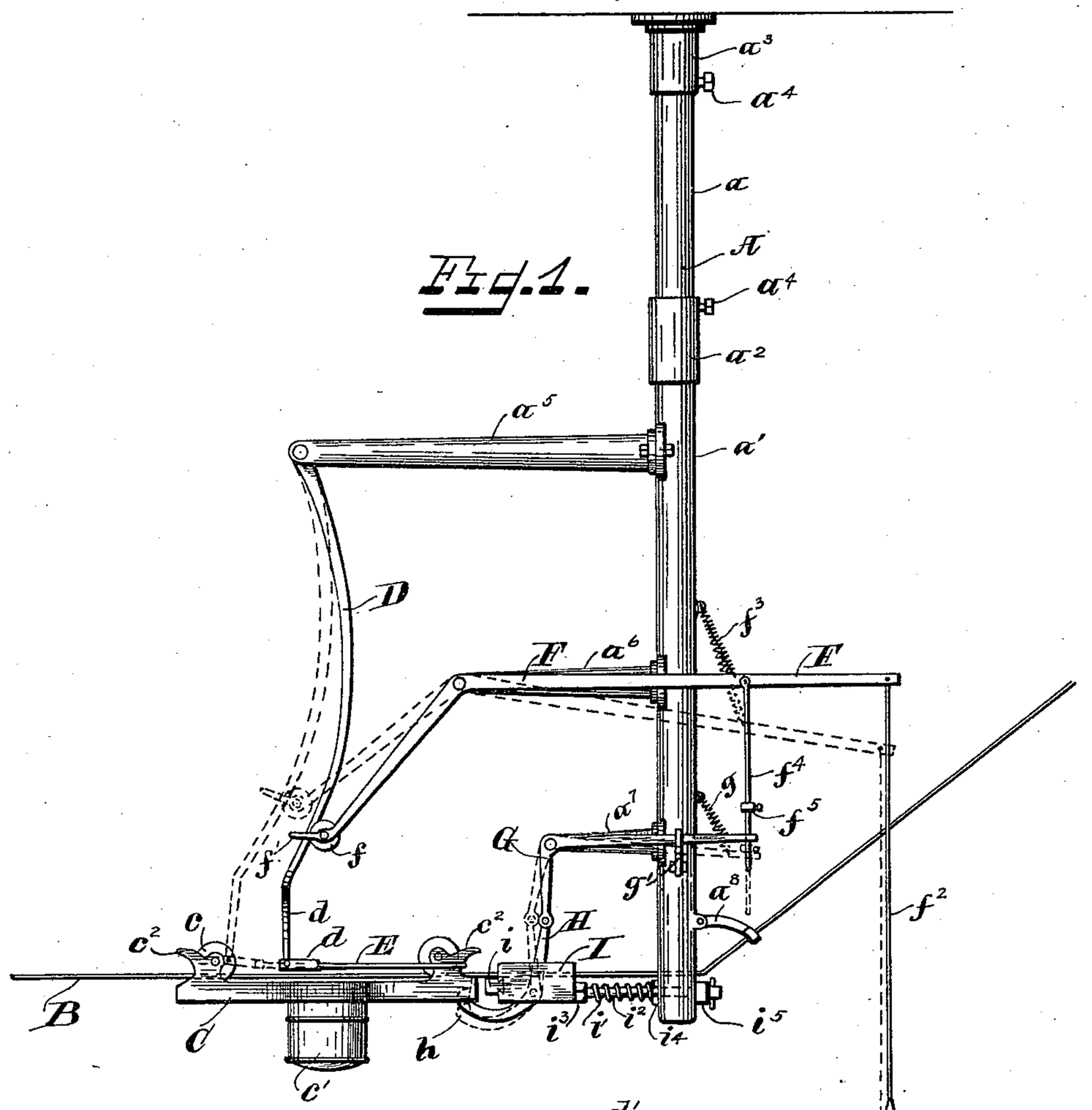
(No Model.)

D. E. CAMPBELL.

CASH AND PARCEL CARRIER.

No. 455,273. Patented June 30, 1891.

Fig. 1.



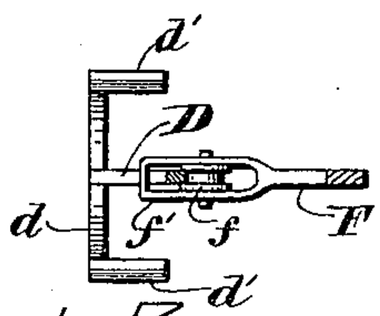


Fig. 3.

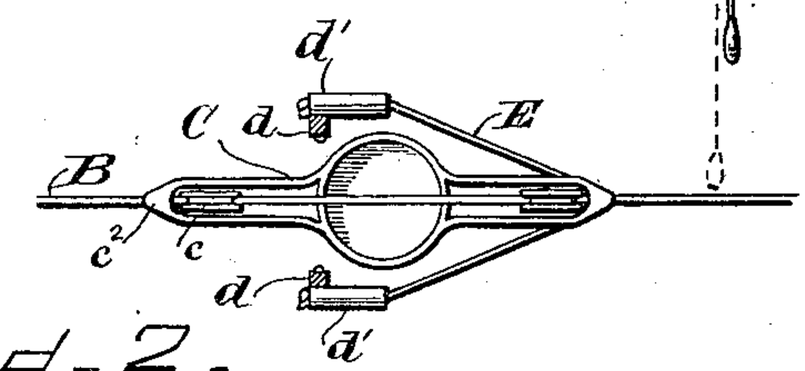


Fig. 2.

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UNITED STATES PATENT OFFICE.

DAVID E. CAMPBELL, OF CINCINNATI, OHIO.

CASH AND PARCEL CARRIER.

SPECIFICATION forming part of Letters Patent No. 455,273, dated June 30, 1891.

Application filed February 24, 1891. Serial No. 382,339. (No model.)

To all whom it may concern:

Be it known that I, DAVID E. CAMPBELL, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Cash and Parcel Carriers, of which the following is a specification.

My invention relates to that class of carriers in which a car, to which a receptacle for the cash and memoranda or parcels is attached, travels on a track or wire extending from station to station; and the object of my invention is to provide means, simple in construction and arrangement, for sending the car along its path and for receiving and retaining it at the stations; and the invention consists in the parts and combinations of parts, hereinafter more fully described.

In the drawings, Figure 1 is a side elevation of my improved apparatus. Fig. 2 is a top plan view of the car, showing its propelling-band in position; and Fig. 3 a top plan detail showing the end of the bent lever and its mode of contact with the depending bar.

A is a hanger or standard, hereinafter called a "hanger," composed of a suitable number of sections, as a and a'. In the form shown one end of section a takes into a socket a^2 on section a', and the other end into a socket a^3 attached to the ceiling. The section a is secured in the sockets by means of set-screws a^4 a^4, and preferably has sufficient longitudinal play therein to afford a means for regulating the length of the hanger. A wire B serving as a track is stretched from hanger to hanger, and may be continued beyond the hanger and secured to the wall or ceiling.

C is a car having wheels c and adapted to travel upon the wire. The car has a receptacle c' for cash, memoranda, parcels, &c., attached in such manner that it may be readily removed and replaced. An arm a^5 extends from the hanger and has hinged thereto a bar D. I have shown this bar curved inwardly and provided at its lower end with a fork d, through which the car may pass.

E is a spring, preferably an elastic band, secured to the fork. I have illustrated the prongs of the fork as provided with tubular passages d', through which the band E may take and in which it may be secured. The elastic band takes under a lip c^2 upon the car and serves as the means for propelling it. A second arm a^6 is attached to the hanger at a suitable point, preferably below the arm a^5, and has pivoted thereto a lever F, shown as a bent lever, the end of which has an anti-friction roller f mounted thereon. A band f' extends beyond the end of the lever and around the bar D, serving to hold the latter in place. A rod f^2 or similar operating device is attached to the outer end of the lever F. Pulling the rod throws the end of the lever F to which the roller f is attached up the incline formed by the curve in the bar and the forked end of the bar away from the end of the car, around which the elastic band takes, creating tension on the latter for producing the motive force to propel the car. This construction gives the car a direct forward movement, an equal strain being exerted on either side thereof, and prevents it from rocking. The bar D may be dispensed with and the elastic band E attached to the lever F, but I prefer to use the construction shown. A spring f^3 serves to throw the lever into its normal position after the rod has been operated. A third arm a^7 is attached to the hanger, preferably below the other two, and has pivoted thereto a lever G, jointed to a second lever H, pivoted on a block I, supported on the wire B. The levers G and H, preferably, have the shape of crank-levers, hinged so as to form a toggle-joint between their pivotal points. The lever H is provided with a catch h, adapted to hold the car C in place. The lever F has depending therefrom a rod f^4, taking through an eye in the end of the lever G and provided with a collar f^5, adjustably secured thereto. When the lever F is operated it carries with it the rod f^4, the collar on the rod, when properly set, abutting against and actuating the lever G at the appropriate moment, thereby actuating lever H and throwing the catch h out of engagement with the car, which is then sped on its way by the tension of the elastic band E. A spring g serves to return the lever G to its normal position. A suitable stop g' is provided to guide the lever G in its movement and to limit its throw.

When a car is received at a station its forward end will pass through the fork d, the lip c^2 taking over the elastic band, which

meanwhile has been resting on the wire. The forward end of the car will next throw the catch *h* into position and strike an elastic buffer *i*, attached to the block I. To guard against jarring when the car reaches a station, I prefer to so mount the block I that it may move longitudinally upon the wire B, and to provide a spring-bearing *i'*, which permits the block I to yield when the car strikes it and serves to return the block to its normal position. The spring may take around a rod i^2, which takes through and slides in the hanger. The spring *i'* bears against elastic washers i^3 and i^4, and the outer end of the sliding rod i^2 is provided with an elastic washer i^5.

To insure the fork *d* remaining in a central position over the wire, I provide the section of the hanger to which the arm a^5 is attached with a brace a^8, taking over that part of the wire which extends from the hanger to the wall or ceiling, thereby preventing a turning of the hanger on its axis.

I claim—

1. The combination, in a cash and parcel carrier, of a track, a car adapted to travel thereon, a hanger, an arm extending from the hanger, a bar pivoted to the arm and depending therefrom, a spring for propelling the car, a catch for holding the car while tension is being applied to the spring, a lever the end of which takes against and travels along the bar, thereby throwing the arm outward and applying tension to the spring, and tripping mechanism for releasing the car from the catch, substantially as and for the purpose specified.

2. The combination, in a cash and parcel carrier, of a track, a car adapted to travel thereon, a hanger, an arm extending therefrom, a bar hinged thereto, a fork at the end of the bar adapted to take over the car, a spring secured to the fork and adapted to engage with the car, a catch for the car, a lever the end of which takes against and travels along the bar, thereby throwing the arm outward and applying tension to the spring, and tripping mechanism for releasing the car, substantially as and for the purpose specified.

3. The combination, in a cash and parcel carrier, of a track, a car adapted to travel thereon, a spring for propelling the car, a hanger, a lever adapted to apply tension to the spring, a second lever, a lever jointed thereto, a catch carried thereby adapted to hold the car while tension is being applied to the spring, and a rod extending from the first lever adapted to actuate the second lever and throw the catch out of engagement with the car, substantially as and for the purpose specified.

4. The combination, in a cash and parcel carrier, of a track, a car adapted to travel thereon, a spring for propelling the car, a hanger, a lever adapted to apply tension to the spring, a second lever, a lever jointed thereto, a catch carried thereby adapted to hold the car while tension is being applied to the spring, a rod extending from the first lever adapted to actuate the second lever and throw the catch out of engagement with the car, and a stop limiting the throw of the lever, substantially as and for the purpose specified.

5. The combination, in a cash and parcel carrier, of a track, a car, a spring, a hanger, a lever for applying tension to the spring, a crank-lever supported by the hanger, a second crank-lever jointed thereto and carrying a catch for the car, a rod extending from the tension-lever and adapted to trip one of the crank-levers whereby the catch is thrown out of engagement with the car, substantially as and for the purpose specified.

6. The combination, in a cash and parcel carrier, of a track and a car adapted to travel thereon, with the hanger A, the arm a^5, the bar D, hinged to the arm and provided with means for propelling the car, the catch *h*, the arm a^6, the lever F, supported thereby, the band *f'*, taking about the bar D, and tripping mechanism for throwing the catch out of engagement with the car, substantially as and for the purpose specified.

7. The combination, in a cash and parcel carrier, of a track and a car adapted to travel thereon, with the hanger A, the arm a^5, the bar D, hinged to the arm and provided with means for propelling the car, the catch *h*, the arm a^6, the lever F, supported thereby, the band *f'*, taking about the bar D, the roller *f*, and tripping mechanism for throwing the catch out of engagement with the car, substantially as and for the purpose specified.

8. The combination, in a cash and parcel carrier, of a track and a car adapted to travel thereon with the hanger A, the arm a^5, the bar D, hinged to the arm and provided with means for propelling the car, the catch *h*, the arm a^6, the lever F, supported thereby, the band *f'*, taking about the bar D, the roller *f*, the spring f^3 for returning the lever to its normal position, and tripping mechanism for throwing the catch out of engagement with the car, substantially as and for the purpose specified.

9. The combination, in a cash and parcel carrier, of a hanger, an arm extending therefrom, a bar hinged to and depending from the arm and provided with means for propelling a car, a second arm, a lever pivoted thereto for operating the bar, two crank-levers hinged between their pivotal points, one of them carrying a catch for holding the car, a rod provided with a collar extending from the first lever for tripping the crank-levers and releasing the car from the catch, and means for returning the levers to their normal position, substantially as and for the purpose specified.

10. The combination, in a cash and parcel carrier, of a track, a car adapted to travel thereon, a sectional hanger supporting the end of the track, an arm extending from a

section of the hanger, a bar hinged thereto and carrying a fork adapted to take over the car, a spring secured to the fork and adapted to engage with the car, an extension of the track-wire beyond the track, and a brace extending from the section of the hanger to which the forked arm is connected to the extension of the track-wire, substantially as and for the purpose specified.

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Witnesses:
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