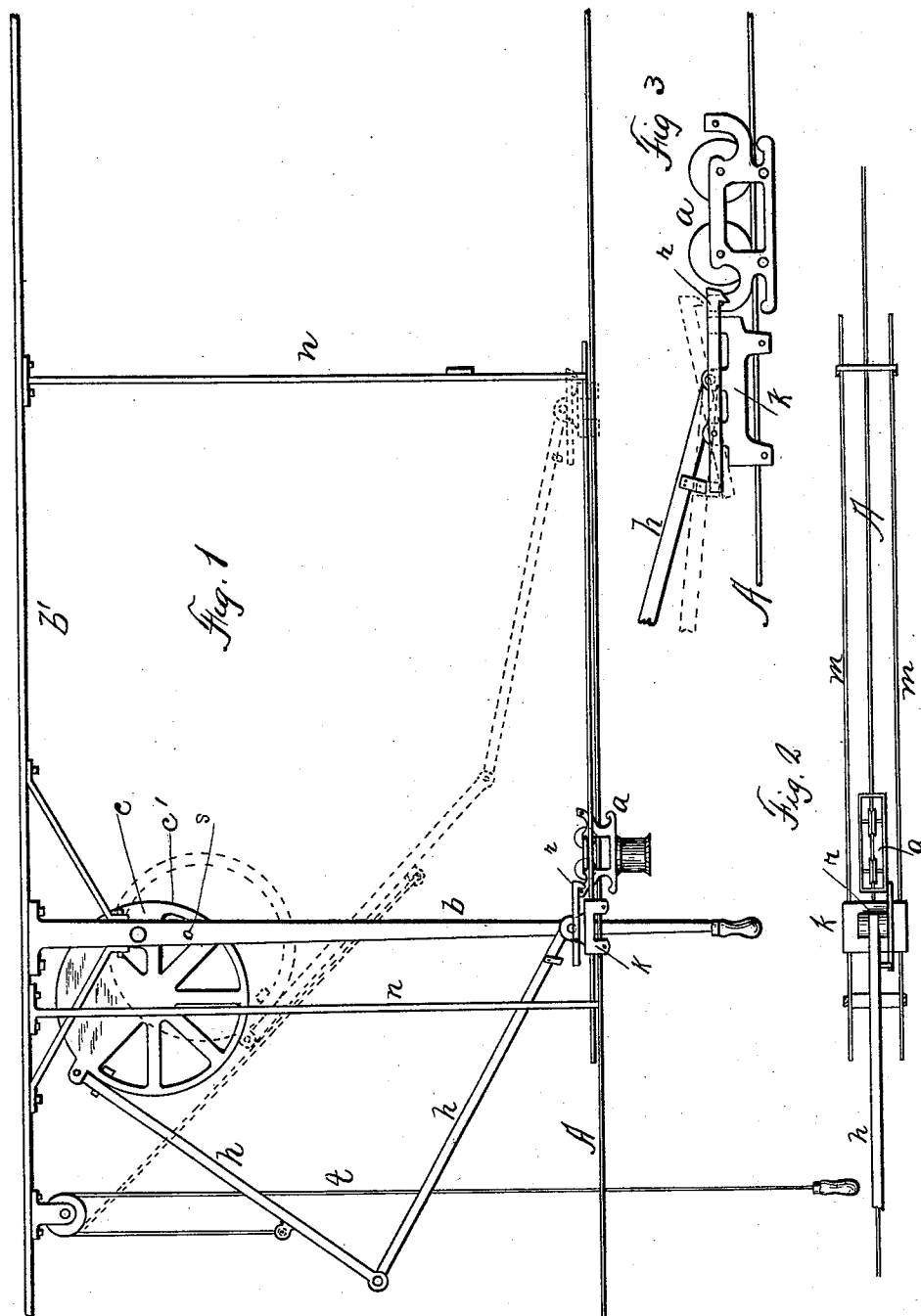


(No Model.)

N. & N. E. DILLENBECK.
CASH CARRIER.

No. 487,048.

Patented Nov. 29, 1892.



WITNESSES:

H. A. Carhart
Geo M Blowers

INVENTORS

Noah Dillenbeck &
Norman E. Dillenbeck
by Smith & Devison
their ATTORNEYS.

UNITED STATES PATENT OFFICE.

NOAH DILLENBECK AND NORMAN E. DILLENBECK, OF SYRACUSE, NEW YORK.

CASH-CARRIER.

SPECIFICATION forming part of Letters Patent No. 487,048, dated November 29, 1892.

Application filed July 9, 1892. Serial No. 439,501. (No model.)

To all whom it may concern:

Be it known that we, NOAH DILLENBECK and NORMAN E. DILLENBECK, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Cash-Carriers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

Our invention relates to cash or parcel carriers, and particularly to the mechanisms for propelling the carrier from one station to another along a stationary wire.

Our object is to provide a carrier-propelling mechanism embodying no springs whatever or not dependent upon them and in which a weighted and eccentrically-pivoted wheel is the actual propelling force, and this force is exerted through arms connected to the rim of the wheel and to a slide upon the wire whenever said wheel is released to rotate upon its pivotal arbor.

Our invention consists in the several novel features of construction and operation hereinafter described, and which are specifically set forth in the claims hereunto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of our propelling mechanism. Fig. 2 is a top plan of the carrier, the slide and its support, part of the propelling-arm, and the wire. Fig. 3 is a side elevation of the carriage and slide and the catch detachably connecting them and part of the propelling-arm connected to the slide, all upon an enlarged scale, the dotted lines showing the positions of the arm and catch when the arm is extended and the catch unhooked.

A is the carrier-wire, properly suspended, and *a* is the carrier mounted upon the wire and comprising a wheeled carriage and a change-receiver connected thereto, all of ordinary construction. A parcel-carrier can also be connected to a suitable carriage mounted upon said wire. A spring-lever *b* is secured to the ceiling *b'* and braced so that it serves as a hanger in which the arbor *c* of the wheel *C'* is journaled, said wheel being eccentric to its arbor and being also weighted on one side, as at *d*, in any ordinary manner, it being

shown as weighted by a filling between part of its spokes. A stud *e* is secured to the rim of the wheel, to which one end of the section of the propelling-arm *h* is pivotally connected, said sections being also hinged or flexibly connected together, and the lower end of said arm is pivotally connected to a slide *k*, which is mounted upon the parallel wire sides of a frame *m*, suspended by hangers *n* from the ceiling, the front of said slide being adapted to engage with the carrier. A catch *r* is secured to the lower end of the arm *h* and is adapted to hook over the end of the carrier-frame and hold the carrier in position for use. A pin *s* through the lever *b* engages with a spoke of the wheel to hold it in its normal position, as shown, and by springing the lever outward the wheel is released and rotates upon its arbor, and this forces the arm forward, which propels the slide and carrier until the wheel, arm, and slide assume the positions shown by the dotted lines. As the lower section moves, changing the angle of its bearing upon the slide, the catch is gradually raised out of engagement with the carrier, until when the slide strikes the hanger it is released and is propelled with great velocity over the wire to the central or cashier's station. A like mechanism enables the cashier to return the carrier to the station from which it was sent. A cord *t*, connected to said arm and passing over a pulley, enables the operator to draw the arm and wheel back to their normal position.

We are aware that cash-carrier mechanisms have heretofore been patented in which the propelling-arm was secured directly to the drive-shaft, which was rotated by the rotation of a pulley secured to said shaft, and said arm was actuated or swung forward thereby to give the impulse to the carrier; but we are not aware that an eccentrically-pivoted weight to the periphery of which the propelling-arm is connected has heretofore been used to propel the carrier. It will be seen that the eccentrically-pivoted weight exerts a leverage force upon the propelling-arm, which increases geometrically in proportion to the eccentricity of the weight and the distance the arm is connected thereto from the pivot, thereby enabling us to propel the car-

rier to much greater distance than can be done by the construction above referred to and even up long grades; that no force is exerted by the operator except sufficient to release
5 the weight, and that the eccentricity of the swing of the weight starts the carrier slowly and easily and gradually increases its force and the speed of the carrier and exerts its greater force just before the weight reaches the limit
10 of its swing and then automatically stops the movement of the arm.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. A carrier mechanism consisting in the
15 combination of an oscillatory and eccentrically-pivoted weight, a carrier, and means to transmit the force exerted by the oscillation of the weight to the carrier to give it the impulse along the wire trackway.

20 2. An oscillatory and eccentrically-pivoted

weight, a propelling-arm connected thereto, a slide connected to said propelling-arm, and means to detachably connect the carrier to said arm.

3. The combination, with the oscillatory
25 eccentrically-pivoted weight and the propelling-arm pivotally connected to the rim of said weight and also connected to a slide, of the slide, a carrier detachably connected to said slide, and means to set the weight and
30 arm in their normal positions and to release them to give the carrier its impulse along its trackway.

In witness whereof we have hereunto set our hands this 7th day of July, 1892.

NOAH DILLENBECK.

NORMAN E. DILLENBECK.

In presence of—

HOWARD P. DENISON,

C. W. SMITH.