(No Model.)

H. M. WEAVER.

CASH AND PACKAGE CARRIER.

No. 369,218. Patented Aug. 30, 1887.

Fig. 2.

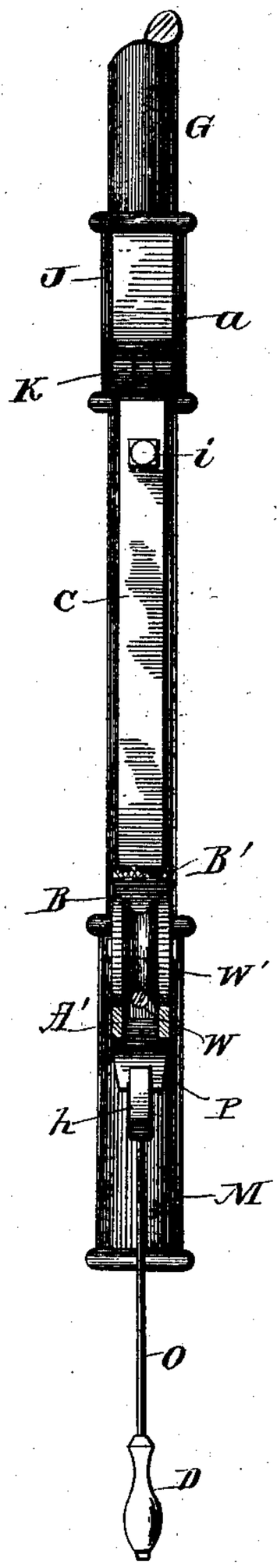
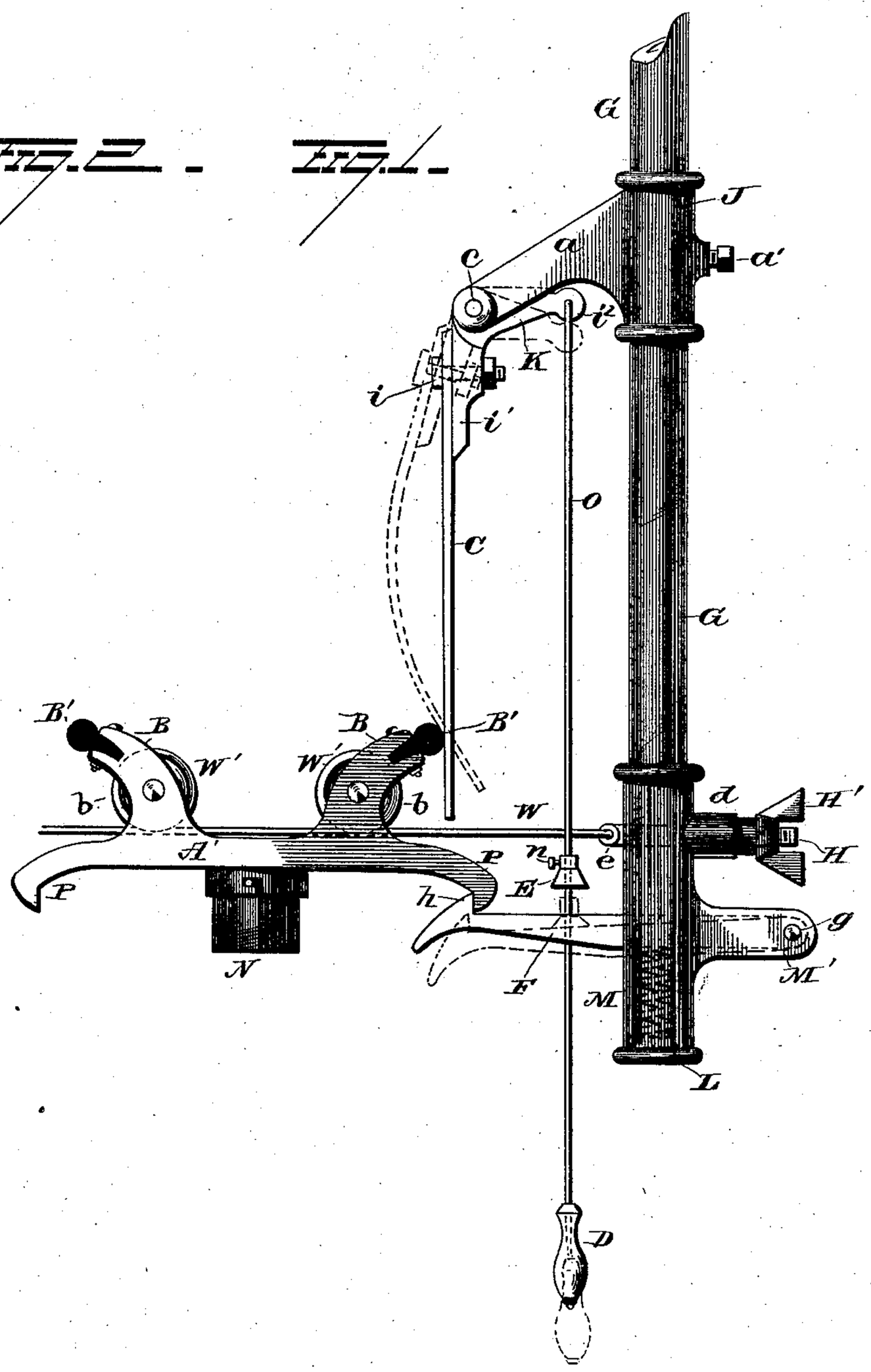


Fig. 1.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY M. WEAVER, OF MANSFIELD, OHIO.

CASH AND PACKAGE CARRIER.

SPECIFICATION forming part of Letters Patent No. 369,218, dated August 30, 1887.

Application filed March 17, 1887. Serial No. 231,290. (No model.)

To all whom it may concern:

Be it known that I, HENRY M. WEAVER, of Mansfield, in the county of Richland and State of Ohio, have invented a certain new and useful Improvement 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 same.

My invention relates to an improvement in cash-carriers, the object being to provide a device of this character that will be efficient and reliable in operation, have but few working parts, that are of simple form, and that can be made and maintained at a low cost for construction and repairs.

With these objects in view my invention consists of certain features of construction and combinations of parts, that will be hereinafter described, and pointed out in the claims.

Referring to the drawings making a part of this specification, Figure 1 is a side elevation of the device. Fig. 2 is a front elevation of the same.

This cash-carrier belongs to the type known as a "single-track system," so termed on account of the employment of a single-track wire, whereon the cash-carrier car travels between a cashier's stand and a clerk's station, one track sufficing to send the car in either direction, and for each cash-receiving station a separate line is erected to transmit cash or packages from one terminal to the other.

Various complicated mechanical expedients have been employed to give progressive motion to the transporting-car, that moves from end to end of a track, and in some cases gravity is solely depended upon to give the necessary impetus. The essential feature of my present invention consists in a simple and very effective combination of a plate-spring and other operative parts of the device to give the proper propelling force and act as a buffer-cushion at the opposite terminal of a line, similar devices being employed at each end or station to receive and discharge a transporting-car with its connected freight, as will appear in the detailed description that will now be given, proper reference being made to the appended drawings that form a part of the specification. The construction of parts at each end of a line being similar, it is only necessary to describe the details of one station.

G is a depending post or hanger, which is rigidly affixed to the ceiling or other elevated secure point in a room in which the device is located. The hanger G is of a proper length to hold the track-wire W at a proper elevation from the floor of the apartment. It is preferably made of wrought-iron tube, and is threaded at its lower end to receive the tubular bracket M, which is provided with a rearward projection, *d*, that forms an abutment for the winged nut H'. The line-wire W is connected to the end *e* of the straining-bolt H, upon which the nut H' is placed, a sufficient length of threaded body of the bolt extending beyond the projection *d* to engage this nut and permit a straining of the track-wire to give it necessary tension.

At a suitable point below the straining-bolt H two parallel lugs or ears, M', are formed integral with tubular bracket M. The bracket M is slotted vertically to correspond with the space that intervenes between the ears M', to allow the insertion of the latch-bar F through the bracket and into this space, to be pivoted at the point *g* to the ears M', a perforation being made in the ears and bar to permit the insertion of a bolt at this point.

The latch-bar F is supported upon a spiral spring, L, which rests on the base of the bracket M. The free end *h* of the latch-bar, projecting a proper distance from the bracket M, is provided with a latching-hook to engage a projection on the transporting-car A, as will be presently described.

The bracket J is secured to the hanger G, by means of the set-screw *a'*, a proper distance above the track-wire W, its integral arm *a* projecting above the track-wire and in the same vertical plane with it.

The free end of the arm *a* of the bracket J is slotted vertically to produce parallel jaws, that receive between them the bell-crank K, which is pivoted to these jaws at a point, *c*.

To the lower end, *i'*, of the bell-crank K a flat plate-spring, C, is bolted at *i*. This spring is preferably made of steel and is tempered to give it the requisite elasticity. It should be so proportioned that the impact of a car strik-

ing its side near the lower end will neutralize the shock and permit an engagement of the car with the hook *h* of the latching-bar F.

The upper extremity of the bell-crank K is perforated at i^2, and a depending, cord, wire, or wire rope, O, is secured to it. The body of the latch-bar F is perforated to permit the passage through it of the cord or wire O, the hole being of such diameter as to afford sufficient play to permit free movement of this wire when the latch is depressed. A check-block, E, is made to slide upon the wire O and be secured at a desired point by a set-screw, *n*, or any other convenient means. It is intended to impinge upon the upper surface of the latch-bar F, to release this latch-bar from an engagement with the car A, as will now be described. The car A is used as a means of transporting cash or packages from a clerk's station to a cashier's desk or other desired point. This car is constructed having a frame, A′, which is preferably made of metal. This frame has slotted brackets B formed at each end, which are adapted to support on pivoted bearings the grooved wheels *b*, that are intended to support the car upon the track-wire W, these wheels resting upon the same, as shown in Fig. 1. The portions of the brackets B that project above the wheels *b* are curved to project outside the peripheries of these wheels and are slotted to receive the gum buffers B′, these elastic buffers being held in place by bolts or rivets inserted through the flanges of the brackets B, between which they are inserted.

Upon each end of the frame A′ the depending hooked projections P are formed. These rest in a plane below the line-wire W and have their free ends curved to engage the hook *h* of the latch-bar F when a car reaches a station.

The plate-spring C is of such a proportionate length as to extend and nearly reach the line-wire W, and it is in a perpendicular position when the upper limb, i^2, of the bell-crank K is made to abut on the shoulder of the slot in which it vibrates. The relative distance of this spring C from the supporting-hanger G is such that the hook *h* on the latch-bar F will lie in a vertical plane nearer the hanger and permit a slight impingement of the buffer B′ against the face of the spring C when a car arrives at a station. The contact of the car with the elastic spring C will cause this spring to yield sufficiently to permit a latching engagement of the projecting hook P of the car with the latch-hook *h* of the bar F, and by the joint action of the gum buffer-cushion B′ and slight yielding of the spring C the momentum of the rapidly-moving car is absorbed, and the same arrested and held in secured position without jar or noise.

The car A is represented as being provided with an ordinary cash-receiver, N, which is attached to the lower surface of the frame A′ by a lantern-lock in the usual way. I do not desire to restrict myself to such a cash or package receptacle in connection with this improved car arresting and dispatching apparatus, as it is evident that other devices may be employed which will afford a means of elevation of the cash or package receptacle to connect the same with the transportation-car. The improved latching device for which I have made application for patent, filed on the 21st day of January, 1887, is peculiarly well adapted for the purpose mentioned.

When cash or packages are to be dispatched from a station, the handle D is depressed, and the check-block E in this manner brought into forcible contact with the upper surface of the latch-bar F. The position of this block upon the pendent wire or cord O is such that a forward projection of the spring C is effected, as is shown in dotted lines in Fig. 1, and it should be stated that this pressure of the spring against the buffer B′ of the car will be permitted by the position of the check-block E in relation to the latch-bar F, this adjustment of parts being such that a proper forward propulsion of the car will result from a sudden release of the spring C and its tendency to assume a normal position. This release is accomplished when a maximum predetermined compression of the spring C is attained by the continued downward draft of the wire O, causing a disengagement of the hook *h* from the projection P on the car A. It is apparent that the degree of spring-compression and transmitted energy thus imparted to the car may be regulated critically by the adjustment of the check-block E to cause its releasing contact with the latch-bar F at the proper time.

Slight changes might be made in the constructive details of this device without departure from the spirit or exceeding the scope of my invention. I do not, therefore, desire to strictly confine myself to exact forms shown; but,

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

1. In a cash and package carrier, the combination, with a hanger, a track, a car adapted to move on the track, and a latch-bar to engage the car, of a pivoted device adapted to arrest the momentum of the car and furnish means for giving the car a starting impulse, and a device for operating the latch-bar and the propelling mechanism, substantially as set forth.

2. In a cash and package carrier, the combination, with a hanger, a track-wire, and a car, of a pivoted latch-bar, a bell-crank lever, one arm of which is adapted to engage the car, and a device for actuating the bell-crank lever and the latch-bar, substantially as set forth.

3. In a cash and package carrier, the combination, with a track and a car adapted to travel thereon, of a bell-crank lever having a spring-arm adapted to engage the car and arrest the momentum of the same and give it a starting impulse, a latch-bar for locking the car at one end of the track, and a device for operating the latch and the bell-crank lever, substantially as set forth.

4. In a cash and package carrier, the combination, with a hanger, a track-wire secured to the hanger, a spring-actuated latch-bar, and a car adapted to engage the latch-bar, of a supported plate-spring that acts as a recoil-arrester and car-starter and a pendent wire or cord provided with an adjustable check-block adapted to release the latch-hook from the car when the spring is strained to propel the car, substantially as set forth.

5. In a cash and package carrier, the combination, with a hanger, a bracket, and a bell-crank lever carrying a plate-spring, of a track, a pivoted and spring-supported latch-bar, a car adapted to move on the track and be locked to the latch-bar and impinge upon the plate-spring, and a wire or cord attached to the bell-crank lever and provided with an adjustable check-block, substantially as set forth.

6. In a cash and package carrier, the combination, with a hanger, a fixed bracket attached to the lower end of the hanger, a track-wire, and a latch-bar, of an upper bracket, a bell-crank pivoted to this bracket, a plate-spring, and a wheeled car adapted to move on the track-wire and engage the spring and latch-bar, substantially as set forth.

7. In a cash and package carrier, the combination, with a hanger, a tubular bracket fixed to the lower end thereof, a pivoted and spring-actuated latch-bar, a track, an adjustable slotted upper bracket, a bell-crank pivoted to vibrate in this slotted bracket, and a plate-spring fixed to the lower limb of the bell-crank, of a two-wheeled car having elastic buffers made to project at each end to impinge on the vertically-depending plate-spring, and extended hooked limbs adapted to engage the hooked end of the yielding latch-bar and hold the car stationary, substantially as set forth.

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

HENRY M. WEAVER.

Witnesses:
W. H. FUNK,
J. C. LASER.