

(No Model.)

T. M. KENNEY.  
CASH CARRIER.

No. 416,923.

Patented Dec. 10, 1889.

Fig. 1.

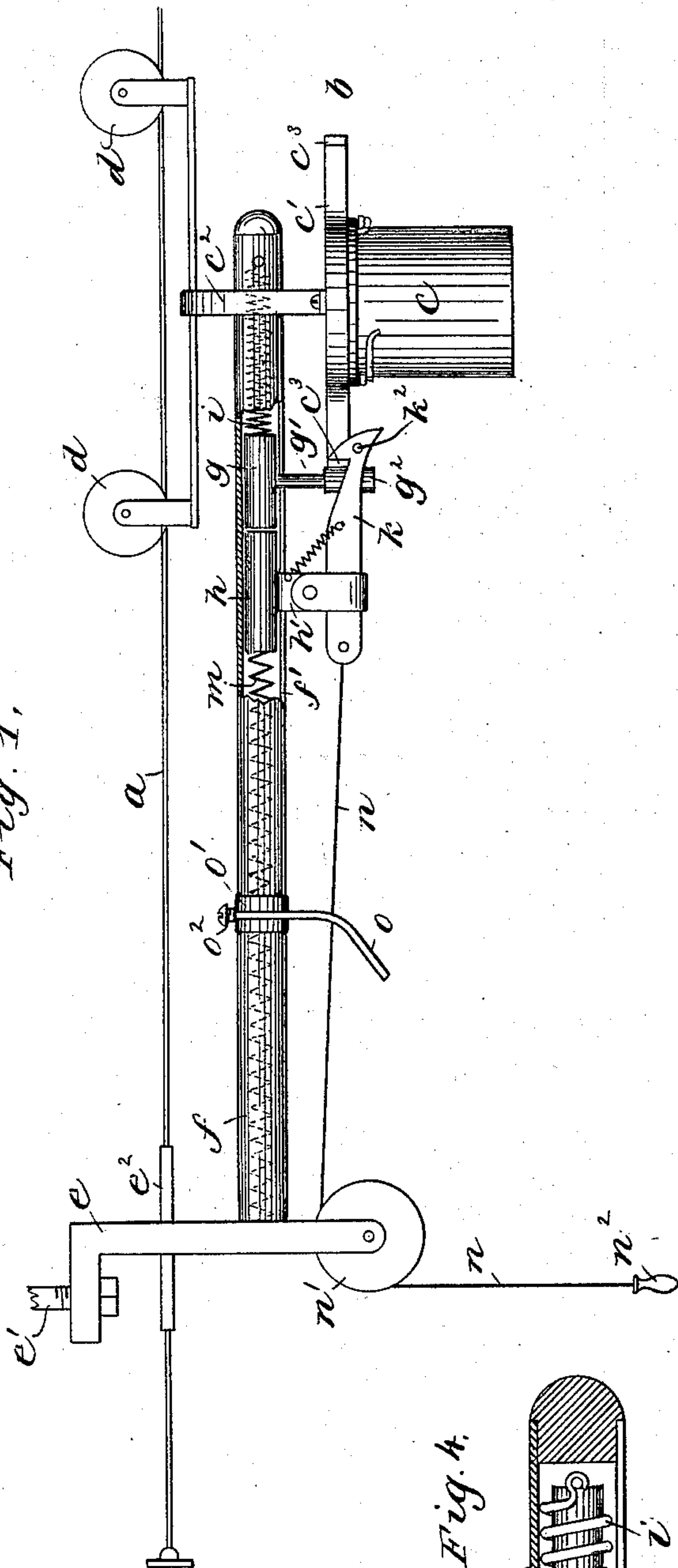


Fig. 2.

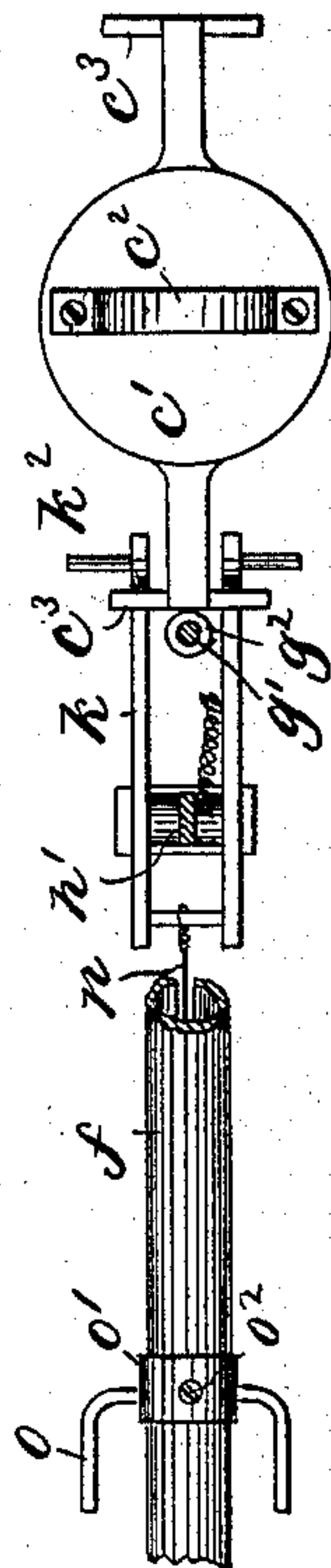


Fig. 3.

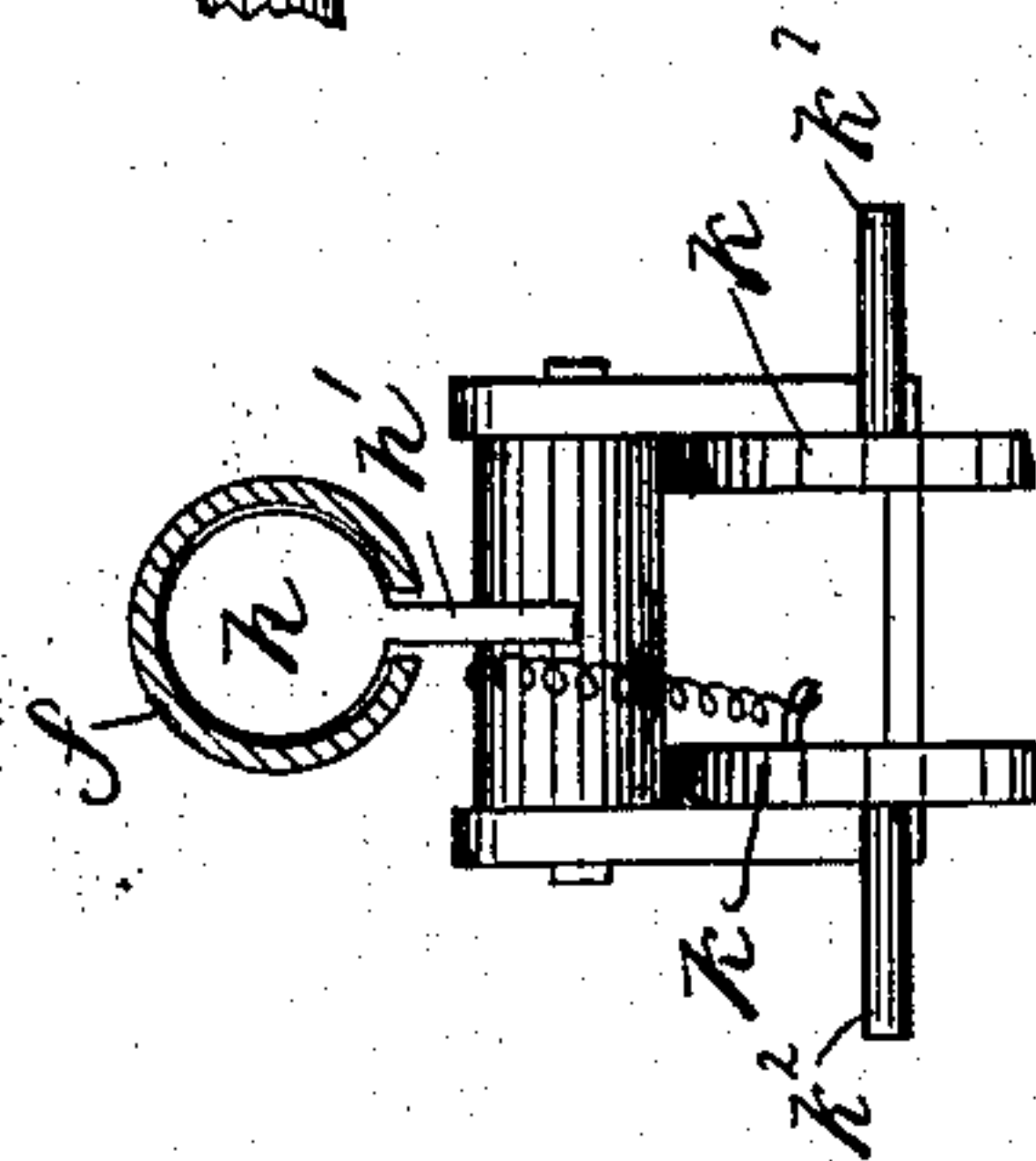
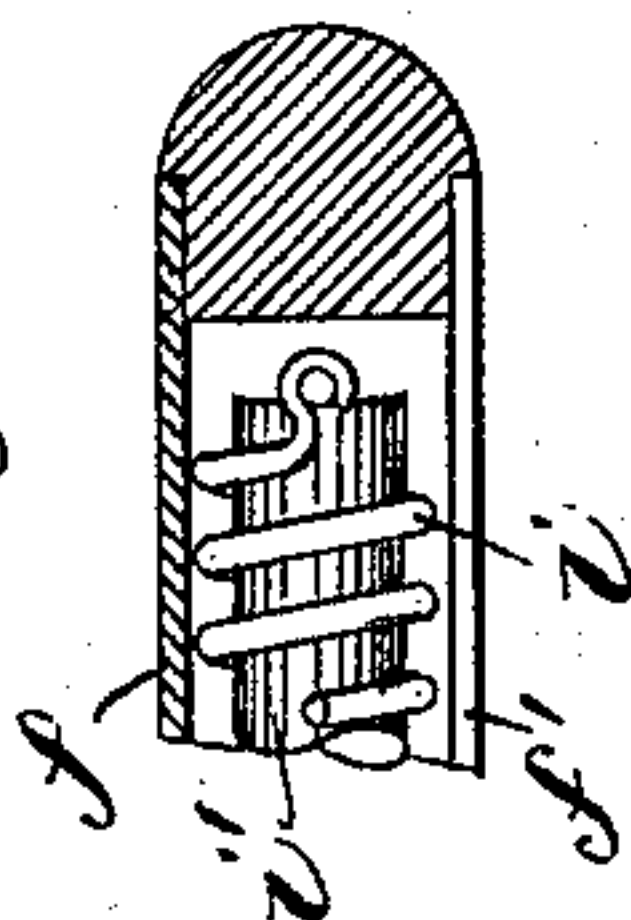


Fig. 4.



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# UNITED STATES PATENT OFFICE.

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AMERICAN STORE SERVICE COMPANY, OF NEW YORK, N. Y.

## CASH-CARRIER.

SPECIFICATION forming part of Letters Patent No. 416,923, dated December 10, 1889.

Application filed April 30, 1887. Serial No. 236,621. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS M. KENNEY, of Cambridge, county of Middlesex, State of Massachusetts, have invented an Improve-  
5 ment in Cash-Carriers, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention relates to an apparatus for  
10 conveying cash or small articles back and forth between different stations—as, for example, between the counters and the cashier's desk of a store.

My invention is embodied in an apparatus  
15 of that kind in which the carrier travels along a track which may consist of a stretched wire; and the invention relates especially to the means for propelling the carrier along the said track by giving it an impulse at the  
20 station at either end of the track sufficient to carry it across to the other station.

The invention consists in novel combinations of devices hereinafter specified.

Figure 1 is a side elevation of a portion of  
25 a cash-carrier apparatus embodying this invention, portions being broken away and shown in section; Fig. 2, a plan view of a portion of the device, and Figs. 3 and 4 sectional details on a larger scale.

30 The track *a* and carrier *b* may be mainly of the usual construction, said track being shown as a wire stretched tightly between the points or stations between which the carrier is to travel, and the said carrier consists,  
35 essentially, of a receptacle *c*, connected by suitable frame-work with wheels *d*, that run on the said track.

At the terminal stations propelling devices are provided, the mechanism of which is  
40 shown as supported on a bracket *e*, supported in proper position with relation to the track *a*, as by a rod *e'*, connected with the ceiling or other suitable frame-work overhead, the said track *a* passing through said bracket,  
45 which may have a tube *e<sup>2</sup>* fastened to it to give a considerable bearing on the track. At a short distance below the track a tube *f* is fastened upon the said bracket *e*, projecting therefrom in a direction parallel with the  
50 track. The said tube is split along its under side, as shown at *f'*, and contains two heads

or plungers *g h*, that are fitted to slide easily in the said tube.

The plunger *g* is provided with a projection *g'*, that projects out from the slit *f'* in the  
55 tube, and is preferably provided with a cushion *g<sup>2</sup>*, of rubber or other yielding material. The said plunger *g* is acted upon by the stout spring *i*, connected with the forward end of the tube and tending to draw the said  
60 plunger toward the forward end of the tube. The said spring *i* may be a spiral wire spring, and preferably has a core of rubber *i'* drawn into it, as shown in Fig. 4, so as to form a  
65 somewhat yielding cushion for the forward movement of the plunger *g* when suddenly drawn forward from the rear end of the tube. The said plunger *g*, with its projection *g'*  
70 and actuating-spring *i*, constitutes the carrier-propelling device. The plunger *h* is also provided with a projection *h'*, extending out from the slit *f'* of the tube and having piv-  
75 oted to it a pair of hooks *k*, which, when the said plunger *h* is next to the plunger *g*, as shown in Fig. 1, receive the projection *g'* be-  
80 tween them and have their engaging-shoulders a short distance in front of the said projection *g'*, as shown. A light spring *m* tends to force the plunger *h* toward the forward end  
85 of the tube and retain it in contact with the plunger *g*. A cord or actuating device *n* is connected with the hooks *k* and extends over a pulley *n'*, pivoted in the lower end of the bracket *e*, the said cord *n* being provided  
90 with a suitable handle *n<sup>2</sup>* within reach of the operator.

The frame of the carrier comprises a member *c'*, supported on an arch or yoke *c<sup>2</sup>*, which  
95 extends over the tube *f* and is connected with the wheels *d* above the said tube and with the member *c'* below the tube, said member *c'* being at the level of the ends of the hooks *k* and provided with lateral pro-  
100 jections *c<sup>3</sup>*, which, as the carrier comes into the station, strike the beveled ends of the hooks *k*, and, passing over them, are engaged by the said hooks, as shown in Fig. 1, the carrier being arrested by the cushioned  
projection *g'* from the plunger *g*, the spring *i* of which yields as the carrier comes in, so as  
to arrest the carrier without too great shock. When the carrier is to be sent along the



track to the other station, the operator pulls on the handle  $n^2$ , which draws the hooks  $k$  backward, and the said hooks constitute a carrier-engaging device, which in turn draws the carrier, and the latter pushes the plunger  $g$  with it, straining the spring  $i$ . When the said spring  $i$  is strained sufficiently to give the proper force to send the carrier the required distance, the hooks or engaging device  $k$  is disengaged from the projections  $c^3$  of the carrier, thus releasing the same and permitting the spring  $i$  to act upon it through the intervention of the plunger  $g$  and projection  $g'$ . The hooks  $k$  are thus disengaged at the proper time by a disengaging device  $o$ , shown as consisting of two inclined arms connected with a collar  $o'$ , fastened at the proper point on the tube  $f$  by a suitable clamping device or set-screw  $o^2$ . The said inclined arms  $o$  engage pins  $k^2$ , projecting from the hooks  $k$ , as the latter are drawn back by the cord  $n$ , thus pressing the hook downward out of engagement with the projections  $c^3$  of the carrier and releasing the latter, which is immediately shot forward by the action of the spring  $i$ . As soon as the operator relieves the pressure on the handle  $n^2$  the spring  $m$  carries the plunger  $h$  forward to the plunger  $g$ , thus placing the hooks  $k$  in proper position to engage with the carrier upon its return from the other station.

The receptacle  $c$  may be fastened to the carrier in any suitable manner, being detachable for the purpose of removing or changing its contents, or it may remain connected with the carrier but be arranged to open or be drawn down from the carrier in any suitable

or usual manner, as the special construction of the carrier forms no part of the present invention except in the particulars required for its proper co-operation with the propelling device.

The tube  $f$  is merely a guide and support for the plungers  $g$   $h$  and their actuating-springs, and it is obvious that any other suitable guide might be used, although the tube is especially desirable, as it affords protection for the parts from accidental derangement as well as from access of dust or dirt.

I claim—

1. The combination, with the track, of the guide-tube substantially parallel with the said track and provided with a longitudinal slit, a plunger and spring connected therewith inclosed in said tube, said plunger being provided with a carrier-engaging projection extending out through the slit in said tube, and a second plunger in said tube and connected carrier-engaging hooks, and means for moving the latter along said tube, substantially as and for the purpose set forth.

2. The combination of the track and slitted guide-tube with the plunger  $g$  and connected actuated spring  $i$ , and the plunger  $h$  and actuating-spring therefor, and the carrier-engaging hooks  $k$ , connected with the said plunger  $h$  and operated substantially as described.

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

THOMAS M. KENNEY.

Witnesses:

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JAS. J. MALONEY.