To all whom it may concern:

Be it known that I, JAMES L. BALDWIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Traveling and Elevating Parcel-Carrier, of which the following is a specification.

My invention relates to parcel carriers employed to transmit small parcels from place to place rapidly by means of suitable propulsion delivered to a car mounted to travel on a suitable track, and the objects of my invention are, first, to transmit a carrier from place to place and at different levels with very little propelling force; second, to facilitate propelling the carrier around a curve; third, to positively and automatically lock the carrier to the propelling device upon its return to the station; fourth, to eliminate all spring pressed catches; fifth, to make a simple, effective and durable device and other features to become apparent from the description to follow.

This invention is an improvement on the device forming the subject matter of my application for patent filed August 13, 1912, Serial No. 714,911, and is designed particularly to overcome the objection of the carrier rebounding after striking the buffer spring when returned to the station and the necessity of exerting a strong pull on the thrower or propelling device when sending the car out from the station.

To describe my invention so that others versed in the art to which it pertains can make and use the same I have illustrated it on the accompanying sheet of drawing forming a part of this specification in which:

Figure 1, is a side elevation of a device embodying my invention showing the carrier at the lower station and Fig. 2, is a similar view enlarged showing the position of the thrower or propeller after the carrier has been sent out from the lower station, and Fig. 3 is a side elevation of a modification.

Similar reference characters refer to similar parts throughout the views.

Similar to the construction shown in my application above referred to the track comprises the horizontal or slightly inclined portion 3, and the vertical portion 4, below the plane of the portion 3, and is made of a continuous wire, upon which the wheeled carrier 5 is mounted to travel. The track wire is secured to a suitable station bracket 6 at the lower end, to a suitable curved or corner section 7 at the bend and has its remaining end secured to another station bracket not shown.

The thrower or propeller 8 for the carrier is mounted to slide freely on vertical ways 9 parallel to the track portion 4 and may be considered an elevator, since it serves to elevate and lower the carrier. A pull cord 10 is attached to the thrower 8 for operating the same. The thrower 8 is provided with the lower buffer springs 11 which take against the station bracket 6, and with the upper buffer springs 12 which take against the corner bracket 7 when the thrower is in its upper position. A suitable counter-weight 13 is attached to the pull cord 10 of such weight that the thrower 8 will be held in its upper position against the corner bracket 7 in the absence of the carrier but will be held in its lower position against the bracket 6 when the carrier is at the station; the weight of the carrier being sufficient to overcome the upward pull exerted by the weight 13.

The mechanism thus far described is substantially shown in my former application above referred to and necessitates a sufficiently quick and strong pull on the pull cord 10 to throw the carrier 5 around the corner section 7 and along the portion 3 of the track. Experience has proven that occasionally the carrier would fail to reach its destination on account of an insufficient throw or momentum given to the carrier by the operator. To overcome this objectionable feature I pivotally attach an extension rod 14 to the thrower 8 at 15 which is of sufficient length to push the carrier 5 entirely around the curved portion 7 and onto the horizontal portion 8. The extension rod 14 is provided on its upper end with an end piece 16 having means preferably wheels 17 for guiding it along on the track wire and a hook 18 arranged to automatically take into a suitable catch or loop 19 provided on the carrier 5. It will be noted that the hook 18 is rigid or integral with the end piece 16, there being no springs required since the position of the extension rod 14 at the curved portion of the track is such that the hook 18 is withdrawn or disengaged from.
the catch or loop 19; but when the extension rod 14 is in juxtaposition to the vertical portion of the track 4, the position of the same is such that the hook 18 is held in engagement with the catch or loop 19 and the carrier 5 is locked to the end piece 16 and of course also to the thrower 8.

In operation to send the carrier 5 out from the station the pull cord 10 is pulled with only sufficient force to send the carrier the length of the horizontal portion 3 of the track; the first action or movement lifts the thrower 8 together with the carrier, and the final movement of the pull cord causes the extension rod 14 to lift and push the carrier 5 entirely around the curved section 7 where the said rod is automatically released from same and brings the thrower 8 to stop with its upper buffer springs 12 against the stops on the corner section 7, where it remains by reason of the counter-weight 13 as above described.

When the carrier 5 is returned to the station, its end contacts with the end piece 16 on rod 14 and its momentum and weight will carry the thrower 8 downward until the lower buffer springs contact with the bracket 6 in which position as above described the carrier 5 is positively locked to the thrower 8 through the extension rod 14. The locking of the carrier 5 to the thrower 8 is desirable to prevent the carrier 5 from rebounding, especially when it is returned to the station with considerable force by some careless operator.

In Fig. 3, is illustrated a modified form in which the thrower 20 is arranged to be pulled upward around the curved section 7 of the track until it comes to stop against a suitable buffer 21 provided for the purpose. The thrower 20 is guided to travel on the track wire by means of four grooved wheels arranged on opposite sides of the wire so that the thrower cannot leave the wire. The pull cord 22 passes upward from the handle 23 around the pulley 24 and thence downward to the thrower 20 to which it is attached. The thrower 20 is provided at its upper end with the hook 25 which performs the same function as does the hook 18 in the construction shown in Figs. 1, and 2, as above described.

To retain the thrower 20 in proper registering position with the corner section 7 of the track when it is in position on the vertical track 4 I provide a guide wire 26 extending parallel to the vertical track 4 which is straddled by the forks 27 provided on the thrower 20 for the purpose. To retain the carrier 5 in proper registering position with the corner section 7, a forked extension 28 is provided on the thrower to straddle the end of the carrier 5.

It will be understood that the size, form and arrangements of parts may be modified to a considerable degree without in the least departing from the scope of my invention.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. In a device of the class described, a track comprising a horizontal section a vertical section at one end of and below the horizontal section, and a curved section connecting said horizontal section and said vertical section, a car to travel on said track, a thrower for the car guided to move parallel to the track, a pull cord to operate said thrower and push the car upward and around said curved section of track and a hook on the thrower arranged to be locked to the car when the car is on the vertical section.

2. In a device of the class described, a track comprising a horizontal section, a vertical section and a curved section connecting the horizontal section with the vertical section, a car to travel on said track a thrower for the car mounted to travel on said track, a pull cord to operate said thrower and push the car upward and around said curved section of track and a hook on the thrower arranged to be locked to the car when the car is on the vertical section of track.

3. In a device of the class described, a track comprising a horizontal section, a vertical section and a curved section connecting said horizontal section to the vertical section, a car to travel on said track, a thrower for the car mounted to slide on said track, a guide for the thrower parallel to the track to retain the thrower in proper position, a pull cord to operate the thrower and push the car upward and around the curved section of track and a means on the thrower arranged to lock the thrower to the car when the car is on the vertical section of track.

4. In a device of the class described, two straight sections of track arranged at an angle to one another, a curved section connecting said two straight sections, a car to travel on said track, a thrower for said car, means to operate the thrower and push the car along one straight section and around the curved section and a hook on the thrower arranged to be locked to the car when the car is on the straight section and unlocked from the car when the car has been pushed around the curved section of track.

5. In a device of the class described, a track comprising a horizontal section, a vertical section at one end of and below the horizontal section, and a curved section connecting said horizontal section and said vertical section, a car to travel on said track, a thrower for the car guided to move parallel to said vertical section, a pull cord to operate said thrower, an extension rod on said thrower to engage said car and push the same upward and around said curved section.
of track and an integral hook on the upper
end of said extension rod arranged to be
locked to the car when the car is on the ver-
tical section of track and unlocked from the
car when the car is on the horizontal section
of track.
In testimony whereof I have signed my
name to this specification in presence of two
subscribing witnesses this 18th day of Au-
gust, 1914, at Chicago, Illinois.

JAMES L. BALDWIN.
Witnesses:
RICH. J. JACKE,
MORRIS LEWIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."