

(No Model.)

3 Sheets—Sheet 1.

S. W. BARR.

CASH AND PACKAGE CARRIER.

No. 383,937.

Patented June 5, 1888.

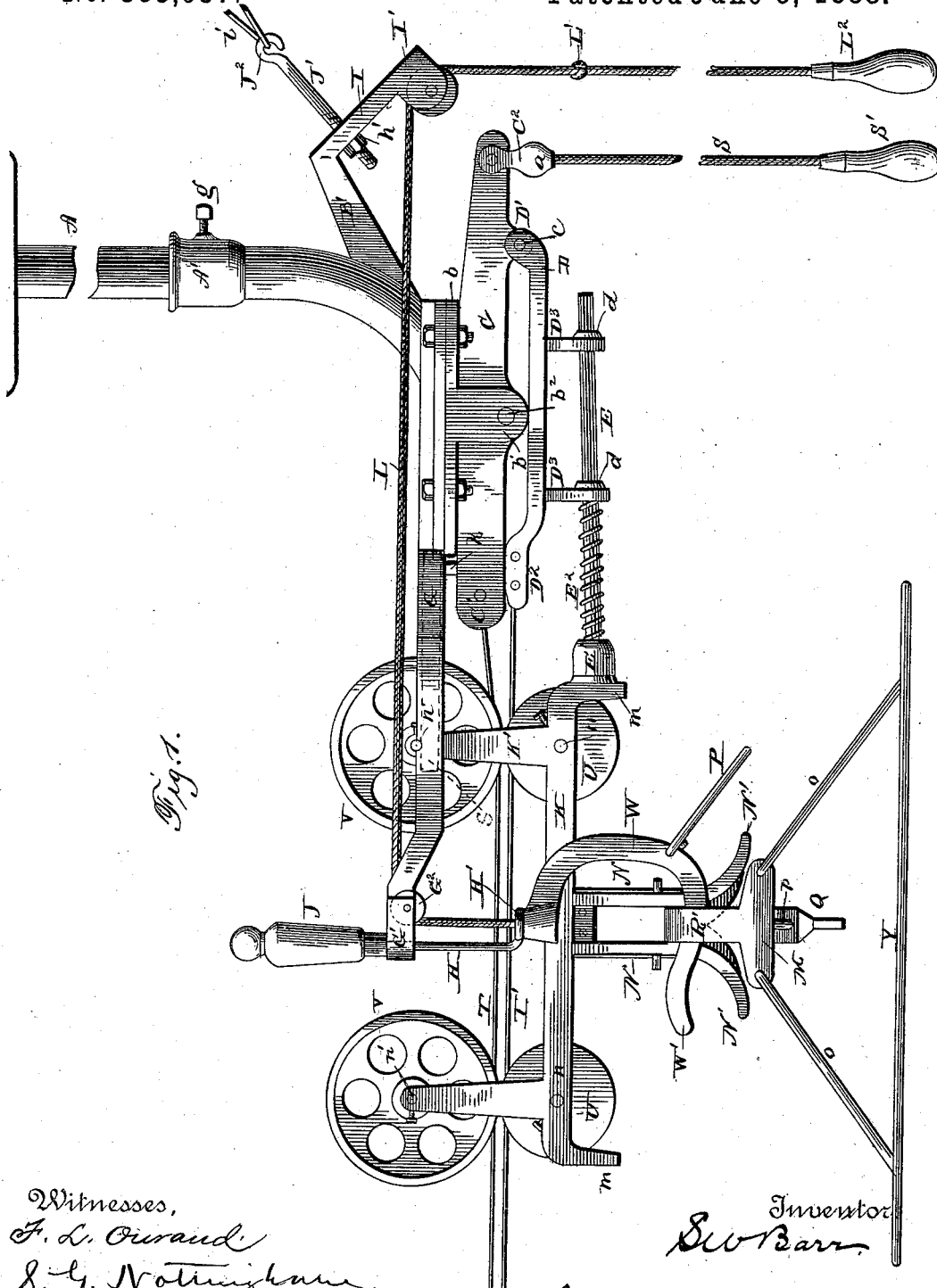


Fig. 1.

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Inventor  
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By *his* Attorney,  
W. A. Seymour.

(No Model.)

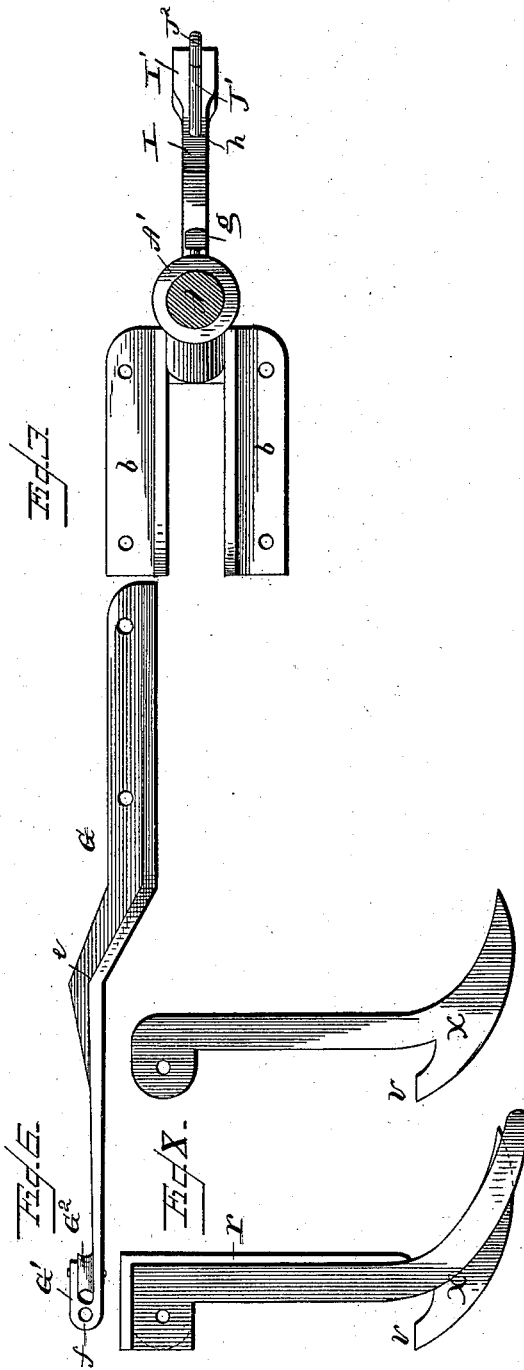
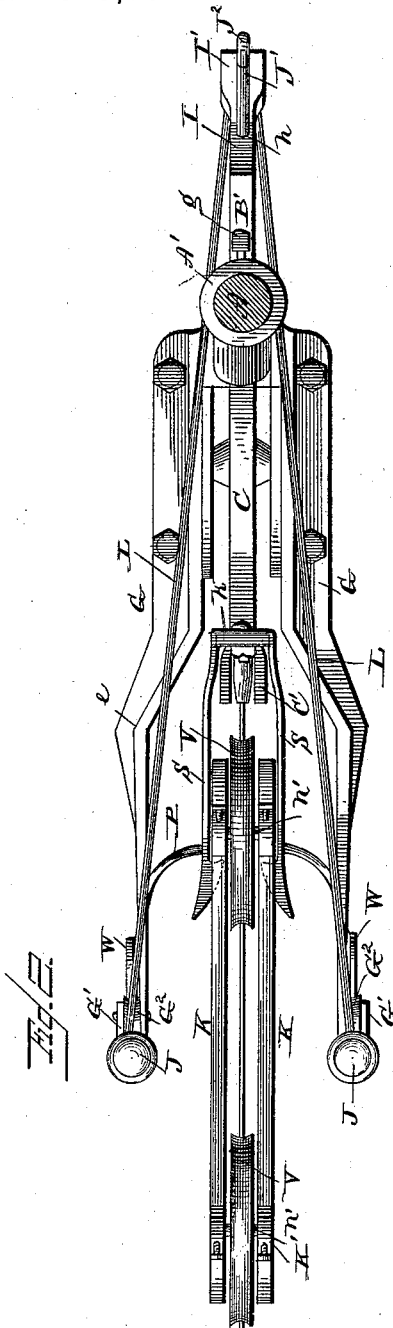
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WITNESSES.  
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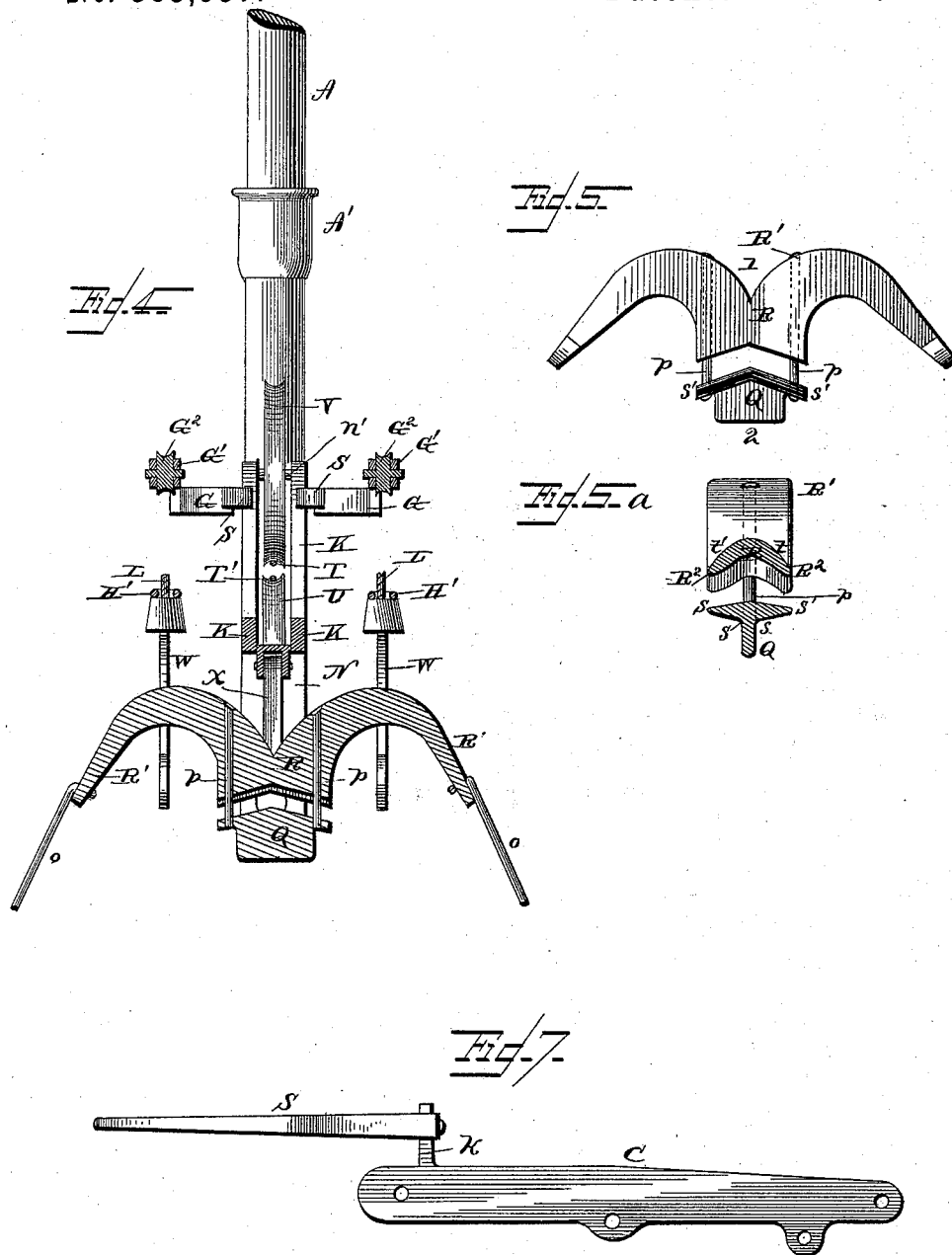
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WITNESSES  
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# UNITED STATES PATENT OFFICE.

SAMUEL W. BARR, OF MANSFIELD, OHIO.

## CASH AND PACKAGE CARRIER.

SPECIFICATION forming part of Letters Patent No. 383,937, dated June 5, 1888.

Application filed August 2, 1887. Serial No. 245,957. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL W. BARR, of Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful  
5 Improvements in Cash and Package Carriers; 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  
10 same.

My invention relates to an improvement in cash and package carriers.

The object of my present invention is to produce a simple and efficient device of this nature  
15 that will possess important advantages in its method of propelling the car from a station to a cashier's stand or bundle-table, of arresting and holding the car at a station, and for the attachment and disconnection of a basket or  
20 other cash or package receptacle to and from the traveling car.

With the objects in view, as above enumerated, my invention consists in certain details of construction and combinations of parts, that  
25 will be hereinafter fully explained, and pointed out in the claims.

In the drawings making a part of this specification, Figure 1 is a side elevation of the cash and package carrier at a station, with a basket  
30 attached. Fig. 2 is a plan view of the cash and package carrier at a station. Fig. 3 shows a plan view of the hanger, with bracket-flanges affixed to the hanger. Fig. 4 is a transverse section of the device, taken on a line through  
35 the center of the basket attachment to the car. Figs. 5 and 5\* are views of the latch-block and the sliding trip in connection with it. Figs. 6, 7, and 8 are detached views of several details.

In patent of record, No. 357,449, dated February 8, 1887, the generic principle is shown  
40 upon which my present invention is based, as relates to the method of propelling cars by the use of two wires or other analogous flexible material, the wires lying in the same vertical  
45 plane, the traveling car having two sets of grooved wheels supported upon standards of the car, one set above the other, the wires being located between the two sets of wheels, so that a spreading apart of the wires in the plane in  
50 which they lie will force the car forward from a station to a designated point.

My present invention embodies several im-

portant features of improvement in constructive details, showing novel means for supporting and spreading apart of the two track-wires; 55 an improved cushioning device to arrest a car at a station without jar; an improved securing device, by which the car is held in position at a station until designedly released, the same action that releases the car giving it a progressive impulse, and a novel as well as superior latching mechanism, by the use of which the basket or other receptacle for cash and packages is securely attached to the car and as readily disconnected therefrom, as will appear 65 in the following detailed description of my improvements as applied to a two-wire system of cash and package transportation.

In Fig. 1, A represents a hanger or depending rod, upon which the mechanism is supported at a station. It is provided with a flange, by which it is affixed in position to the ceiling or other elevated point. Upon its lower end a curved bracket-piece, A', is secured, which latter is provided with the parallel bracket-flanges *b b*. (See Fig. 3.) These flanges have a proper space intervening between them, and are furnished with integral depending ears *b'*, (see Fig. 1,) which are perforated for the reception of a cross-bolt, *b''*, that 80 affords support to the rocking bar C.

Bar C is of such a relative thickness as to work neatly between the ears *b'*, which retain it in position, it being perforated at a point near its center of length to receive the bolt *b''*, 85 as above mentioned. It is also perforated at each end, for a purpose that will be explained, and has a depending lug, D', integrally formed on its lower edge near the rear end.

Upon the lug D' a swinging arm, D, is 90 pivoted at *c*, this arm extending forwardly to a point just below the forward end of the rocking bar C, and bifurcated to receive an eye-plate, D<sup>2</sup>, which is pivoted between the jaws of the arm D, the plate D<sup>2</sup> being perforated to receive the lower track-wire, T', and thus form 95 a means of attachment for the wire to the arm D, that will afford free vertical play between the forked ends of the arm. The rocking bar C is also split to form two parallel walls at its forward end, C', and the upper track-wire, T, is secured to an eye-plate, which is pivoted to move 100 between the two walls of this end of the bar, to afford a means of proper adjustment rela-

tively of the two track-wires T T' when the ends C' D' of the bar C and arm D are spread apart.

To the rear end of the rocking bar C a forked swivel-piece, *a*, is pivotally affixed, and the cord S is secured to hang pendent therefrom. A handle, S', is attached to the lower end of the cord S, which latter should be of a proper length to be within the grasp of an operator at a station.

From the lower surface of the arm D two limbs, D<sup>3</sup>, are downwardly extended, and these are provided with bosses *d*, which latter are centrally perforated, the holes being in about a horizontal line when the bar is in the position shown in Fig. 1. The limbs D<sup>3</sup> receive and slidingly support the cylindrical bumper-rod E, which is made of proper diameter to loosely fit the holes in the bosses *d* and extend a proper distance in advance of the arm D. The forward end of the bumper-rod has an elastic cushion, E', attached thereto, and a spiral spring, E<sup>2</sup>, is placed upon the body of the rod E between the bumper-head E' and the forward-depending limb D<sup>3</sup>, so as to hold the bumper head or cushion normally advanced to receive the impinge of a car running toward it, and neutralize its momentum to prevent shock or jar.

Upon the flanges *b b*, that are horizontal extensions of the curved bracket A', the forwardly-extended limbs G are bolted, which latter are bent laterally at *e*. (See plan view, Fig. 6.) This bend produces a slight offset, and the limbs are continued parallel to each other, but wider apart, their forward ends being bent to form loops G', the parallel walls of which give support to grooved pulleys G<sup>2</sup>, that support the cords L, as will be more fully explained in connection with parts yet to be described. The ends of the loops G' are perforated at *f* to receive the vertical rods H, having eyes H' formed on their lower ends, and upon the upper ends of these rods the weighted heads J are attached, which rest on the top surface of the ends G' of the limbs G, and hold the pair of rods H in position to engage the cords L, that are inserted through the eyes H' of these rods. (See Figs. 1 and 2.)

At the rear side of the bracket A', which is secured by set-screw *g* to the hanger A, the angular brace-bar I is made integral therewith. It has its free end adapted to support the grooved pulley I', so that it will rotate freely. The cords L, that lie in the grooves of the mated pulleys G' at the forward end of the limbs G, are both made to occupy the grooved pulley I' at the rear, which has just been described, and the two cords may be knotted together at I', and from this point downwardly continue as one cord to have a handle, L<sup>2</sup>, affixed to the lower end, within convenient reaching distance of a party operating the device. The brace I is perforated at *h* to receive a stay-rod, J', which is threaded to be tightened up by a nut, *h'*, that bears against the surface of the brace I, (see

Fig. 1,) and the hooked end J<sup>2</sup> of the stay-rod J' is engaged by a wire loop, *i*, that is secured by its ends to a wall or other stable fixture in the room where the cash-carrier is erected.

It should be understood that there are two hangers and the attached fixtures hereinbefore described necessary for a track or one line that leads from a clerk's station to a cashier's stand or a bundle-table. These being exact duplicates, the description of one will suffice.

Upon the upper side of the forward end of the rocking bar C at the point *k* an integral upward projection is formed to receive and support the twin spring-hooks S, (see Figs. 2 and 7,) these hooks extending a proper distance in advance of the forward end of the rocking bar to engage the standards K' of the car when the car comes with momentum toward these hooks from an opposite station.

The frame of the car consists of two horizontal pieces, K, the ends of which curve downwardly, as at *m*, and near the ends two vertical standards, K', are formed on each horizontal bar K, these standards affording support to grooved wheels V V, that run on cross-shafts *n' n'*, which enter holes in the upper ends of the standards.

Immediately below the wheels V the wheels U are pivotally supported by shafts *n*, which are inserted in perforations made in the horizontal frame-bars K, the diametrical centers of each pair of wheels lying in the same vertical planes, respectively, so that the grooved peripheries of the paired wheels will engage the upper and lower track-wires, T T', the upper wheels, V V, resting upon the top wire, T, while the lower wheels, U U, are held up against the lower wire, T', as shown in Fig. 1. The lower curved ends, *m*, of the horizontal bars K of the car-frame are joined by cross-bars, and upon these cross-bars the bumper cushion or head E' will abut when a car runs into a station.

The bars K are further provided with integral depending limbs N N, two on each bar, which are curved outwardly or away from each other as paired at the lower or free ends N', thus leaving a space between the limbs of each bar sufficiently wide to receive the latching-head of the basket, as will be explained, and also a space between the limbs of one bar, K, considered in relation to the limbs of the parallel bar that lies on the other side of the car-frame.

The basket-latching device, whereby this package or cash receptacle is connected to the car, is constructed as follows: The latch-head R consists of a metallic block shaped substantially as shown in Figs. 5 and 5<sup>a</sup>, and has two curved arms, R', that project oppositely from the sides of block to engage hooks W, which will also be described.

The body of the latch-block R, considered on the vertical center line, 1 2, (see Figs. 5 and 5<sup>a</sup>, the latter-named view being a section on said line,) is made to slope from a crown-point, *t*, toward each side edge, and the bottom is hollowed out to produce two hook-

shaped lips,  $R^2$ , (see Fig. 5<sup>a</sup>.) that are thus formed on opposite edges of the head at its lower end.

The outer or free ends of the curved arms  $R'$  are furnished with eyes to receive the upper hooked ends of the basket-bail  $o$  and so form a swinging connection between the basket and the latch-block.

The tripping-block  $Q$  is shown in cross-section in Fig. 5<sup>a</sup>, and is made substantially in the form as illustrated. It is sloped on its top surface from the center, which is the highest point toward each edge, and is then contracted or slanted downwardly and inwardly to a point,  $o$ , on each opposite side. The tripping-block  $Q$  is connected to the latch-block  $R$  by two guide-rods,  $p$ , which are riveted fast to the trip-block at opposite points, as shown in Figs. 5 and 5<sup>a</sup>, and play loosely in vertical holes in the latch-block  $R$ , so that the trip-block may be elevated and abut with its edges  $s'$  against the edges  $R^2$  of the latch-block, and thus close the space between these pieces, rendering them in effect a solid block with inclined top and bottom sides.

The space between the two opposite pairs of the depending limbs  $N$  is occupied by the latch-hooks  $X$ , which are pivoted at their upper ends to depending ears placed on the lower side of the bars  $K$  adjacent to the limbs  $N$ . By this provision the latch hooks  $X$  can be made to swing outwardly on each side of the curved limbs  $N$ . The latch-hooks  $X$  are held in a vertical position, with their hook-points  $v$  in close proximity to each other, the lower curved portions diverging to produce a curved incline on each hook, as shown in Fig. 1, and also in the detached views, (see Figs. 8 and 9,) the springs  $r$ , which hold the hooks down, being shown in contact with a hook in Fig. 8.

The bail-loop  $P$  is intended to hold the two hooks  $W$  in proper position, and penetrates holes in their sides, so as to swing free and keep them at a fixed distance apart. These hooks  $W$  are attached by their upper ends to the cords  $L$ , and are of such a size and are so curved at their outer or free ends,  $W'$ , that the curved arms  $R'$  of the latch-block  $R$  will pass freely a short distance above them and the hooks be caused to engage the arms when the car with an attached basket arrives at a station and is to be lowered to the hand of the operator.

It being understood that two hangers  $A$ , with their appurtenances, as specified, are necessary to constitute a transit track and dispatching device for sending and receiving cash or packages between two points, it is apparent from an inspection of Fig. 1 that a vibration of the rocking bar  $C$  by pulling the handle  $S'$ , connected by cord  $S$  to the rear end,  $C^2$ , of this rocking bar, will elevate the forward end of the bar, and with it the top track-wire,  $T$ , while the lower line-wire,  $T'$ , is depressed by the same movement, so that the wires are caused to diverge from their points of contact

with the rear wheels,  $U$   $V$ , of the car, and by this action the car is propelled toward the other station or terminal of the track.

When the rocking bar  $C$  is made to rest in a plane other than horizontal, its forward end,  $C'$ , will move upwardly, and in consequence of this upward movement the hooks  $S$ , which have previously been in engagement with the upright standards  $K'$  of the car-frame  $C$ , will be lifted, and thus release the car which they held securely in contact with the bumper-head  $E'$  of the bumper-rod  $E$ , so that this release is simultaneous with the progressive impetus given the car and produced by the same means that effects its liberation.

In the operation of attachment and release of a basket,  $Y$ , to and from the car-frame  $O$ , it should be remembered that the latch-block  $R$  is attached to the bails  $o$  of this basket and always remains a fixture to the same. Now we will suppose that the curved arms  $R'$  of the latch-block are resting upon the hooks  $W$ , which is the usual position of the basket when it is disengaged from the car at a station. By pulling the cords  $L$  or the connected handle  $L^2$ , the basket will be raised and guided between the depending limbs  $N$   $N$  of the car-frame  $O$  by reason of the diverging curvature of the lower ends of these limbs. Upon entering the space between the limbs the apex  $t$  of the latch-block  $R$  will impinge with its inclined sides  $t'$  (see Fig. 5<sup>a</sup>) against the curved adjacent edges of the latch-hooks  $X$ , and separate them to allow the upward passage of the block  $R$  between them. After the lower edges,  $R^2$ , (see Fig. 5,) of the latch-block have passed the points  $V$  of the hooks  $X$ , these hooks will be forced inwardly and their shoulders will engage the sloping lower edges of the latch-block  $R$ . This will effect a secure lock of the basket  $Y$  to the car, and it can be dispatched to the other end of the line.

When it is necessary to detach the basket  $Y$  from the car-frame  $O$ , it can be accomplished by simply pulling the cords  $L$  and further elevating the latch-block  $R$ , which will cause the pendent trip-block  $Q$  to engage the sloping edges of the hooks  $X$  with its edges  $S'$   $S'$  and throw the hooks outwardly, thus releasing their hold on the lower edge of the latch-block  $R$  and transferring their contact to the trip-block edges. The basket is now lowered, and by this act the trip-block  $Q$  is brought into contact with the lower edge of the latch-block  $R$ , which is effected by the sliding together of these two pieces. The hooks  $X$  will now slide over the inclined sides  $t'$   $t'$  of the latch-block  $R$ , and the basket  $Y$  will be liberated from its connection with the car.

Slight changes might be made in the constructive details of this device, to modify them, without violation of the spirit of my invention; hence I do not wish to limit myself to the exact forms herein shown; but,

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

1. The combination, with a car-frame having depending limbs and spring-pressed latch-hooks, of a receptacle, a latch-block attached thereto, and a trip-block adapted to be moved  
5 into contact with the hooks and actuate the same to release the catch-block, substantially as set forth.

2. The combination of a car-frame having spring-actuated latch-hooks with a latch-block  
10 affixed to the cash or package receptacle and having an angular-shaped apex, and a sliding trip-block attached to the latch-block, substantially as set forth.

3. The combination, with a track, a car, a latch-hook, and hooks for elevating the receptacle, of a latch-block provided with laterally-projected curved arms and a body, the top portion of which is made with an apex and sloping sides that terminate in edges that are  
20 adapted to receive the elevating-hooks, substantially as set forth.

4. In a cash and package carrier, the combination, with a latch-block having curved laterally-extended arms and its body adapted to  
25 engage latch-hooks on its lower edge, of a sliding trip-block connected to the latch-block and adapted to actuate the latch-hooks, substantially as set forth.

5. The combination, with a car having a latch-hook, of the bail of a cash or package receptacle carrying a latch-block that has two curved lateral arms, a body that slopes to produce an apex and equally-inclined sides, and a sliding trip-block connected to the latch-  
30 block, substantially as set forth.

6. The combination, with a hanger, a bent bracket affixed adjustably thereto and provided with two parallel flanges, and lugs on the flanges to support a rocking bar, of a swinging arm pivoted to the rocking bar, two track-wires, and a means for vibrating the rocking  
35 bar, substantially as set forth.

7. The combination, with a supported rocking bar and a swinging arm pivoted at one  
45 end to the rear portion of the rocking bar, of

a spring-actuated bumper-rod supported to slide longitudinally below the swinging arm, substantially as set forth.

8. The combination, with a hanger, a bracket affixed thereto and provided with two horizontal and parallel flanges, and a rocking bar pivoted below these flanges and adapted to swing upwardly between them, of a swinging arm pivoted upon the rear end of the rocking bar on its lower edge, a bumper-rod, two line-wires, and a car adapted to move when the rocking bar is vibrated, substantially as set forth.  
50 55

9. An apparatus comprising a hanger, a bracket having two parallel flanges and two limbs attached to the bracket and projecting forwardly therefrom, two cords, and two hooks, of a rocking bar, a swinging arm pivoted on the rocking bar, a spring-actuated bumper-rod, two line-wires, and a car adapted to move  
60 65 when the rocking bar is rocked, substantially as set forth.

10. An apparatus comprising a hanger, a bracket, two parallel horizontal flanges of the bracket, a rocking bar, a swinging arm, and a spring actuated bumper supported by this arm, two limbs attached to the bracket-flanges, two loose grooved pulleys that rotate on the forward ends of the limbs, two cords, and two hooks adapted to release a basket  
70 75 from a car by the elevation of the hooks that engage arms of the latch-block of this basket, substantially as set forth.

11. The combination, with a bracket, rocking bar, swinging arm, and track-wires, of a catch secured to the bar and a bumper carried by the arm, substantially as set forth.  
80

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

SAMUEL W. BARR.

Witnesses:

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I. S. DONNELL.