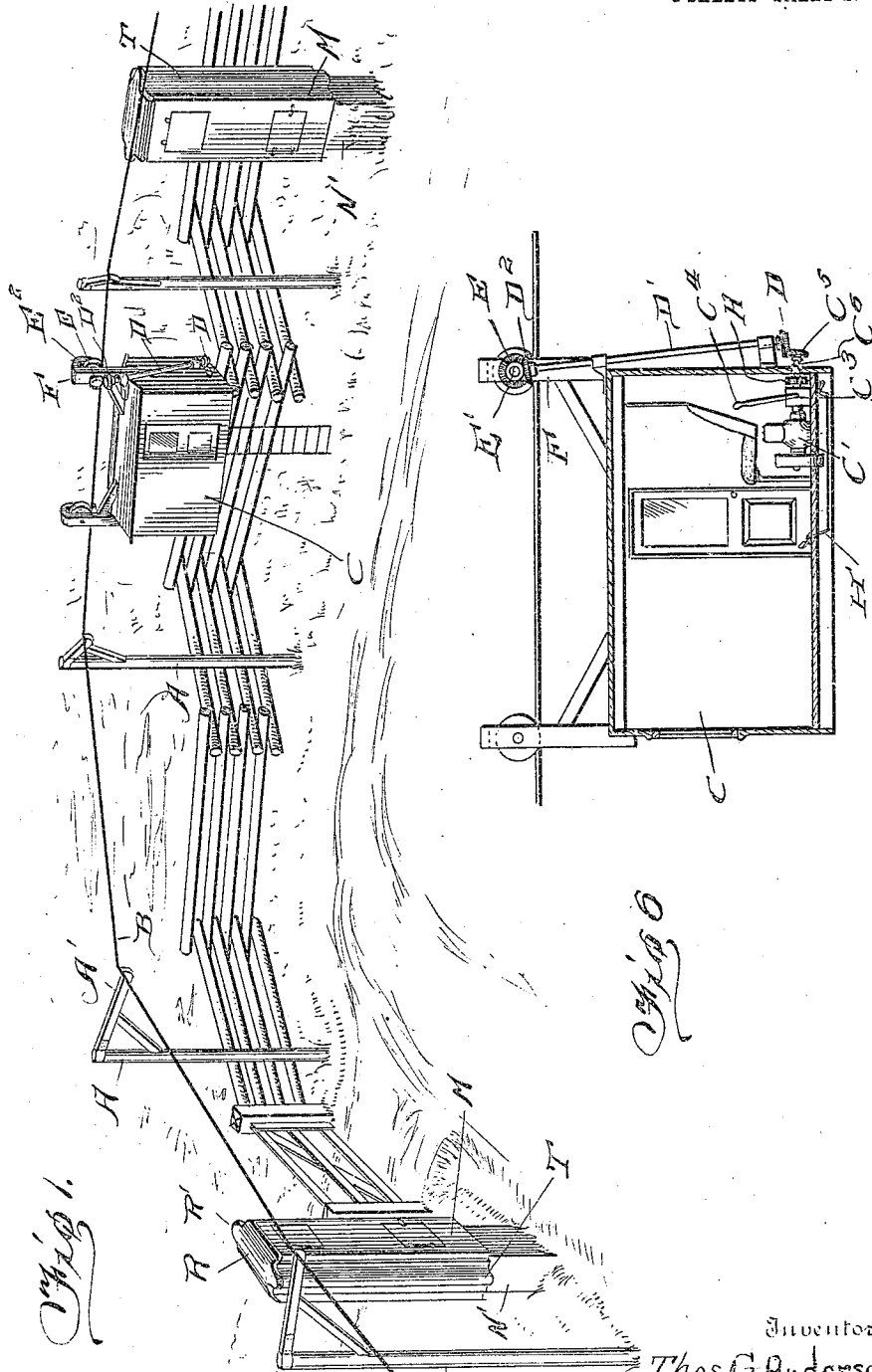


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AERIAL MAIL TROLLEY AND BOX.  
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959,418.

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2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.



# UNITED STATES PATENT OFFICE.

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## AERIAL MAIL TROLLEY AND BOX.

959,418.

Specification of Letters Patent.

Patented May 24, 1910.

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*To all whom it may concern:*

Be it known that we, THOMAS G. ANDERSON, SEYMOUR C. ANDERSON, and ELIE G. ANDERSON, citizens of the United States, residing at Langdon, in the county of Atchison and State of Missouri, have invented certain new and useful Improvements in Aerial Mail Trolleys and Boxes; and we 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in aerial trolley apparatus for delivering and collecting mail, especially adapted for use upon rural mail routes, and comprises various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

We illustrate our invention in the accompanying drawings, in which—

Figure 1 is a perspective view showing the application of the invention. Fig. 2 is a vertical sectional view through one of the delivery and collection boxes. Fig. 3 is a sectional view through the box at right angles to the section shown in Fig. 2. Fig. 4 is a sectional view on line 4—4 of Fig. 2. Fig. 5 is an enlarged detail perspective view of a signal attachment. Fig. 6 is an enlarged detail sectional view vertically through a car, and Fig. 7 is a detail perspective view of the top of the mail receiving box and closure therefor.

Reference now being had to the details of the drawings by letter, A, A designate a series of trolley poles having laterally projecting arms A' to the ends of which the line wire B is connected and suitably insulated therefrom.

C designates a car which may be of any convenient size and shape and of sufficient capacity to hold the mail to be delivered and the operator. Said car is provided with a motor C', and C<sup>2</sup> designates a motor shaft having a clutch mechanism C<sup>3</sup> actuated by means of the lever C<sup>4</sup>. A beveled gear C<sup>5</sup> is mounted upon the shaft C<sup>6</sup> and is in mesh with a bevel gear D which is fixed to the

shaft D' which is journaled in an upright position in suitable bearings upon the car and its upper end has fixed thereto a bevel gear D<sup>2</sup> in mesh with a gear wheel E fixed to the stub shaft E' mounted in the yoke F which projects from the top of the car. A grooved wheel E<sup>2</sup> is fixed to each of said stub shafts and is adapted to ride upon the line wire B. A frictional brake band, designated by letter H, is provided for reducing the speed of the motor when desired and is actuated by means of a foot lever H' mounted in any convenient location within the car so that the operator may readily control the speed of the car in going down grades.

The delivery boxes, designated by letter M, are positioned at any suitable locations and each is mounted upon a post N' and each of said boxes has an opening N<sup>2</sup> near the lower portion thereof whereby a person may come to the box and receive or deliver mail at a second opening N<sup>3</sup> near the top of the box. An elevator car, designated by letter O, is mounted within the box and has ropes O' fastened thereto which pass over the pulleys Q journaled in the upper portion of the box and weights Q' are fastened to the other ends of said ropes, the purpose of which weights is to normally hold the car at its highest throw or opposite the lower portion of the upper opening in the box in readiness to receive mail from the party delivering the same. A cord or rope S is fastened to the elevator car and hangs down so that a person coming to the lower opening may, by grasping said cord, receive mail or deliver the same to be taken up by the car. Pivotally mounted upon a pin I upon said box is a flag or signal I' having a rod I<sup>2</sup> pivotally connected at one end thereof and which rod is connected to an operating lever J pivotally mounted upon a pin J', it being the purpose of the apparatus to throw the signal so that the deliverer of the mail will see the same on approaching the box in either direction for the purpose of either gathering up or delivering mail. Upon opposite sides of the box are the guard casings T which are semi-circular in cross section, as shown clearly in Fig. 4 of the drawings, and which serve to protect the weights upon said ropes and guide the latter as they are raised and lowered.

A closure, designated by letter R, is hinged adjacent to the top of the box upon

one side thereof and is preferably concaved to conform to the convexed top of the box. It will be noted that the opening in the box extends the entire length of the latter and opens through the top as well as having openings in the side as described. Said closure has laterally projecting wings R' which are flanged and are semi-circular in outline adapted to fit over the upper ends of said guide casings, as shown in the perspective view, Fig. 7 of the drawings. A hook R<sup>3</sup> mounted upon said closure is adapted to engage an eye R<sup>4</sup> upon the boxing to hold the closure locked.

From the foregoing, it will be noted that, by the provision of a device as shown and described, an apparatus is afforded especially designed for delivering mail upon rural routes and so arranged that the mail carrier may deliver and receive mail from the boxes without coming to the ground and having control of the car may regulate the speed of the car and be out of reach of obstructions or interference with any one from the ground.

What we claim to be new is:—

1. An aerial apparatus for delivering and receiving mail, comprising a trolley line, a car movable thereon, a series of boxes having an opening opposite the car and an opening near the lower portion of the box, an elevator car within the box, ropes secured to said elevator car, pulleys journaled in the box and over which the ropes pass, counterbalanced weights fastened to said ropes, guard casings about said weights, and a closure over the top of said guard casings.

2. An aerial apparatus for delivering and

receiving mail, comprising a trolley line, a car movable thereon, a series of boxes having an opening opposite the car and an opening near the lower portion of the box, an elevator car within the box, ropes secured to said elevator car, pulleys journaled in the box and over which the ropes pass, counterbalanced weights fastened to said ropes, guard casings about said weights, said box having an opening in its top, a closure hinged to the box and having laterally projecting wings designed to fit over the upper ends of said guard casings.

3. An aerial apparatus for delivering and receiving mail, comprising a trolley line, a car movable thereon, a series of boxes having an opening opposite the car and an opening near the lower portion of the box, an elevator car within the box, ropes secured to said elevator car, pulleys journaled in the box and over which the ropes pass, counterbalanced weights fastened to said ropes, guard casings about said weights, said box having an opening in its top, the latter being convexed, a concaved closure hinged to said box and having laterally extending concaved wings, the latter being adapted to fit over the tops of said guard casings and provided with flanges.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

THOMAS G. ANDERSON.  
SEYMOUR C. ANDERSON.  
ELIE G. ANDERSON.

Witnesses:

DAVE MASSECK,  
C. W. STURGEON.