

No. 859,465.

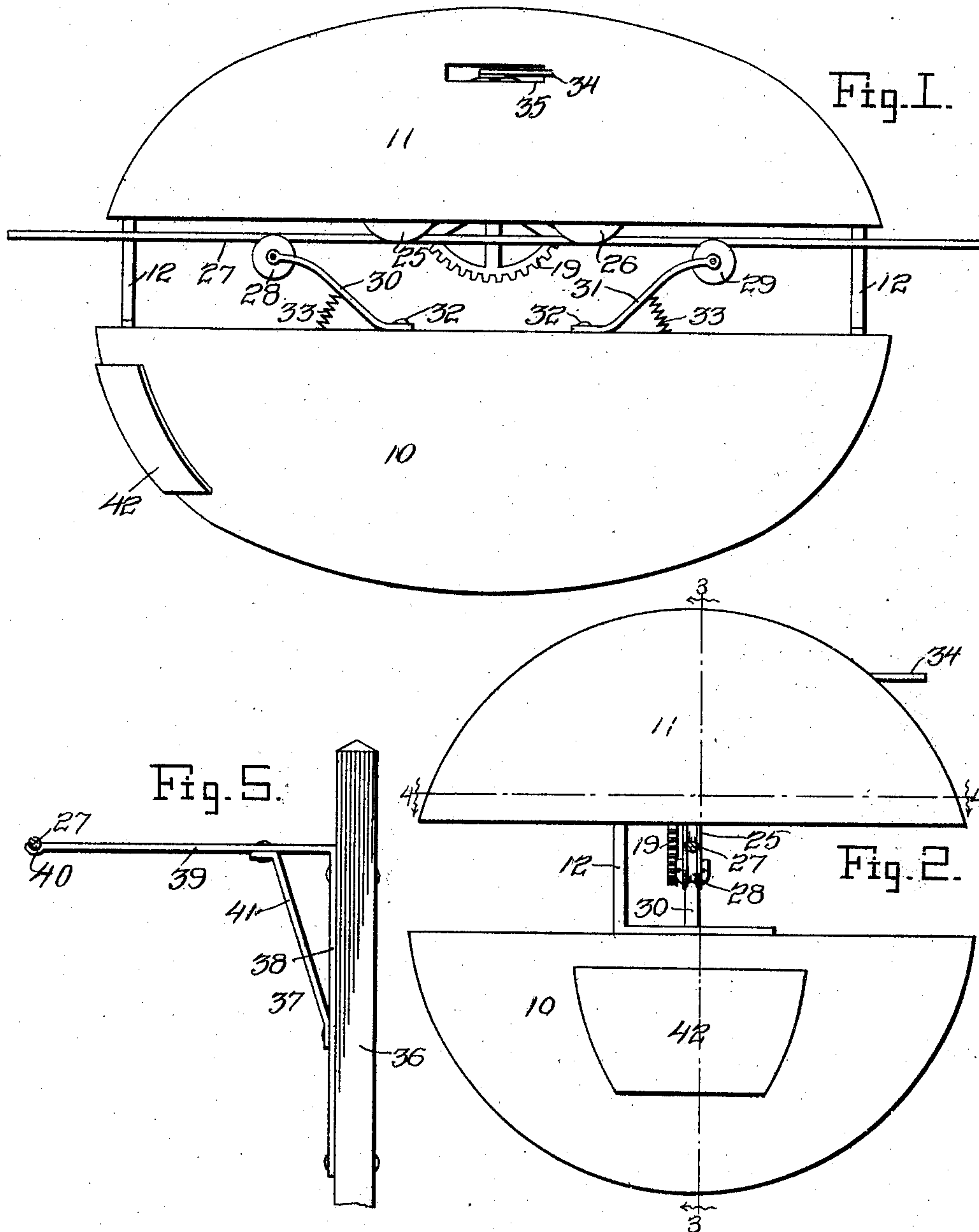
PATENTED JULY 9, 1907.

H. O. SCHROEDER.

MAIL DELIVERER.

APPLICATION FILED DEC. 17, 1906.

2 SHEETS—SHEET 1.



Witnesses

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HERMAN O. SCHROEDER, OF MILLARD, NEBRASKA.

MAIL-DELIVERER.

No. 859,465.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HERMAN O. SCHROEDER, a citizen of the United States, residing at Millard, in the county of Douglas, State of Nebraska, have invented certain new and useful Improvements in Mail-Deliverers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 The present invention relates to improvements in automatically propelled mail-carriers, and more particularly to devices of that class including a car suspended from and adapted to travel on a stationary elevated trolley track, the object of the invention residing in the provision of an efficient, simple, and durable carrier driven from a motor positively connected with the traction wheels of the carrier which are in turn mounted adjacent the motor in a hood arranged over the upper portion of the carrier in spaced relation thereto.

20 The invention further consists in the construction, combination, and arrangement of parts, all as hereinafter fully described, specifically claimed and illustrated in the accompanying drawings, in which like parts are designated by corresponding reference numerals in the several views.

Of the said drawings—Figure 1 is a side elevation of the carrier showing also a portion of the trolley-wire. Fig. 2 is an end elevation of the carrier. Fig. 3 is a longitudinal vertical section on the line 3—3 of Fig. 2. Fig. 4 is a horizontal section on the line 4—4 of Fig. 2. Fig. 5 is an enlarged detail view of one of the brackets for supporting the trolley-wire.

Referring more particularly to the drawings, the carrier is shown as comprising a pair of oppositely-disposed metallic shells 10 and 11, arranged one above the other and preferably semi-spheroidal in shape, the lower shell 10 serving as the package compartment and the upper shell or hood 11 carrying the motor and traction wheels, the two shells being connected at their opposite ends by means of a pair of metal uprights 12, the upper ends of which are bolted to the end pieces of a longitudinally slotted frame 13 carried by the hood. Mounted upon this frame 13 adjacent the slot 14 therein is the motor 15 in operative connection with a battery 16, the motor shaft 17 carrying a gear 18 in mesh with a larger gear 19 mounted on a shaft 20, disposed transversely of said slot. The frame 13 is further provided with a pair of similar transverse shafts 21 and 22, arranged respectively in the front and rear of shaft 20 and provided with the gears 23 and 24, both of which are likewise in mesh with gear 19. Shafts 21 and 22 likewise carry the grooved traction wheels 25 and 26, which are thus positively driven by the train of gears 18, 19, 23, and 24 from the motor shaft, said traction wheels be-

ing arranged exactly in alinement with each other, and adapted to run upon the stationary trolley wire 27, thus supporting the carrier thereon.

The lower shell 10 carries a pair of front and rear guide wheels 28 and 29 mounted on straps 30 and 31 whose opposite ends are pivotally connected to bolts 32 fastened in the flat top face of said shell. Each guide wheel is likewise provided with a grooved periphery, and is yieldingly held against the under side of the wire in advance of the corresponding traction wheel by means of a coil spring 33, whose opposite ends are secured to the shell top and the corresponding wheel strap, the space between the two shells being sufficient to allow the carrier to be positioned upon the wire, and the traction and guide wheels to be set in engagement therewith.

The motor is provided with the usual switch 34 which extends through a slot 35 formed in the adjacent side of the carrier.

The trolley-wire upon which the traction wheels run is suspended from a series of poles 36 by means of brackets 37, each of said brackets comprising a vertical strap 38 secured directly to the poles and a horizontal strap 39 connected at one end to the strap 38 and provided at its opposite end with a hook shaped formation 40 in which the wire rests, the ends of such hook being tightened against the wire to hold the latter in place. The straps 38 and 39 are connected by a diagonal brace 41.

The lower shell or package compartment is provided at one end with a door 42 by means of which access is had to the interior of said shell to load the same with the packages and letters, etc.

The convexed or spheroidal hood 11 serves as a complete protection for the traction wheels and prevents any displacement of the latter from the trolley-wire, while the disposition of the frame 13 carried by said hood above the carrier top prevents any interference between the trolley-wire and the carrier top.

From the foregoing it will be apparent that when the motor is in action, the traction wheels will be positively driven therefrom by the train of gears 23 and 24, 19 and 18, the last-mentioned gear being mounted upon the motor shaft, the yielding supports for the guide wheels allowing the latter to ride easily under the wire hooks 40 on the bracket straps 39 without jarring the carrier to any appreciable extent during its travel on the wire.

In the practice of the invention a single trolley wire may be used, or if preferred, there may be separate wires for the "in" and "out" trips of the carrier, which latter may be shifted from one wire to the other manually or by any desired mechanical means.

The invention is susceptible of slight modifications

and changes within the scope of the appended claims and it is therefore not intended to be limited to the exact details of construction shown and described.

What is claimed, is—

- 5 1. The combination, with a trolley-wire, of a carrier adapted to travel thereon and comprising a pair of superimposed semi-spheroidal shells, the upper shell serving as hood and the lower shell as a package compartment; a slotted frame carried by said hood; a pair of shafts mounted in said frame transversely of said slot; a traction wheel carried by each shaft in position to travel upon said wire; a motor carried in said hood; and driving connections between said motor and traction wheels, for positively rotating the latter.
- 15 2. The combination, with a trolley-wire, of a carrier adapted to travel thereon and comprising a pair of superimposed semi-spheroidal shells, the upper shell serving as a hood and the lower shell as a package compartment; a slotted frame carried by said hood; a pair of traction wheels carried by said frame and disposed one in advance of the other in said slot in position to travel upon said wire; a motor mounted in said hood; driving connections between said motor and traction wheels for positively ro-
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tating the latter; and a pair of yieldingly supported guide wheels movably mounted upon the top of said lower shell and adapted to travel along the under face of the wire. 25

3. The combination, with a trolley-wire, of a carrier adapted to travel thereon and comprising a pair of superimposed semi-spheroidal shells, the upper shell serving as a hood and the lower shell as a package compartment; a slotted frame carried by said hood; a pair of traction wheels carried by said frame and disposed one in advance of the other in said slot in position to travel upon said wire; a motor mounted in said hood; driving connections between said motor and traction wheels for positively rotating the latter; a pair of guide wheels movably mounted upon the top of said lower shell in advance of the corresponding traction wheels; and separate means for yieldingly holding each guide wheel against the lower face of said wire. 35 40

In testimony whereof, I affix my signature, in presence of two witnesses.

HERMAN O. SCHROEDER.

Witnesses:

OTTO SCHROEDER,
AMEL BLUM.