

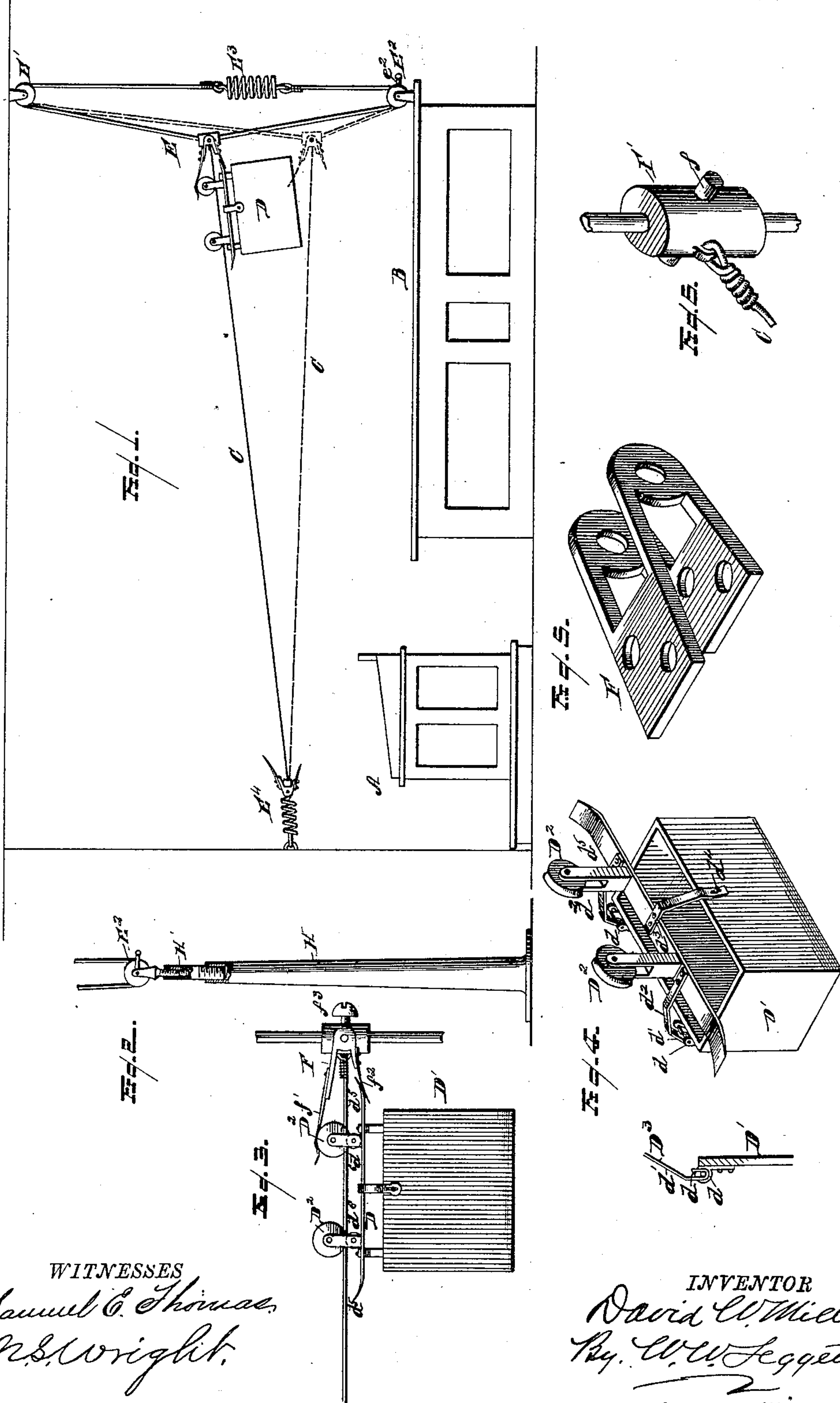
(No Model.)

D. W. MILLER.

CASH AND PARCEL CARRIER.

No. 342,921.

Patented June 1, 1886.



WITNESSES

Samuel C. Thomas.
N. S. Wright.

INVENTOR

David W. Miller
By W. W. Leggett,
Attorney

UNITED STATES PATENT OFFICE.

DAVID W. MILLER, OF DETROIT, MICHIGAN.

CASH AND PARCEL CARRIER.

SPECIFICATION forming part of Letters Patent No. 342,921, dated June 1, 1886.

Application filed October 31, 1885. Serial No. 181,509. (No model.)

To all whom it may concern:

Be it known that I, DAVID W. MILLER, of Detroit, county of Wayne, State of Michigan, have invented a new and useful Improvement in Cash and Parcel Carriers; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists of the combination of devices and appliances hereinafter specified, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a view in elevation illustrating my invention, showing a crank connected with the counter. Fig. 2 represents a variation in which the crank is connected with a short post adjacent to the counter, or in any other convenient locality. Fig. 3 illustrates the cushion mechanism employed for preventing a shock at the end of the line as the car reaches the end of its travel. Fig. 4 represents my cash and parcel holder. Fig. 5 is a separate view of the swiveled shank of the spring-cushion. Fig. 6 is the sleeve to which the line wire or cable is attached, and through which the hoisting-cable is passed.

My invention relates more particularly to the method employed for securing a tension upon the line wire or cable; also, to the means employed for raising and lowering one end of the line; also, in other special features of construction.

Heretofore in that class of cash and parcel carriers in which one end of the line or track is raised or lowered, so as to give it an incline and permit the car to travel by its gravity, it has been customary to connect the end of the line to a bracket, which latter is caused to traverse up and down along a post, rod, bar, or tube. This, however, produces an unsightly appearance, involves frequently a considerable expense for materials as well as for erection, requires a considerable effort to raise and lower the bracket, and the main line or track is apt to have its tension considerably changed, dependent upon its elevation or depression.

In carrying out my invention, A represents

a sectional station—as, for instance, the location of the cashier and package-department of a store.

B represents a counter in any part of the store.

C is the line or track for the cash or parcel carrier.

D is the carrier; and D' the box or receptacle for cash or package.

E is a hoisting apparatus for raising and lowering the end of the line or track. This consists, preferably, of a wire cable passed over a pulley, E', secured to the ceiling and over a pulley, E'', secured to the counter, the latter being provided with an operating-crank, e'.

E³ is a stout spring, which gives at all times a considerable tension to the wire or track C, through the medium of the upright cable E. A similar spring, E⁴, may, if desired, be located at the opposite end of the wire C, assisting to the same end.

The box D' (shown in Fig. 4) is preferably provided with hinge-bars d, adapted to readily engage the hook d' at the end of the strap or arm d², which projects from the carrier. Another strap, d³, readily engages a pin, d⁴, on the box. It is thus apparent that by simply throwing the strap d³ off from the pin d⁴, the box will turn down about the hinge-bars d, and at the same time, if it is desirable to lift the box from the carrier, it requires only to lift the hinge-bars up out of the loops d'.

The carrier D has grooved rollers D², which ride upon the line or track.

At each end of the track is a spring-cushion. (Shown more particularly in Fig. 3 at F.) It consists, preferably, of a shank (shown in Fig. 5,) which is adapted to engage the trunnions f on the block F'. (Shown in Fig. 6.)

Now, referring again to Fig. 3, f' and f² are springs which spread apart, so that when the car approaches that end of its travel, the adjacent wheel D² will ride under the spring f', while the longitudinal bar d³ of the carrier will ride in upon the spring f². The springs will therefore serve to brake and cushion the motion of the car until it stops, and will afford enough friction to hold the carrier in its place while the receptacle is being removed or filled.

The operation of this device will be readily understood, the track being in the position

shown in dotted lines and the car being ready to start on its travel toward the cashier's or package department. The clerk seizing the crank e^2 , turns it, causing the cable E to traverse over the pulleys E^1 and E^2 , thus raising that end of the track or line until the car starts of its own gravity. In this operation the spring E^3 and E^4 , if that spring is employed, serve to maintain a strong tension upon the track-wire C. The carrier having reached its destination, the crank e^2 is turned in the opposite direction, and the line-wire is brought into the position shown in dotted lines. It will then cause the carrier to travel back by gravity as soon as released at the cashier's or package department. This device is adapted for ready attachment without any fitting in any location. It simply requires the fastening of a pulley at the ceiling and another beneath it at the counter and a cable passed over the two, as shown, and it dispenses with any stationary bar or other appliance at the salesman's station. It will usually be desirable that the car should not start from either end without a slight effort to release it from the spring-cushion F. In that case the salesman or other person can release it by slight pressure of the hand.

Instead of attaching the lower pulley to the counter it may, if desired, be connected with a separate short post, H, as shown in Fig. 2. So, also, the lower pulley may, if desired, be provided with a screw-sleeve, H' , threaded right and left, engaged at one end with the stem of the pulley E^2 and at the other end with a post or attachment to the counter, so that by turning this sleeve the pulley may be drawn downward, and so bring the cable E and its spring E^1 to the proper tension.

The block F, to which the track C is attached, is secured to the cable F in any suitable manner, as, for instance, by a set-screw, f^3 .

Instead of securing the upper pulley to the ceiling, both pulleys might be secured to an upright post extending from floor to ceiling. Such a post might be found to be so located in the construction of the building as to be conveniently used for this purpose.

To prevent the carrier from being lifted from the track when it reaches the end of its travel and comes in contact with the cushioning-springs, I prefer to employ additional pulleys, d^6 , engaged beneath the track, as shown in Fig. 3; but I do not limit myself thereto.

What I claim is—

1. A cash or parcel carrier apparatus consisting of a wire or cable track connected at its end to an upright band or cable, an elastic

section interposed between the ends of said upright cable or band, and upper and lower pulleys over which said upright band or cable is passed with means for actuating the latter to hoist and lower the adjacent end of the wire or cable track, substantially as described.

2. In a cash or parcel carrier apparatus, an upright cable or band to which one end of the track-wire is attached, upper and lower pulleys over which said band or cable passes, and a spring-section, E^3 , whereby tension is given to the track through said upright band or cable, substantially as described.

3. In a cash or parcel carrier apparatus, an upright cable or band to which one end of the track-wire is attached, an upper and lower pulley over which said upright band or cable is passed, means for giving tension to said band, and a crank connected with the lower pulley, for actuating the upright band or cable to raise or lower the adjacent end of the track-wire, substantially as described.

4. In a cash or parcel carrier apparatus, a track wire or cable provided at one end with a spring-section, E^4 , and having its other end attached to an upright band or cable, upper and lower pulleys through which said cable is passed, and means for actuating said upright band or cable to raise or lower the adjacent end of the track, substantially as described.

5. The carrier provided with hooked straps d^2 and a latch-strap, d^3 , in connection with a receptacle, D' , provided with engaging hinge-bars d and pin or button d^4 , substantially as described.

6. The cushion or brake F, provided with spring-arms f^1 and f^2 , adapted to engage with one of the rollers and with a bar upon the carrier, and thereby check and stop the carrier, substantially as described.

7. The combination, with one of the pulleys of the upright band, of a right-and-left screw-sleeve upon its shank, whereby the pulley may be drawn downward and a tension given to the band or cable, substantially as described.

8. In a cash or parcel carrier apparatus, an upright cable or band to which one end of the track-wire is attached, upper and lower pulleys over which said band or cable passes, a tension device to tighten the track-wire, and means for elevating and lowering one end of the track-wire, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

DAVID W. MILLER.

Witnesses:

N. S. WRIGHT,

M. B. O'DOHERTY.