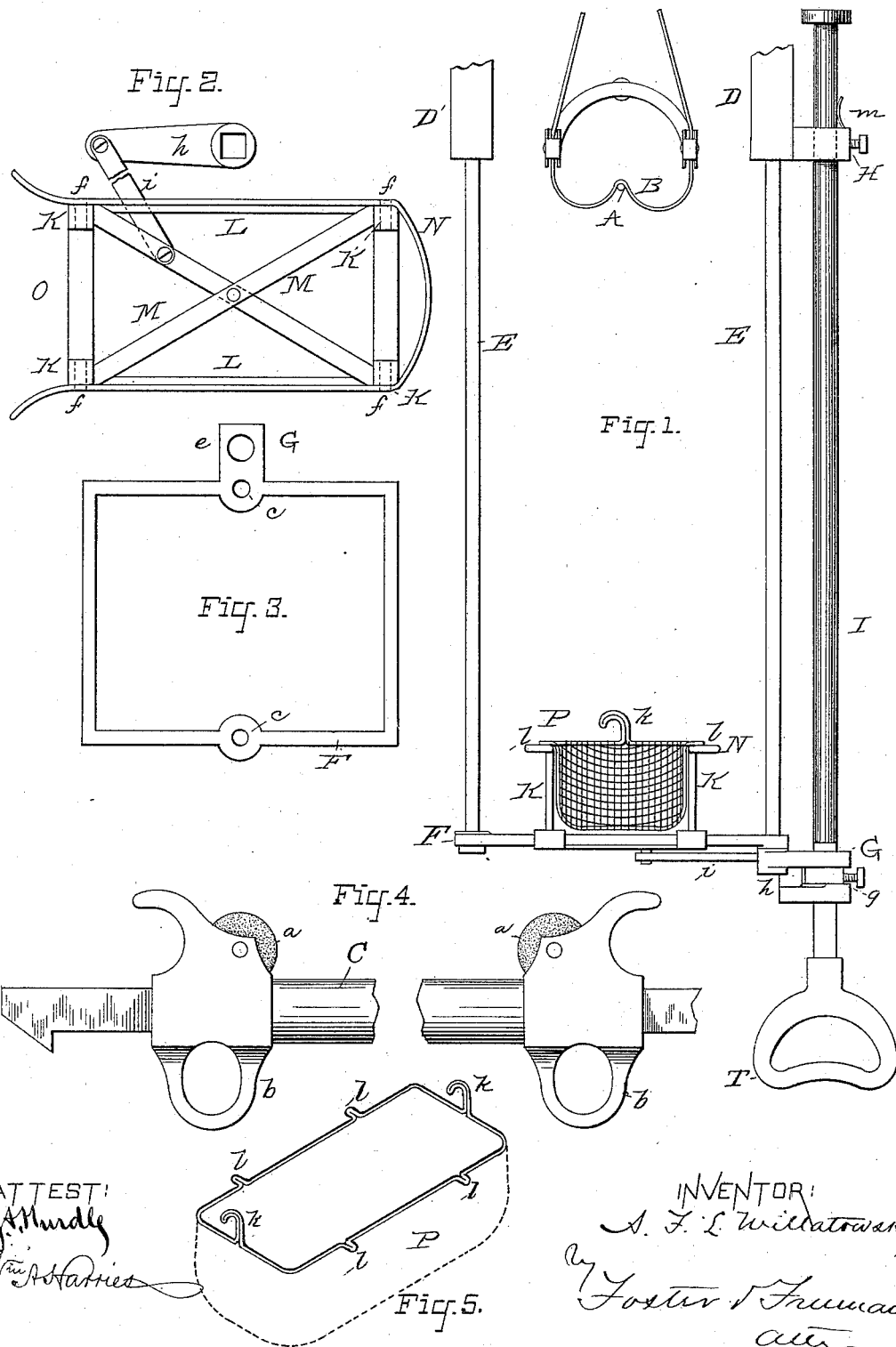


(No Model.)

A. F. L. WILLATOWSKY.
STORE SERVICE APPARATUS.

No. 417,764.

Patented Dec. 24, 1889.



ATTEST:

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AUGUST F. L. WILLATOWSKY, OF DETROIT, MICHIGAN, ASSIGNOR TO THE
RAPID SERVICE STORE RAILWAY COMPANY, OF SAME PLACE.

STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 417,764, dated December 24, 1889.

Application filed July 26, 1887. Serial No. 245,365. (No model.)

To all whom it may concern:

Be it known that I, AUGUST F. L. WILLATOWSKY, of Detroit, in the county of Wayne and State of Michigan, have invented a certain new and useful Improvement in Store-Service Apparatus, of which the following is a specification.

My invention relates to parcel-carriers for store-service apparatus in which a car runs upon an overhead line and a basket or receptacle attachable from the car is provided for holding the articles to be transported; and my object is to provide simple and effective means for raising the receptacle and attaching it to the car and for detaching and lowering it.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the apparatus embodying said invention; Fig. 2, a plan view of the frame in which the basket is raised or lowered; Fig. 3, a plan view of the bottom part of the elevator; Fig. 4, an enlarged side view of the car, portions of the same being broken away; Fig. 5, a perspective view showing the upper rim of the basket.

My invention is intended for use in the store-service apparatus fully described in the patents to R. A. McCarty, dated September 1, 1885, in which a car runs upon a stretched wire, the body of the car being suspended from rollers running on the top of the wire, and the same being propelled by springs placed at the two ends of the way.

A is the wire way.

B is the cord in which the impelling-spring is interpolated, which cord lies in a loop upon the wire.

C is the car, whose rollers *a a* run on the top of the wire. This car is thrown by the loop of cord B when tension is placed on the spring and the latter is released. Upon the lower side of the car are formed or attached rings or eyes *b b*.

D D' are tubes, which extend down, preferably, from the ceiling. EE are rods or standards which slide in and out of said tubes D. Rods E E carry at their lower ends a rectangular frame F, the rods passing through apertures *c* in such frame. An arm or projection G, extending from frame F, has an aper-

ture *e*. This arm, together with arm H, extending from tube D, serves to guide the rod I, by means of which the rods E and frame F, which form the elevator, are raised and lowered. Rod I has a suitable handle I'.

Sleeved upon the frame F is a holder or receiver for the receptacle. This is a frame open at one end, consisting of four upright posts K at the corners of a bottom frame L, having cross-pieces M M. At the top of posts K a rim N extends around the same except at the end O, which is open. At their lower ends the posts K have apertures *f f*, and the side pieces of frame F pass through such apertures, so that the receptacle-holder is free to slide upon said frame.

Any suitable connections between the rod I and the holder for the receptacle may be used, those shown consisting of a hub *g* upon the rod I, from which hub extends an arm *h*, hinged upon which is an arm *i*, which is attached to one of the cross-pieces M of the holder.

The basket P is preferably made of wire, and has a hook *k* at each end and lugs or projections *l* at its sides.

A friction-spring *m* is provided for retarding the downward movement of the elevator.

The operation of these devices is as follows: The articles to be transported having been placed in the receptacle P, the same is placed in its holder through the open end O, the projections *l l* resting upon the rim N. By turning the rod I through crank *h i* the receptacle is moved to one side of the center of the elevator, and then by pushing up rod I the elevator is raised to the level of the carrier, which, as stated, is upon the wire A. Then the rod I is again turned and the holder is slid over until the hooks *k* enter the eyes *b*, such eyes being large enough to permit such entrance. The elevator is then allowed to descend and the receptacle is left hanging from the carrier, the hooks dropping into secure engagement with the eyes. When the car is again returned to the salesman, he raises the elevator till the receptacle enters it and until the hooks are raised from the eyes, turns the rod and slides the receptacle away from the car, and then allows the elevator to descend again with the receptacle. By loosen-

ing the set-screw *n* the height of rod *I* can be adjusted so as to accommodate the apparatus to the height of the line or that of the operator.

What I claim is—

- 5 1. In store-service apparatus, the combination, with a car and a receptacle adapted to engage with said car, of an elevator for raising and lowering said receptacle, and a handle and connections for moving said receptacle laterally into and out of engagement with said car, substantially as set forth.
- 10 2. In store-service apparatus, the combination, with a car and a receptacle adapted to engage with said car, of an elevator, a laterally-movable holder upon said elevator for said receptacle, and a handle and connections for laterally moving said holder to bring said receptacle into and out of engagement with said car, substantially as set forth.
- 15 3. In store-service apparatus, the combination of a car, a receptacle adapted to engage with said car, an elevator, a movable holder upon said elevator for said receptacle, and a turning-rod attached to said elevator and connected with said holder, whereby said holder may be moved to bring said receptacle into and out of engagement with said car, substantially as set forth.
- 20 4. In store-service apparatus, the combination of the car, the receptacle adapted to engage with said car, the elevator, the movable holder for the receptacle, and the turning-rod rigidly attached to said elevator for raising the
- 25 5. In store-service apparatus, the combination, with a car and a receptacle adapted to engage with said car, of an elevator for raising and lowering said receptacle, and a handle and connections for moving said receptacle laterally into and out of engagement with said car, substantially as set forth.
- 30 6. In store-service apparatus, the combination of the car having eyes at its lower side, the receptacle with rigid hooks, the elevator for raising the receptacle having a laterally-moving holder for said receptacle, and a handle and connections for moving said basket to bring said hooks into and out of engagement with said eyes, substantially as set forth.
- 35 7. In store-service apparatus, the combination, with the elevator, of the holder consisting of a frame provided with a continuous flat rim open at one end, and a receptacle adapted to enter said holder, and having lugs or projections to rest upon the rim of said holder, substantially as set forth.

same and having a pivoted connection with said holder, whereby the same may be moved to bring the receptacle into and out of engagement with the car, substantially as set forth.

5. In store-service apparatus, the combination, with the elevator, of the holder or receiver for holding the receptacle sleeved upon the bottom frame of said elevator so as to slide thereon, and a crank and connections for moving said holder, substantially as set forth.

6. In store-service apparatus, the combination of the car having eyes at its lower side, the receptacle with rigid hooks, the elevator for raising the receptacle having a laterally-moving holder for said receptacle, and a handle and connections for moving said basket to bring said hooks into and out of engagement with said eyes, substantially as set forth.

7. In store-service apparatus, the combination, with the elevator, of the holder consisting of a frame provided with a continuous flat rim open at one end, and a receptacle adapted to enter said holder, and having lugs or projections to rest upon the rim of said holder, substantially as set forth.

This specification signed and witnessed this 60 7th day of July, 1887.

AUGUST F. L. WILLATOWSKY.

Witnesses:

G. A. MEANS,
JOHN CARVER.