No. 847,076. PATENTED MAR. 12, 1907.

L. C. JARRETT.

MAIL TRANSPORTATION SYSTEM.

APPLICATION FILED SEPT. 13, 1906.

3 SHEETS—SHEET 1.

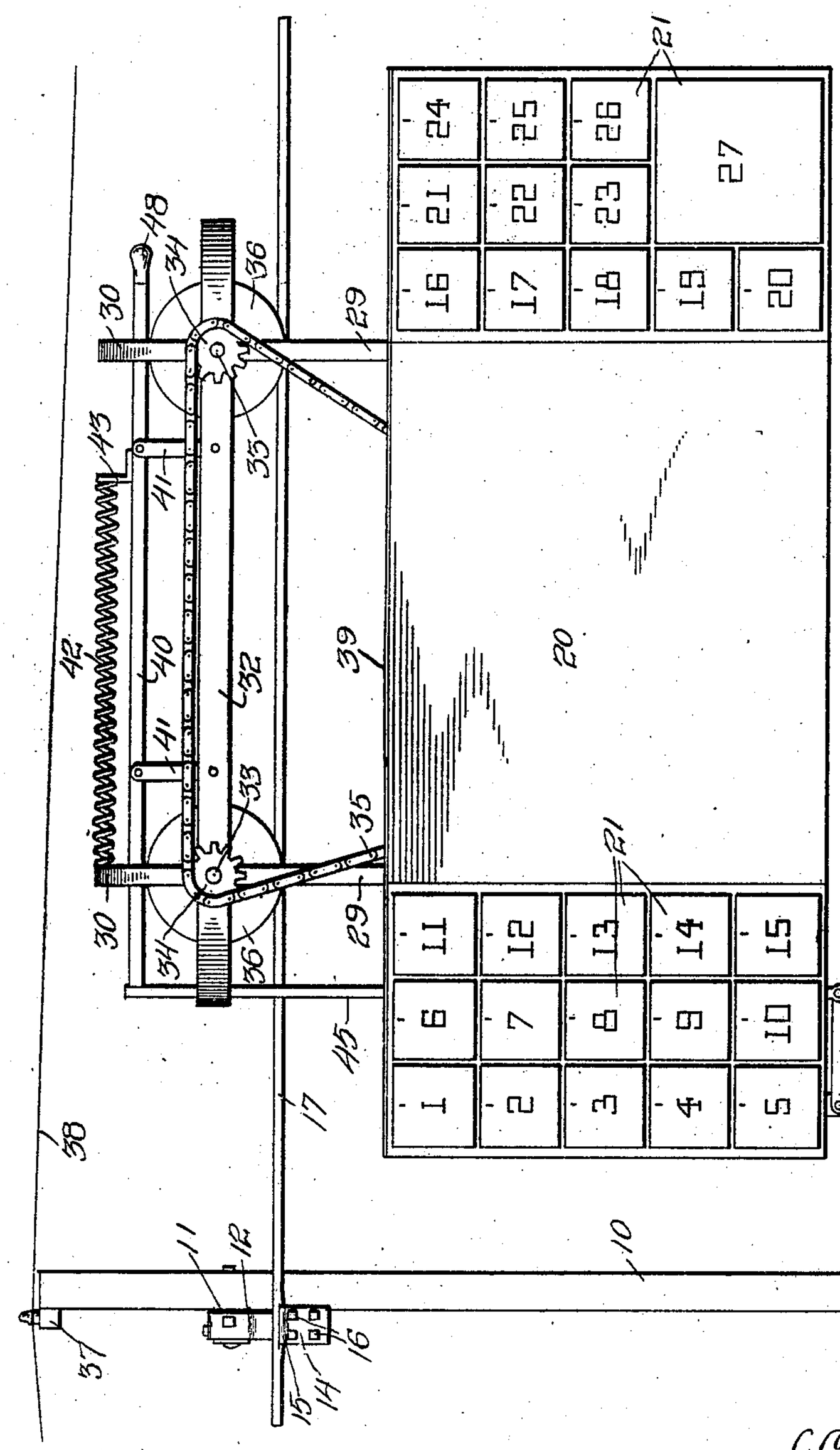

Fig. 1.

Witnesses

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3 SHEETS—SHEET 2.

Fig. 2.

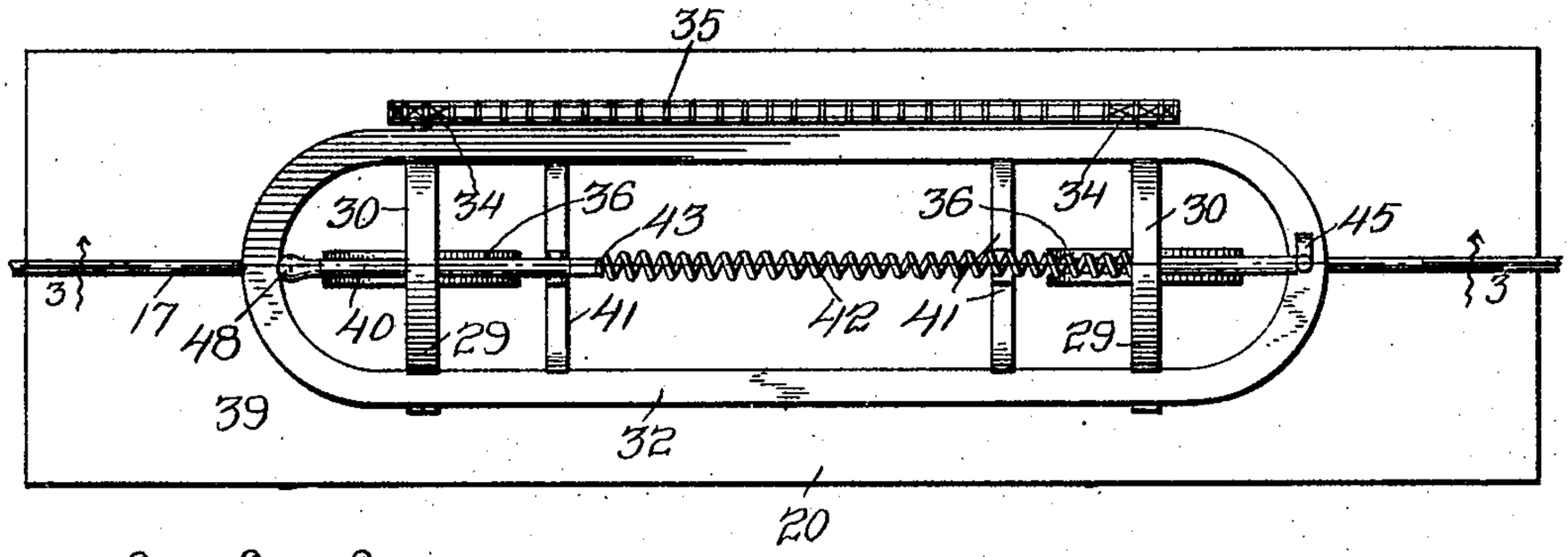
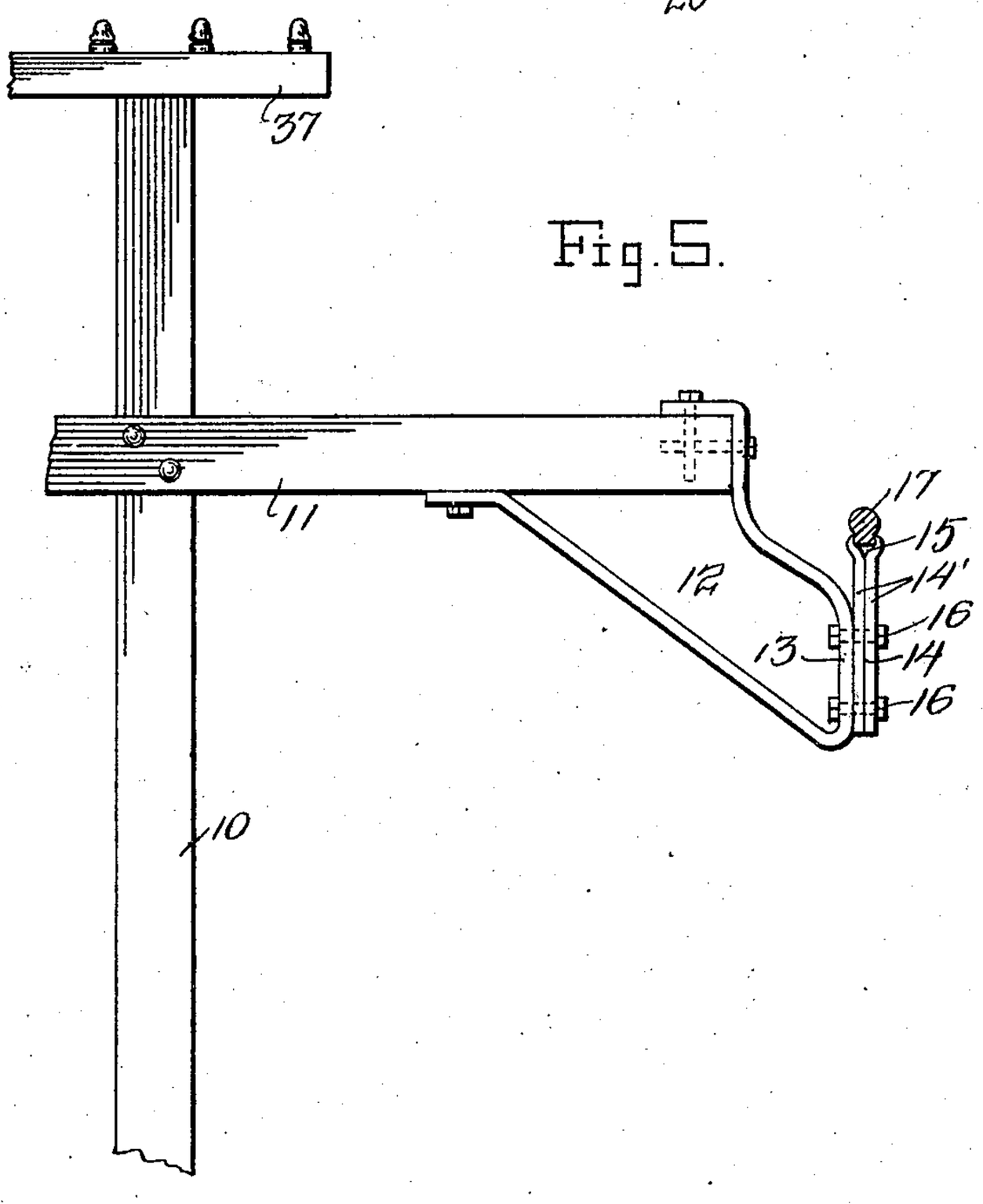


Fig. 5.



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3 SHEETS—SHEET 3.

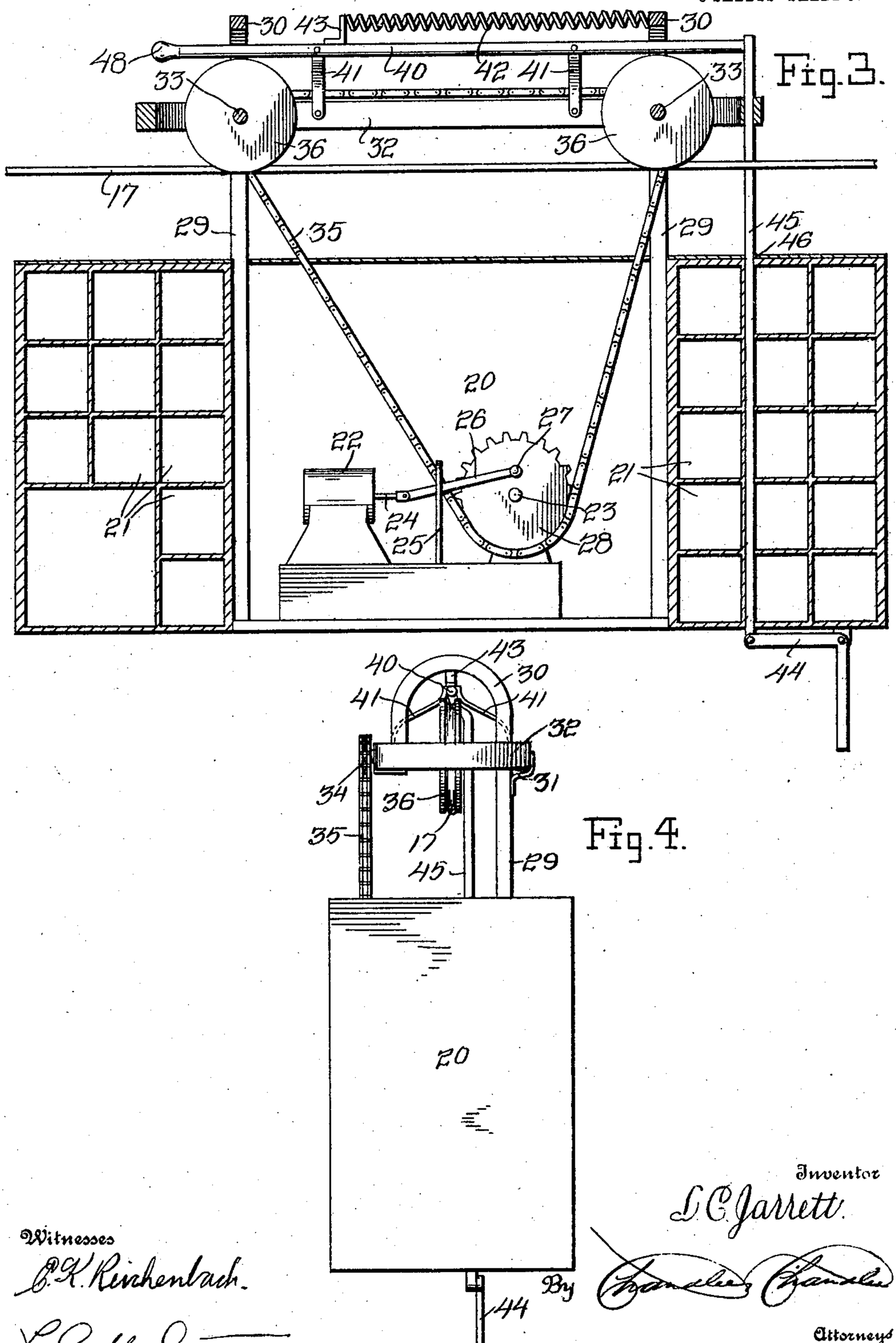

Fig. 3.

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

LANDON C. JARRETT, OF MARSHALL, NORTH CAROLINA.

MAIL-TRANSPORTATION SYSTEM.

No. 847,076. Specification of Letters Patent. Patented March 12, 1907.

Application filed September 13, 1906. Serial No. 334,479.

To all whom it may concern:

Be it known that I, LANDON C. JARRETT, a citizen of the United States, residing at Marshall, in the county of Madison, State of North Carolina, have invented certain new and useful Improvements in Mail-Transportation Systems; 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.

This invention has reference to improvements in systems of mail transportation.

The particular improvements include the construction of the traveling carrier and the means for automatically propelling the same and the manner of securing the traffic-wire upon which the carrier travels, to the supporting-poles.

With the above and other ends in view the invention comprises the construction, combination, and arrangement of parts, all as hereinafter fully described, specifically claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the carrier in place on the traffic-wire, showing also one of the poles upon which the wire is carried. Fig. 2 is a top plan view of the carrier. Fig. 3 is a longitudinal vertical section through the carrier, taken approximately upon the line 3 3 of Fig. 2. Fig. 4 is an end elevation of the carrier in place on the traffic-wire. Fig. 5 is a detail view of a portion of the pole cross-bar and the bracket secured thereto for carrying the traffic-wire.

Like parts are designated by corresponding reference-numerals in the several views.

The system hereinafter described is of the type known as "belt-line," a single traffic-wire forming a complete or closed track being used.

Referring more particularly to the drawings, 10 designates generally one of the poles upon which the traffic-wire is carried, said pole having a cross-bar 11 secured thereto adjacent its top. Secured to the outer ends of said cross-bar are depending brackets 12, the ends of which are fastened thereto in any desired manner. Each bracket is bent outwardly intermediate its ends beyond the plane of the cross-bar ends, forming a vertical section 13, to which is secured the supporting-clamp 14, comprising a pair of vertically-disposed metal plates 14′, the upper edges of which are bent outwardly to form the jaws 15. The attaching-bolts 16 are passed through plates 14′ and through the vertical section 13 of the bracket. Said plates are formed of metal sufficiently resilient to enable the jaws 15 to clamp the traffic-wire 17 and hold the same firmly in place.

The carrier, adapted to travel upon the traffic-wire and generally designated 20, comprises a suitable receptacle of rectangular or cigar shape, as desired, and provided at its ends with a plurality of series of letter-boxes 21, arranged in tiers, as shown, forming the mail-carrying compartments of the carrier, occupying each approximately one-fourth of the carrier.

Mounted in any desired fashion upon the bottom of the carrier within the space between the mail-compartments is an engine 22, having a driving connection with the main drive-shaft 23 of the carrier. The plunger-rod 24 of the engine passes through a slotted guide-post 25 in its movement, the outer end of the plunger-rod being connected with one end of a pitman 26, the opposite end of which is secured to a crank-pin 27, mounted upon the main sprocket-wheel 28.

Located adjacent the inner end of each mail-compartment is an upright 29, the upper end of which is bent outwardly and downwardly, as indicated at 30. Secured at diametrically opposite points to the hook thus formed on each upright is a pair of brackets 31, the free ends of which bear against the outer face of a horizontally-disposed open frame 32 of elliptical shape, and thus hold said frame in place upon the uprights. Mounted within said frame is a pair of transverse shafts 33, which are passed through registering openings formed in said frame and in the corresponding uprights and extend beyond said frame at one side thereof, as shown, this construction serving likewise to more-effectually support said frame.

Each shaft 33 carries a sprocket-wheel 34, mounted thereon exteriorly of the frame and driven from the main sprocket-wheel 28 by means of a sprocket-chain 35, the crank-pin in said last-mentioned sprocket-wheel being of sufficient length to prevent any interference of the plunger-rod or pitman with the movement of the chain during the movement of the carrier. Shafts 33 are further provided with a grooved trolley-wheel 36, mounted intermediate their ends within the frame 32, said wheels being adapted to run upon a traffic-wire 17 and serving as the means of support for the carrier thereon.

The several poles 10 may, if desired, be provided with a second cross-bar 37, secured to the top thereof above the cross-bar 11 and of less extent than said cross-bar to serve as supports for telephone or telegraph wires 38, connected with the several stations to which the mail is to be delivered. It will thus be possible for the postmaster at the main office to notify or warn the clerks at such stations that the carrier is on its way.

The top of the carrier is covered by a casing 39 of any description provided with slots or openings, through which the uprights 29 and sprocket-chain 35 pass.

The engine for propelling the carrier may be of any desired type, or an electric motor may be used for the same purpose, in which latter instance the armature-shaft of the motor will be connected, by means of a crank, with the pitman 26, the crank passing through the guide-post 25 when the armature-shaft is in motion.

To enable the carrier to be automatically stopped on reaching the several stations, a brake 40 is pivotally mounted upon the frame 32 by means of rearwardly-inclined straps 41, arranged in pairs on opposite sides of said frame and pivoted thereto at their lower ends. The brake is actuated by means of a retractile spring 42, connected at one end to the top of the rear upright 29 and at the other end to a shoulder 43, secured to the upper face of the brake, the tension of the spring normally pressing the brake rearwardly against the grooved trolley-wheels 36.

Pivoted to the under face of the carrier is an angle-lever 44, the upper arm of which is connected at its free end with the lower end of a rod 45, which latter passes through openings 46, formed in the carrier, and extends above the upper face thereof, its movement being guided by said openings.

When the brake is set, its rear end is in contact with the upper portion of rod 45, the tension of the spring 42 holding said parts in such position and forcing the rear face of said rod into contact with the inner face of frame 32 at the rear end of the latter.

The pole adjacent each station is provided with a trip 47, adapted to contact with the lower arm of lever 44 and swing the same upwardly, thus lowering the opposite arm of said lever and with it rod 45, the upper end of which is withdrawn from contact with the brake, which is free to move rearwardly and downwardly into contact with the trolley-wheels by the action of spring 42, the pressure exerted by said brake against the wheels being sufficient to cause the carrier to stop.

To reset the brake, it is drawn forwardly by its handle 48 a sufficient distance to permit rod 45 to be moved upwardly, when the brake end will again be held in contact with the upper end of said rod by its spring.

It will thus be understood that the carrier will be automatically stopped on reaching the successive stations at which mail is to be delivered, and upon resetting of the brake will automatically start, continuing its passage until the complete circuit has been traveled and it has once more reached its starting-point.

What is claimed is—

1. In a mail-transportation system, the combination with a traffic-wire and means for supporting the same; of a carrier adapted to travel thereon consisting of a receptacle provided at each end with a mail-compartment comprising a series of letter-boxes, arranged in tiers; and means located within the interior of said receptacle between said compartments for automatically propelling the carrier, said means including a pair of uprights, a frame carried by said uprights, a pair of transversely-extending shafts journaled in said frame, a trolley-wheel and a sprocket-wheel mounted on each shaft; a sprocket-chain connecting said sprockets, an engine and a driving connection between said sprocket-chain and said engine.

2. In a mail-transportation system, the combination with a traffic-wire, and means for supporting the same; of a carrier adapted to travel upon said wire, and consisting of a receptacle provided with a mail-compartment at each end; an engine located in the interior of said receptacle in the space between said compartments; an upright mounted adjacent each compartment and extending above the upper edges of the receptacle; an open frame secured to the tops of said uprights; a transverse shaft journaled in said frame adjacent each end thereof; a trolley-wheel mounted on each shaft within the frame, and a sprocket-wheel mounted on each shaft exteriorly of the frame; a transverse shaft mounted in said receptacle intermediate said compartments; a sprocket-wheel mounted in said last-mentioned shaft; a sprocket-chain connecting the several sprocket-wheels; and a driving connection between the engine and the last-mentioned sprocket-wheel for automatically propelling the carrier.

3. In a mail-transportation system, the combination with a supporting-pole, including a cross-rod secured to the upper portion thereof; of a depending bracket secured to each end of said cross-rod; a clamp secured to each bracket, and comprising a pair of vertically-disposed spaced members formed with diverging jaws at their upper portions; a traffic-wire seated within said jaws and held in place thereby; a carrier adapted to travel upon said wire; and means located within said carrier for automatically effecting its propulsion.

4. In a mail-transportation system, the combination with a traffic-wire and means for supporting the same; of a carrier adapted

to travel upon said wire; means located within the carrier for automatically effecting its propulsion; a pair of uprights secured to said carrier; an open frame carried by said uprights; a pair of transversely-disposed shafts mounted in said frame; a trolley-wheel mounted on each shaft; a brake adapted to be moved into contact with said trolley-wheels; and means for automatically operating said brake.

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

LANDON C. JARRETT.

Witnesses:

Z. V. FISHER,

J. H. SPRINKLE.