(No Model.) 3 Sheets—Sheet 1.

A. J. GILLESPIE.

STORE SERVICE APPARATUS.

No. 469,014. Patented Feb. 16, 1892.

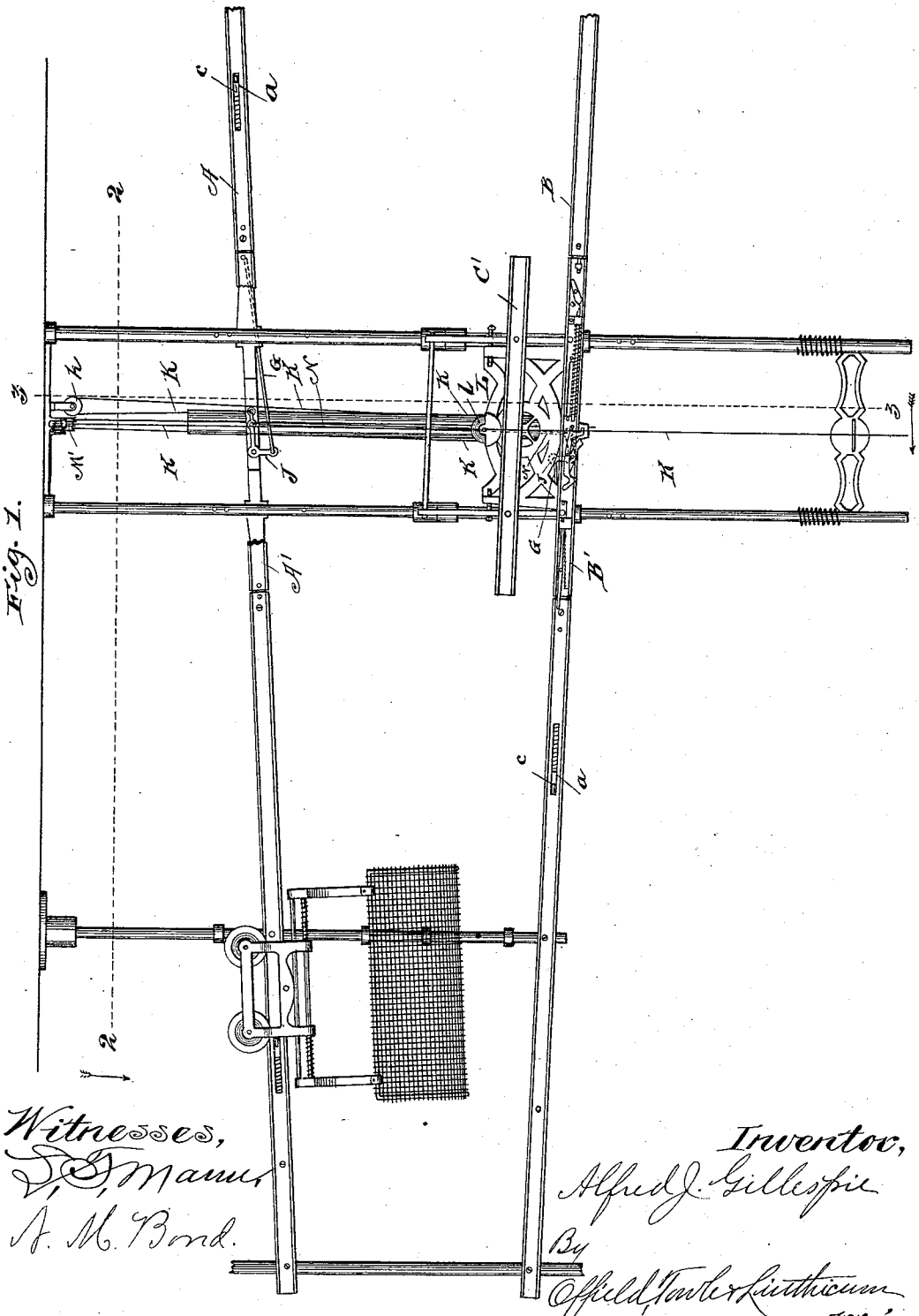

Fig. 1.

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A. M. Bond.

Inventor,
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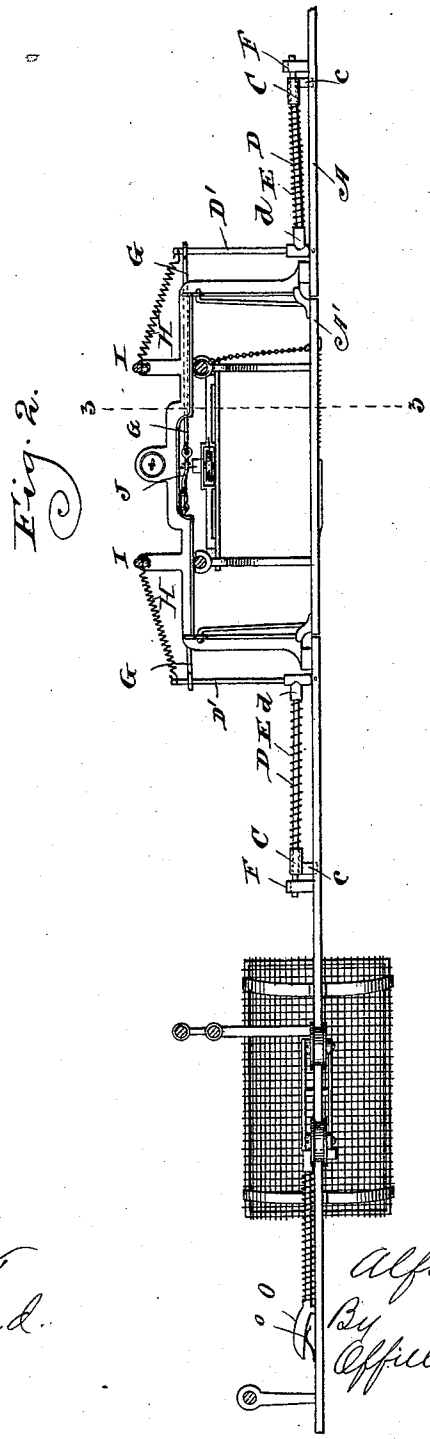
Att'ys.

(No Model.) 3 Sheets—Sheet 2

A. J. GILLESPIE.

STORE SERVICE APPARATUS.

No. 469,014. Patented Feb. 16, 1892.



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(No Model.) 3 Sheets—Sheet 3.

A. J. GILLESPIE.

STORE SERVICE APPARATUS.

No. 469,014. Patented Feb. 16, 1892.

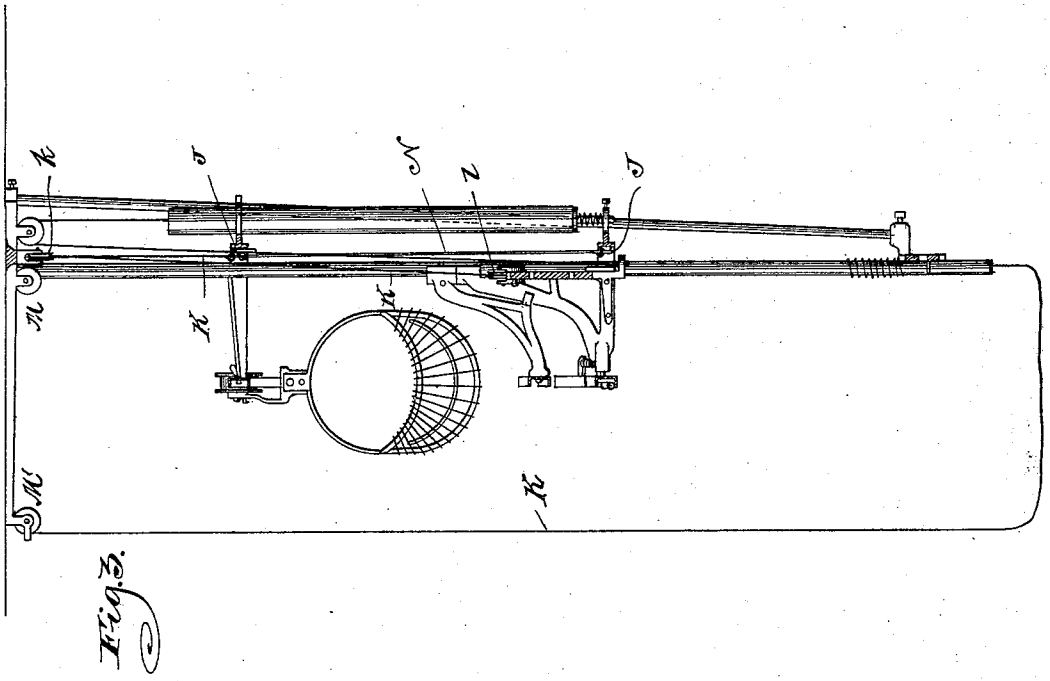

Fig. 3.

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N. M. Bond.

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UNITED STATES PATENT OFFICE.

ALFRED J. GILLESPIE, OF ATLANTIC, IOWA, ASSIGNOR TO THE BOSTEDO PACKAGE AND CASH CARRIER COMPANY, OF CHICAGO, ILLINOIS.

STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 469,014, dated February 16, 1892.

Application filed March 26, 1891. Serial No. 386,495. (No model.)

To all whom it may concern:

Be it known that I, ALFRED J. GILLESPIE, a citizen of the United States, residing at Atlantic, Iowa, have invented certain new and useful Improvements in Store-Service Apparatus, of which the following is a specification.

My invention relates to certain improvements in package and cash carriers, and particularly to an improved form of "back-stop" which is provided to stop the cars as they approach the elevator-well.

In the accompanying drawings I have shown my improvements applied to a package and cash carrier of the type wherein two elevated tracks are employed, arranged one above the other in the same vertical plane, and which are provided with elevators for raising the cars from the counter and dispatching them upon the upper track to a cashier's desk or wrapping-table, from whence they are returned on the lower track and descend upon the elevator to the counter. In this system no turn-outs are employed, but free track-sections are used to bridge the elevator-well to permit the passage of a car when the elevator is not in use, said sections being raised by the elevator on its upward movement and deposited again on its downward movement. In this system, also, a cable or cord is employed to raise the elevator; and a feature of my improvement consists in the employment of this elevator-cable to operate the back-stops. The track rails or ways are composed of flanged metal bars, and I perforate the webs of these bars for the passage of the engaging end of the back-stop, said perforation forming a guide and way for the stop and causing its certain and effective action to stop the car.

In the drawings, Figure 1 is a side elevation of a section of the upper and lower tracks at a station with a basket or carrier on the upper track. Fig. 2 is a plan view of the same below the line 2 2 of Fig. 1, and Fig. 3 is a sectional elevation looking to the left of line 3 3 of Fig. 2.

In the drawings, A represents the upper track, having the swinging track-section A′, and B the lower track, having a movable section B′.

C′ is a supplemental track-section adapted to bridge the gap when the elevator is below the lower track-rail. The track-rails are flanged metal bars, in this instance of **U** form, and with their webs vertically disposed. The track-rail A at a suitable distance from the elevator has its web slotted longitudinally, as shown at *a*, and through this aperture the back-stop works. This back-stop consists in the form shown in the drawings of a sleeve C, having a dog *c* thereon, which is adapted to enter the slot *a* in the track-rail. The sleeve is carried by one member D of a bell-crank lever loosely or pivotally connected to the side of the rail. A spring E surrounds the member D, one end of the spring forming a yielding seat for the sleeve, the other end of the spring being seated against a projecting shoulder *d* of the member D. A keeper F limits the outward movement of the free end of the member D. The member D′ of the bell-crank is connected at its outer end to a link G, and said end is normally retracted by a spring H, made fast at one end to the well-frame I. The opposite end of the link G is connected to a bell-crank J, pivoted on frame I, and to the other member of the bell-crank is secured one end of the operating-cable K, which is passed over a suspended sheave *k*, and thence conducted around a sheave *l* on the elevator-car L, and thence up around the guiding-sheaves M M′, from the latter of which it depends within reach of the attendant. The lower rail is provided with a back-stop identical in construction with that just described, but located on the opposite side of the well of the elevator. The bell-crank of the lower back-stop is connected with the bell-crank J of the upper by means of the link N, and hence a pull on the elevator-cable operates both of the back-stops simultaneously.

It is evident from the foregoing that so long as the elevator-cable is under tension the back-stops are held in position to arrest the cars on the tracks leading to the well, and it is also evident that the cable cannot be made effective to lift the elevator-car until the back-stops are thrown into operative position. Obviously this back-stop can be used in a cash-carrier system having a single track-rail instead of the two track-rails shown, and

in this case, as there would be only one back-stop at each station, the elevator-cable would be adapted to operate but one back-stop.

It will be observed that the back-stop serves the purpose of a spring-buffer and that it is guided and controlled in its movement by traveling in the slotted way formed in the rail.

Instead of pivoting the members D D′ to the track-rail they may be pivoted to the frame or yoke surrounding the elevator-well.

It is evident that the stop device may be used to arrest or detain the carriers at the cashier's station or wrapping-counter.

The stop device is shown applied to the upper track in Figs. 1 and 2 of the drawings, and in the latter figure the rod carrying the spring and sliding stop is manipulated by a latch or handle O, having a spring *o* seated beneath the handle or latch and tending to normally force the back-stop into position to engage and arrest the carrier on the incoming track. On the outgoing track the back-stop is formed integrally with the pivoted rod and the spring and sliding sleeve are omitted. The perforation in the track-rail in this instance may be a round aperture, as the back-stop has no movement along the rail. The stop in this case simply acts to detain the carrier on the outgoing track until such time as it is ready to be dispatched on the return trip.

I claim—

1. In a store-service apparatus, the combination, with a track-rail having a transverse aperture or perforation through the substance of its body, of a back-stop device comprising an operating-lever pivotally mounted at the side of the rail, and a dog having a sliding connection with said lever and adapted by the vibration thereof to be projected through the aperture of the rail into the path of a moving carrier, substantially as described.

2. In a store-service apparatus, the combination of a track-rail having a transverse aperture therein elongated to provide a guide, and a back-stop device comprising an operating-lever pivotally connected to the rail and having a sliding sleeve thereon and a dog carried by said sleeve and adapted to be projected through the slot in the track-rail and to move longitudinally thereof, and a spring forming a yielding seat for the sleeve, substantially as set forth.

3. In a store-service apparatus having an elevated track for the carriers, and an elevator for transferring the carriers, and an operating-cable for said elevator, a back-stop device for the track, comprising a movable dog adapted to be projected through an aperture in the track-rail to intercept the carriers, and a connection between the stop and the elevator-cable, whereby a pull on said cable to move the elevator first operates said stop, substantially as described.

ALFRED J. GILLESPIE.

Witnesses:
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