(No Model.)

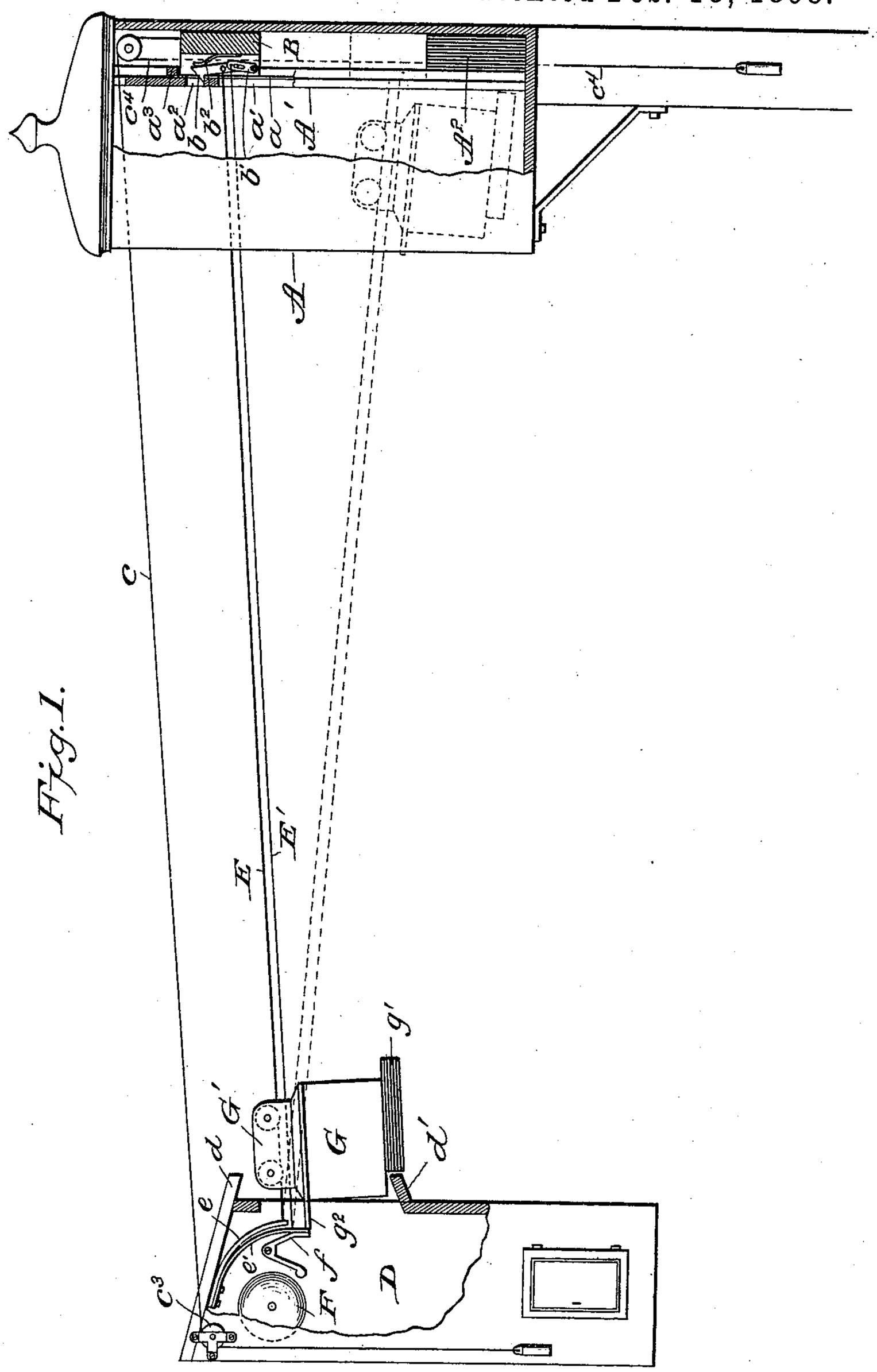
2 Sheets—Sheet 1.

J. ANDERSON.

CARRYING APPARATUS.

No. 599,137. Patented Feb. 15, 1898.

Fig. 1.



WITNESSES:

G. S. Elliott.

D. L. Rice

INVENTOR:

Jens Anderson

by Eugene H. Johnson

his attorney.

(No Model.) 2 Sheets—Sheet 2.

J. ANDERSON.

CARRYING APPARATUS.

No. 599,137. Patented Feb. 15, 1898.

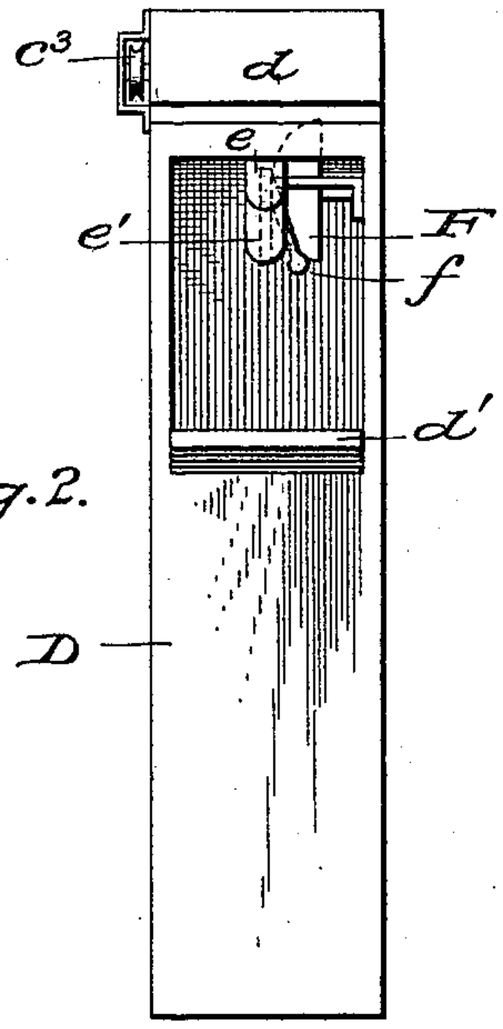


Fig. 2.

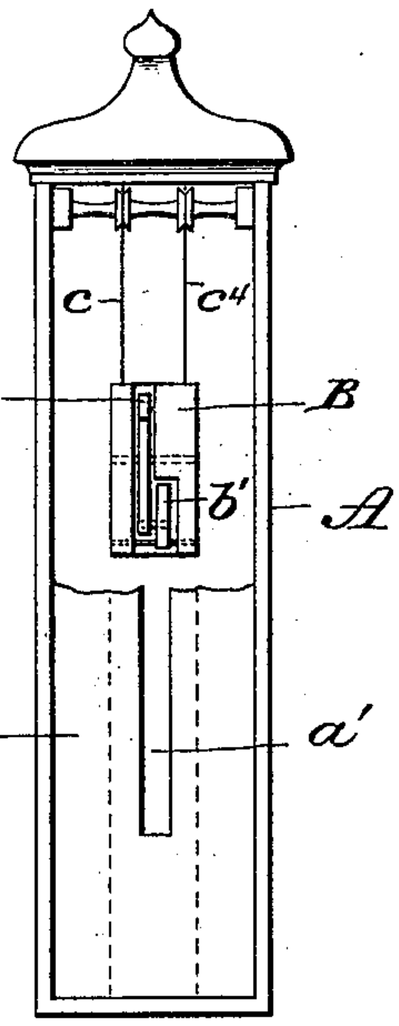


Fig. 3.

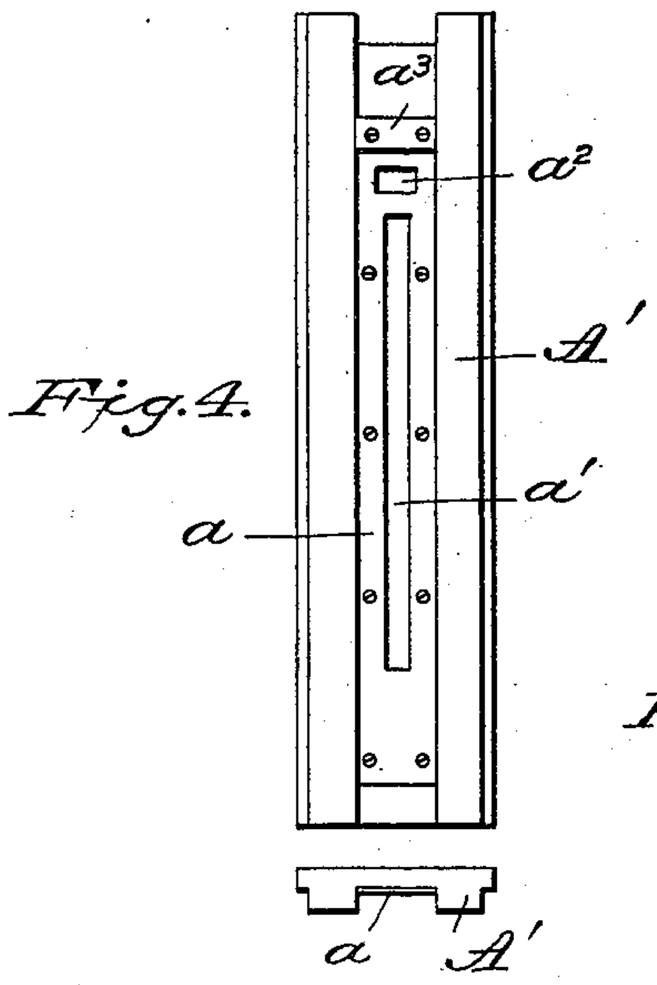
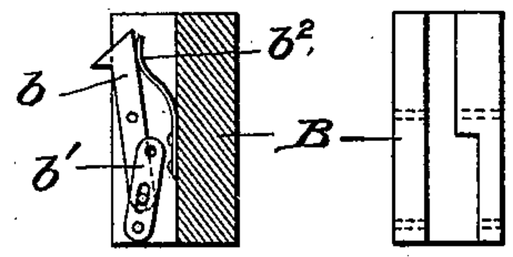


Fig. 4.

Fig. 5.



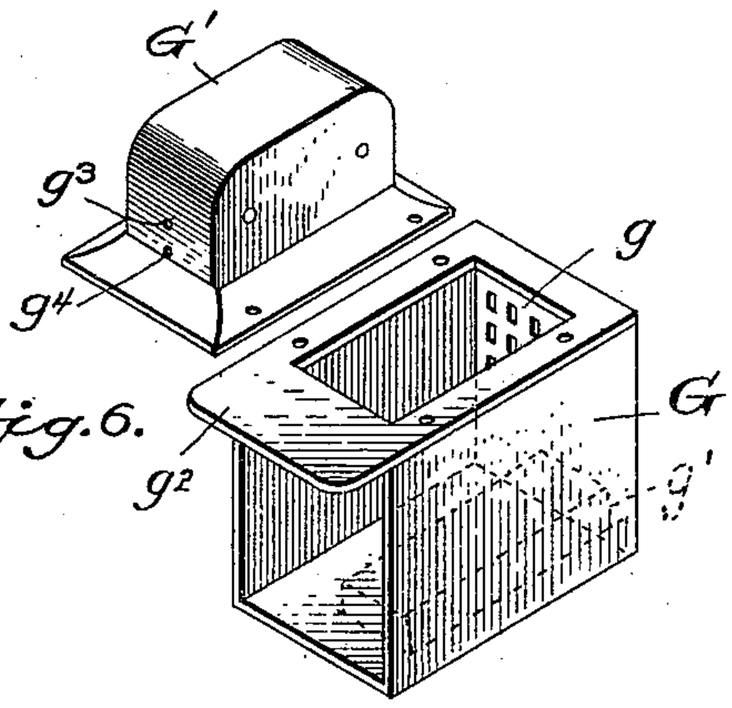


Fig. 6.

WITNESSES:
L. S. Elliott.
D. L. Rice.

INVENTOR:
Jens Anderson
by Eugene W. Johnson
his attorney.

UNITED STATES PATENT OFFICE.

JENS ANDERSON, OF WALLA WALLA, WASHINGTON, ASSIGNOR OF TWO-THIRDS TO WILLIAM O. FALLON AND JOHN KEOGH, OF SAME PLACE.

CARRYING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 599,137, dated February 15, 1898.

Application filed August 2, 1897. Serial No. 646,791. (No model.)

To all whom it may concern:

Be it known that I, JENS ANDERSON, a citizen of the United States of America, residing at Walla Walla, in the county of Walla Walla and State of Washington, have invented certain new and useful Improvements in Carrying Apparatus; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in a carrying apparatus which is designed to carry a receptacle from a given point to another point, discharge its contents, and then automatically return the carrier.

The invention is designed particularly as a mail or letter carrier and embodies in its organization a collecting-station, a carrier and track mechanism, and mechanism for raising and lowering the carrier and track, so that when they are raised the carrier will move toward the collecting-station, deliver its contents therein, sound an alarm, and automatically return.

The invention consists in the construction and combination of the parts, as will be hereinafter fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, which illustrate my invention, Figure 1 is a view in elevation, showing my improved apparatus arranged for operation, the respective inclinations of the track-wire and positions of the carrier being shown in full and in dotted lines. Fig. 2 is a front view of the mail-receiving box or station. Fig. 3 is a front view of the collecting-station. Fig. 4 is a front view showing a slotted plate located within the collecting-station. Fig. 5 shows detail views of the sliding block located within the rear portion of the collecting-station, and Fig. 6 is a perspective view of the carrier.

Referring to the drawings, A indicates the collecting-station, which may consist of a suitable housing, box, or receptacle closed at its sides and rear and open at the front, such structure being mounted in any suitable manner, as on a post or platform. This station A has parallel with the rear wall thereof a vertical partition A′, which carries a plate *a*, provided with a longitudinal slot *a′*, above said slot an aperture a^2, and above the aperture a block or buffer a^3. In the space formed by the partition A′ and the rear wall of the structure A is positioned a slide B, said slide being preferably of metal, the front edge thereof being recessed, as shown, to receive a trigger *b*, below the trigger a lever *b′*, and in rear of the trigger a spring b^2, said spring abutting against the upper portion of the trigger, so as to force the upper end thereof, which is provided with a catch or projecting portion, in engagement with the aperture in the plate when the block is raised to its highest point of elevation.

A^2 refers to a rubber block or cushion which is positioned beneath the slide B. To the slide B is attached a flexible connection or cord *c*, which passes over one of a pair of rollers, said rollers being suitably journaled on a shaft supported by the side pieces of the collecting-station, and the cord *c* extends from the roller over a roller or guide-pulley c^3, suitably supported upon the receiving box or station D. A second cord is also attached to the slide B and passes over the other of said guide rollers or pulleys, from which the second cord c^4 depends, as shown in Fig. 1. The cords *c* c^4 are for the purpose of raising the trigger-carrying slide to effect a change in the elevation of the wire track or way upon which the carrier travels, so that said carrier will be raised and caused to move toward the station D.

The mail-receiving box or station D is provided with a roof *d*, and below the same there is an opening, the lower wall of said opening being projected outwardly and inclined, as shown at *d′*, and from the roof may be a depending ledge. To the roof *d* are attached springs *e* and *e′*, the former being of less length and of greater strength than the latter, and to these springs are attached wires E and E′, the latter wire being secured slightly above the lower end of the spring *e′*. The upper wire E, which is attached to the spring *e* at one

end, is secured to the slide B, and the wire E′, which is attached to the longer and weaker spring, is connected to the upper end of the lever b'.

F refers to a bell which is carried by the box and is adapted to be struck by a bell-hammer mounted on an angle-arm f, one end of which lies in the same plane and abuts against the lower end of the spring e', being held in contact therewith by gravity.

The carrier G is preferably made up of a box which is open at one end and closed at the other by a perforated plate g, and this box has secured to its bottom an elastic block or buffer g', which projects a considerable distance beyond the end formed by the perforated plate, and the bottom of the other end of the box overhangs the other end of the buffer. The upper portion of the carrier is also provided with a projecting ledge or flange g^2, which is positioned so as to be on a line with the lower end of the spring e', the position of the buffer g' being so as to be on a line with the inclined ledge d' of the receiving-box.

To the upper portion of the carrier G is secured a casing G′, carrying a pair of rollers having peripheral grooves for engagement with the track-wire E, and on a line with the grooves of the rollers the ends of the casing have apertures g^3 g^4, the wires E E′ passing through said apertures, so as to retain the carrier permanently thereon.

This device is designed as an improved method of collecting mail or delivering packages, and the carrier herein described is open at one end.

When the slide carrying the trigger is lowered, it will rest upon the cushion A^2 and the wires E E′ will be inclined, as shown in Fig. 1, the carrier then resting in the box or collecting-station A. The letters or packages are placed in the carrier G, and when it is desired that the carrier should deposit its contents in the receiving box or station D an operator at either point draws upon one of the flexible connections, which raises the slide and changes the inclination of the wires, which are held so that the carrier will travel toward the receiving-box. When the carrier reaches the receiving-box, the contact of the same therewith will project the contents thereof, and the ledge g^2 of the carrier striking against the spring e' will actuate the bell-hammer to sound an alarm and at the same time draw upon the wire E′, which moves the lever b' forwardly, and as said lever engages with the lower end of the trigger it will move the end of the trigger out of engagement with the aperture a^2, which allows the slide to fall and changes the inclination of the wire, so that the carrier will automatically return to the collecting station or box A.

This device may be used in connection with a cash-carrying apparatus for store-service to deliver parcels to a station where they will be wrapped, marked, and then sent to the general delivery department.

This device, though designed especially for mail-matter, may be obviously used for other purposes, and as a mail-carrier the perforated back will offer less resistance to the air and will cause in its travel light mail-matter to collect at the back of the carrier.

Having thus described my invention, I do not limit myself to the particular construction and arrangement of the parts, but reserve the right to modify my invention within the spirit and scope of my claims.

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

1. In a carrying apparatus, the combination with a vertically-movable slide, having a trigger, a lever which engages with the slide and trigger, of wires connected to the slide and lever and to a distant station, a carrier mounted on one of the wires, and means for raising the slide to effect a change in inclination of the wires upon which the carrier is mounted, substantially as shown and for the purpose set forth.

2. In a carrying apparatus, the combination with the parallel wires, a slide having a trigger, a lever and means for projecting the trigger, one of the wires being attached to the slide and the other wire to the lever, supporting-springs to which the opposite ends of the wires are attached; together with a carrier mounted on one of the wires and adapted to engage with the supporting-spring of the other wire to exert a tension thereon which will actuate the lever and release the trigger to effect automatically a change in the inclination of the track-wire and a return of the carrier.

3. In a carrying apparatus, the combination with a vertically-movable slide having a trigger, a plate having an aperture with which the trigger engages, a lever carried by the slide said lever engaging with the trigger, wires extending from the slide and lever to a distant station, springs attached to the distant station with which the wires are connected, a carrier having a projecting portion which engages with the spring to which the wire attached to the lever is connected to effect an automatic release of the trigger when the carrier reaches the limit of movement in one direction, and flexible connections attached to the slide for manually raising the same from either station, substantially as shown.

4. The combination in a carrying apparatus having two stations, of wires strung between said stations and secured to independent tension devices, a vertically-movable slide provided with a trigger, and a trigger-operating lever, one of the wires being secured to the slide and the other to the trigger-operating lever, means for raising the slide manually, a carrier mounted on one of the wires, said carrier having means for exerting a tension

upon the wire attached to the trigger-operating lever when the carrier has reached the limit of its movement toward the station farthest from the one provided with the vertically-movable slide, substantially as shown.

5. In a carrying apparatus, the combination with parallel wires one constituting a track-wire and the other a release-wire, a slide having a trigger, and a trigger-releasing lever, the track-wire being connected to the slide and the release-wire to the lever, springs attached to a station at a distance from the station having the slide, the track and release wires being connected to said springs; together with a carrier provided with rollers for engagement with the track-wire, and a projecting portion for engagement with the spring to which the trigger-releasing wire is connected to effect an automatic release of the trigger and a change in the inclination of the wire upon which the carrier is mounted to cause an automatic return of the carrier, substantially as shown.

6. In a carrying apparatus, the combination with the carrier of a track-wire and trigger-releasing wire, a vertically-movable slide, a trigger carried thereby, the track-wire being connected to said slide, means for releasing the trigger actuated by the releasing-wire and carrier, a bell and bell-hammer operated by the carrier, and means for manually raising the slide from the station having the bell substantially as shown and for the purpose set forth.

7. In combination with the springs e e', of a track-wire and a trigger-releasing wire, a carrier having rollers for engagement with the track-wire and apertures through which the track and trigger-releasing wires pass, a ledge or projecting portion g^2 extending from one end of the carrier near the top thereof so as to contact with the spring to which the trigger-releasing wire is attached, a buffer attached to the base portion of the carrier so as to project beyond one end of the same; together with a manually-raised slide having a trigger, and means connected with the trigger-releasing wire for automatically disconnecting the trigger so as to permit the slide to fall by gravity and change the inclination of the wires, substantially as shown and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JENS ANDERSON.

Witnesses:
W. T. DOVELL,
J. G. THOMAS.