan-

tially as described, for retaining the said drum at any desired point in its revolution.

3. A drum for use in connection with a store-  
55 service apparatus of the kind described, having a grooved periphery, a coil-spring connected at one end to the drum and at the other to the pin on which the drum is mounted, and means, substantially as described, for locking  
60 the said drum at any point in its rotation.

4. In combination with the operating-rope of a store-service apparatus of the kind described, the drum provided with the grooved periphery, the standard A, which is made in sec-  
65 tions, one turning in the other, and means, substantially as described, for locking the said drum at any desired point in its revolution.

5. The combination of the standard A, the drum C, provided with the grooved periphery,  
70 and with a circular series of holes, and the spring-actuated locking-pin entering the said holes for the purpose of locking the said drum against turning.

6. The combination, with the standard A,  
75 provided with pin B, and an opening near its upper end for the passage of the locking-pin, said opening having a V-shaped mouth, as described, of the spring-actuated drum provided with openings in the side, and the spring-actu-  
80 ated locking-pin, substantially as described.

7. The combination, with a store-service apparatus of the kind described, of the spring-actuated drum provided with the circular series of holes, the standard A, provided with  
85 the pin B, and the opening near the top having the flaring mouth, the locking-pin having the upward extension, and the spring E, secured to the standard and bearing against the pin, substantially as described. 90

8. The combination, with the standard A, of the spring-actuated drum mounted thereon and provided with the grooved periphery, and having the openings in the periphery and side of the said drum for the reception of the rope,  
95 substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOSEPH R. H. HINTON.

Witnesses:

THOS. KELL BRADFORD,  
WILLIAM H. WINKELMAN.