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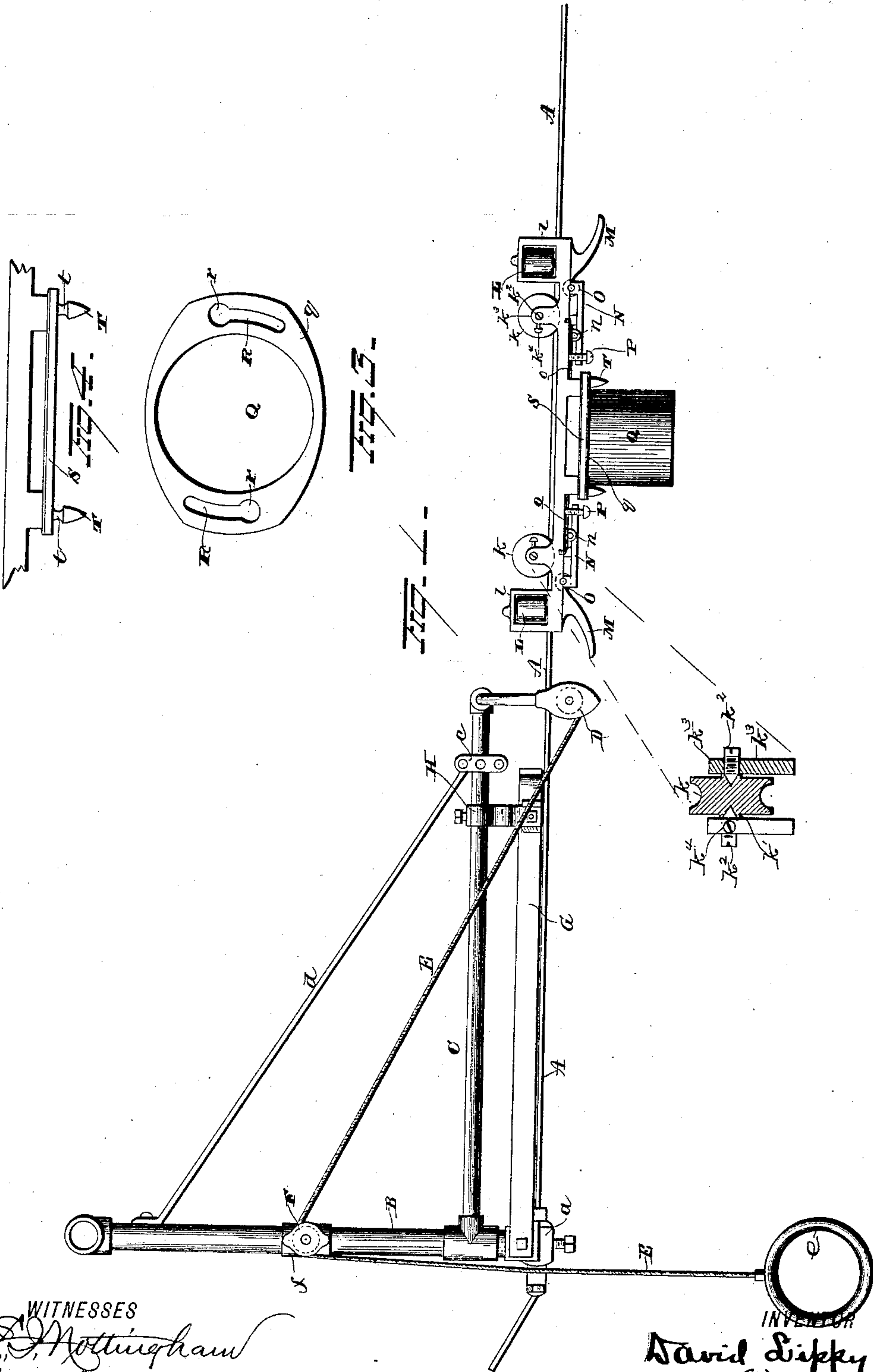
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D. LIPPY & P. OTT.

CASH CARRIER.

No. 328,323.

Patented Oct. 13, 1885.



WITNESSES

*E. J. Nottingham*  
*Geo. F. Downing,*

*B. H. Seymour.*

*David Lippy,*  
*Peter Ott,*  
Attorney

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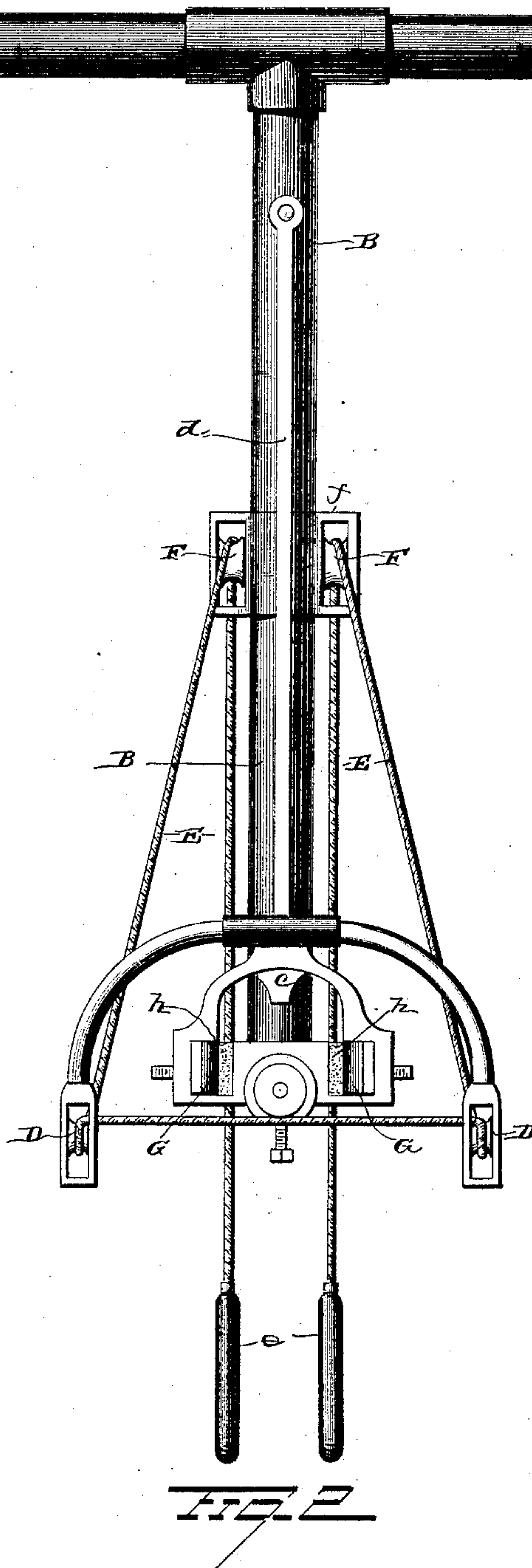
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*Geo. F. Downing.*

INVENTOR  
*David Lippy.*  
*Peter Ott.*  
Attorney  
*R. M. Symmons.*



# UNITED STATES PATENT OFFICE.

DAVID LIPPY AND PETER OTT, OF MANSFIELD, OHIO.

## CASH-CARRIER.

SPECIFICATION forming part of Letters Patent No. 328,323, dated October 13, 1885.

Application filed September 9, 1885. Serial No. 176,600. (No model.)

*To all whom it may concern:*

Be it known that we, DAVID LIPPY and PETER OTT, of Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Cash-Carriers; and we 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.

Our invention relates to an improvement in cash-carriers.

On August 11, 1885, an application for improvement in cash-carriers was allowed David Lippy, in which a car suspended from a single wire was caused to traverse the wire from station to station by an impetus given it from the operator, the same pull by the operator which set the car in motion also serving to release the car from a stop which automatically locked the car in position as it reached a station.

On August 12, an application for improvement in cash-carriers was allowed us in which the principal features of the former application referred to were embodied, the gist of the second invention being the simplification of the several parts and the addition of such new features as would tend to make the invention better adapted for general use.

The object of our present invention is to still further simplify the cash-carrier system set forth in the former applications, and to provide a safe, noiseless, and durable carrier and a cash-box capable of a more ready and convenient closure.

With these ends in view our invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of one of the station ends of the system in side elevation, the car resting on the track just outside of the station. Fig. 2 is an end view; and Figs. 3 and 4 represent a top plan view of the cash-box and a section of the cover, respectively.

A represents the track-wire extending through the lower end of the hanger B, as shown at *a*, or secured to the hanger or other support in any approved manner.

C is an arm, which extends from the hanger B above and parallel with the track to a point, preferably at a somewhat greater distance from the hanger than the length of the car, and is provided at its outer end with a depending U-shaped support in the ends of which the operating-cord pulleys D are journaled. A diagonal brace-rod, *d*, is secured to the hanger B and to a collar *c* on the arm C to steady the said arm in position.

E is the operating-cord. It extends from the ring-handle *e* over one of a pair of pulleys, F, secured to the hanger B by means of a vertically-adjustable sleeve or collar, *f*; thence around one of the pulleys, D; thence across below the track A to the other pulley, D, around which it passes, and thence over the other pulley F and back to the ring-handle *e*.

A pair of brake bars or jaws G extend along the opposite sides of the track-wire a distance preferably about equal to the extreme length of the car, and are supported at their outer ends by a saddle-bracket, H, adjustably secured to the arm C. Their inner ends are secured to the track-fastener *a* on opposite sides thereof. Between the brake-bars G and the fastener *a*, and between the said brake-bar and the depending branches of the saddle-bracket H, yielding cushions *h*, preferably rubber, are interposed, and are locked in either contracted or expanded adjustment, as desired, by means of bolts and draw-nuts I, or other equivalent device. The ends of the brake-bars G toward the station from which the car approaches are curved outwardly flaring-shaped to receive the end of the car as it approaches.

K represents the body of the car, suspended from the axles *k'* on a pair of wheels, *k*, adapted to run on the track A. The ends of the axles *k'* are hollowed out to receive the conical or pointed ends of set-screws *k<sup>2</sup>* which work in the upright ears *k<sup>3</sup>*, thus forming a very delicate bearing as free from frictional contact as possible. To prevent the pivotal set-screws *k<sup>2</sup>* from working loose in their seats, we provide a second set-screw, *k<sup>2</sup>*, working in the ear *k<sup>3</sup>* transversely to the screw *k<sup>2</sup>*, and adapted to impinge against the latter, and thereby serve to lock it in the desired adjustment.



At each end of the body is secured an upright roller, L, loosely journaled in a suitable frame, *l*. The diameter of the roller L is somewhat greater than the distance between the brake-bars, and gradually increases from the hanger B to the receiving ends, and the roller L is thereby gradually wedged more tightly between the bars as the car moves on toward the hanger, and is brought to a full stop just as it reaches the hanger. By adjusting the spring-cushions *h* the bars G may be arranged to press more or less sharply on the rollers L, and the car, no matter what its momentum may be, can be brought to a full stop with the least possible jar and noiselessly. The turning of the rollers L on their axes prevents wear from sliding friction, and also prevents any disagreeable harsh sound from the contact.

Each end of the car is also provided with a depending outwardly-extending hook, M, located beneath the longitudinal axis of the car, which catches the loop of the operating-cord as the car enters the station, and carries it toward the hanger into a position for returning the car to the opposite station by a downward pull on the ring-handle, as fully set forth in the former applications referred to above.

To hold the car on the track, and prevent the jarring which often occurs when a car is forced rapidly along the wire, we provide a pair of under guides, as follows: A pair of levers, N, are pivotally secured to the body of the car, as shown at *n*. In one end of each lever is journaled a pulley, O, adapted to bear against or run in close proximity to the under side of the track. The opposite end of each lever is provided with a set-screw, P, adapted to regulate the distance of that end of the lever from the under side of the body K, and hence the distance of the face of the pulley O from the track. Spring-cushions *o* are interposed between the levers and the body to prevent rattling and to oppose a yielding force against the action of the set-screws P.

The cash-box Q consists, preferably, of a cylindrical cup open at the top, and provided with a laterally-extending flange, *q*, about its upper edge. The opposite ends of the flange *q* are each provided with an oblong curved slot, R, terminating at two diametrically-opposite ends in enlarged circular slots *r*. The cover S of the cash-box is firmly secured to the under side of the body K, and lined with rubber or other yielding material to prevent rattling.

From the under side of the cover S, in positions corresponding to the slots R *r* in the flange *q*, two conical-shaped locking-studs, T, depend. The studs have grooves cut around their bases, leaving a narrow neck, *t*, adapted to fit the oblong slots R, while the largest portions of the studs loosely fit the circular slots *r*.

The cash-box may thus be attached to the car by pressing it upwardly against the cover with the studs T in the slots *r*, and then giv-

ing it a partial rotation, sliding the necks *t* of the studs into the slots R. The pressure of the rubber or other yielding lining *s* on the under side of the cover will prevent the cash-box from becoming displaced during its travel.

The attachment is thus simple and effective and capable of the quickest possible adjustment.

It is evident that many slight changes might be resorted to in the construction and arrangement of the several parts without departing from the spirit and scope of our invention; hence we do not wish to limit ourselves strictly to the construction herein set forth; but,

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

1. In a cash-carrier, the combination, with a car, means for actuating the car, and the car-track, of a pair of yielding jaws or bars adapted to receive the car between them and bring it to a gradual stop, substantially as set forth.

2. In a cash-carrier, the combination, with the car-track, the car, and means for actuating the car, of a pair of flaring bars or jaws adapted to engage the opposite sides of the car and bring it to a gradual stop, substantially as set forth.

3. In a cash-carrier, the combination, with the car-track, the car, and means for actuating the car, of a pair of adjustable bars or jaws adapted to engage the opposite sides of the car and bring it to a gradual stop, substantially as set forth.

4. In a cash-carrier, the combination, with the car-track, a car provided with an upright roller, and means for actuating the car, of a pair of yielding jaws adapted to engage the opposite sides of the roller, and thereby bring the car to a gradual stop, substantially as set forth.

5. In a cash-carrier, the combination, with the car-track, the car provided with a pair of upright rollers, and means for actuating the car, of a pair of adjustable yielding jaws adapted to engage the opposite sides of the rollers and bring the car to a gradual stop, substantially as set forth.

6. In a cash-carrier, the combination, with the track and a car adapted to be actuated by the hand of the operator, of a pair of brake-jaws adapted to engage the sides of the car with a gradually-increasing pressure for the purpose, substantially as set forth.

7. In a cash-carrier, the combination, with the track and its supports and an arm for supporting the operating-cord pulleys, of a pair of brake-jaws supported at their outer ends by a saddle-bracket secured on said arm, yielding cushions interposed between the saddle and jaws, and clamp-screws or their equivalent for regulating the expansion and contraction of the cushions, substantially as set forth.

8. In a cash-carrier, the combination, with the track and the car suspended thereon, of a



guide-pulley journaled in a lever secured to the body of the car, the said guide-pulley being adapted to rest in contact with or in close proximity to the under side of the track, substantially as set forth.

5 9. In a cash-carrier, the combination, with the track and the car suspended thereon, of guide-pulleys journaled in the ends of levers fulcrumed on the body of the car and means  
10 for adjusting the levers, substantially as set forth.

10. In a cash-carrier, the combination, with the track and the car suspended thereon, of a pair of levers fulcrumed on the under side of  
15 the car-body, guide-pulleys journaled in one end of each lever, adjusting-screws in engagement with the other ends of the levers, and spring-cushions interposed between the levers and car-body, substantially as set forth.

20 11. In a cash-carrier, the combination, with the car, the cash-box cover secured thereto, and fastening-studs depending therefrom, of the cash-box provided with a slotted flange adapted to receive the fastening-studs and be  
25 locked thereto by a rotary movement, substantially as set forth.

12. In a cash-carrier, the combination, with the car, the cash-box cover secured to the car and provided with a yielding lining, and fastening-studs depending from the cover, of  
30 the cash-box provided with a slotted flange adapted to receive the fastening-studs and be locked in snug contact with the yielding lining by a rotary movement, substantially as  
35 set forth.

13. In a cash-carrier, the combination, with the car-supporting wheels adapted to rotate in opposite directions on the wire, of pivotal adjustable bearings for the axles, and set-  
40 screws adapted to lock the bearings in the desired adjustment, substantially as set forth.

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

DAVID LIPPY.  
PETER OTT.

Witnesses:

S. G. CUMMINGS,  
C. E. McBRIDE.