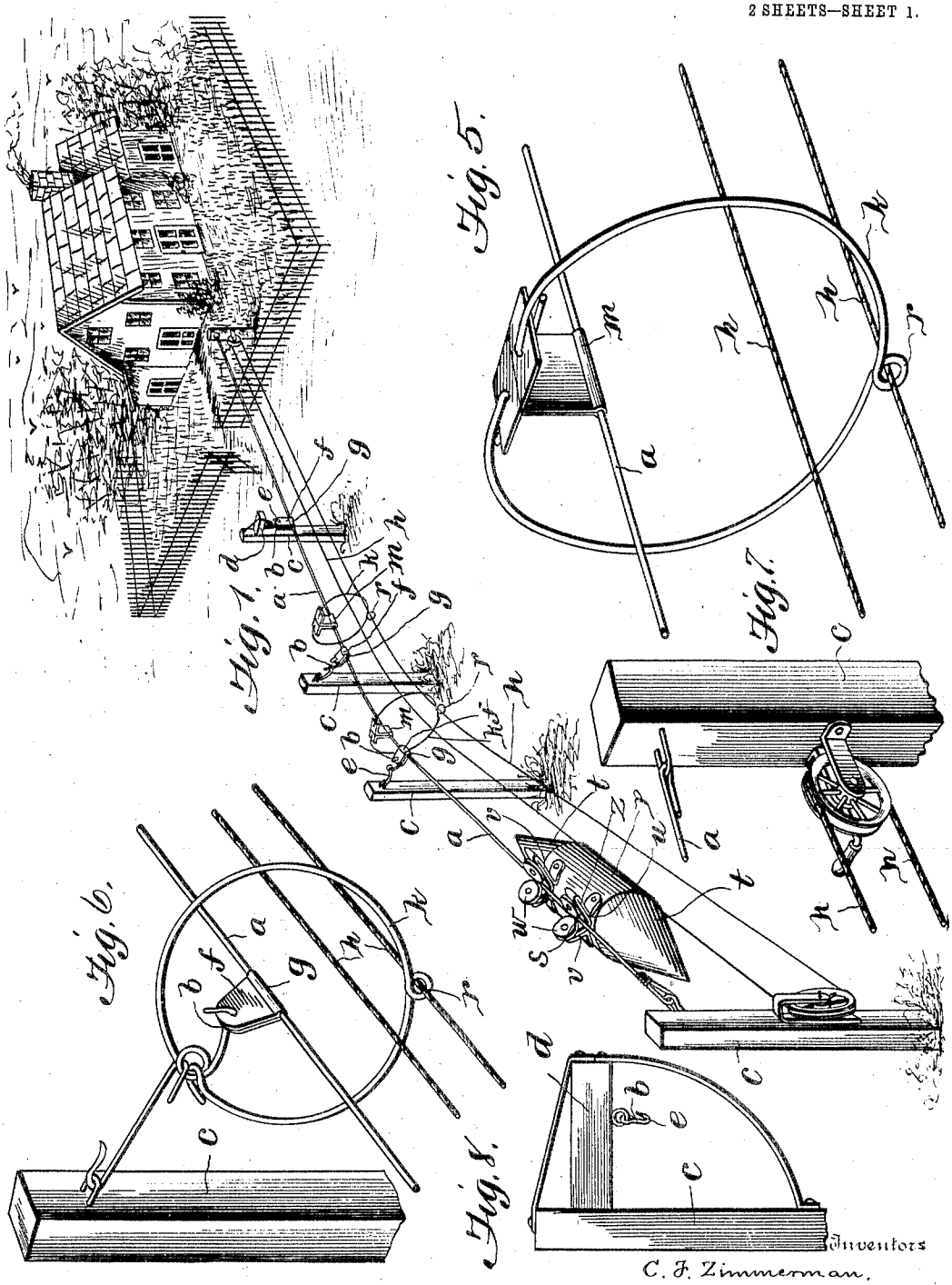
No. 783,920. PATENTED FEB. 28, 1905.

C. F., H. C. & C. ZIMMERMAN.

MAIL OR PACKAGE TRANSMITTER.

APPLICATION FILED NOV. 30, 1904.

2 SHEETS—SHEET 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

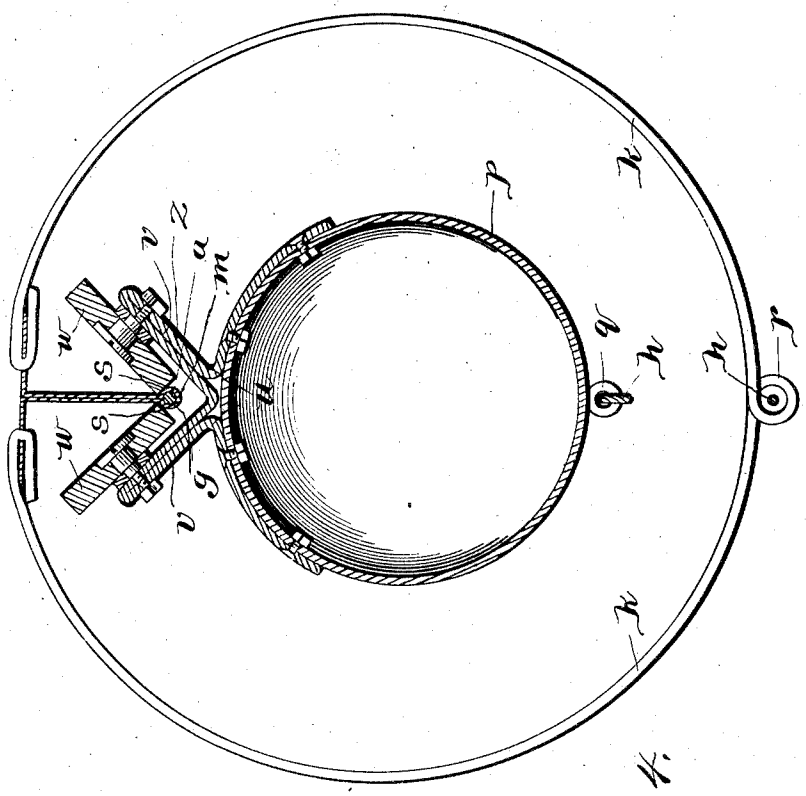


Fig. 2.

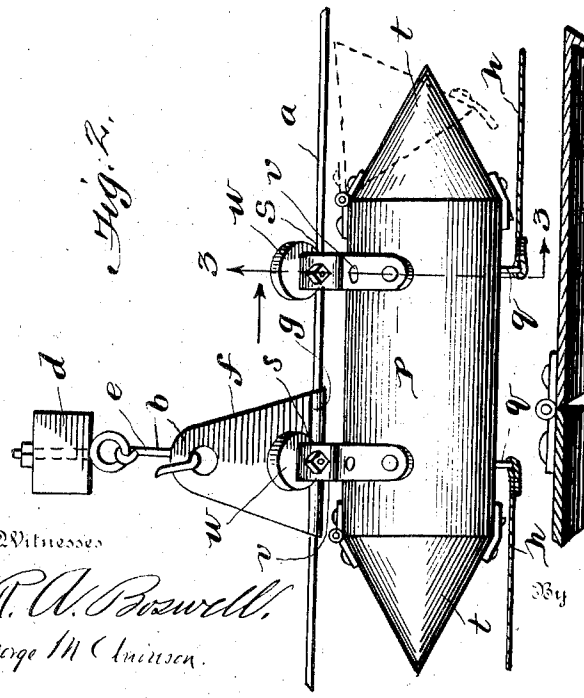
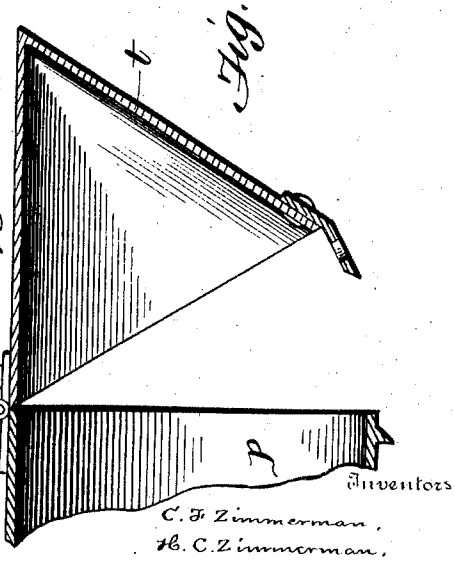


Fig. 4.



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No. 783,920. Patented February 28, 1905.

UNITED STATES PATENT OFFICE.

CHARLES F. ZIMMERMAN, HARRY C. ZIMMERMAN, AND CHARLES ZIMMERMAN, OF ARABY, MARYLAND.

MAIL OR PACKAGE TRANSMITTER.

SPECIFICATION forming part of Letters Patent No. 783,920, dated February 28, 1905.

Application filed November 30, 1904. Serial No. 234,853.

To all whom it may concern:

Be it known that we, CHARLES F. ZIMMERMAN, HARRY C. ZIMMERMAN, and CHARLES ZIMMERMAN, citizens of the United States, and residents of Araby, in the county of Frederick and State of Maryland, have made a certain new and useful Invention in Mail or Package Transmitters; and we declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view of our invention as applied. Fig. 2 is a side view of the carrier *p* and one of the track-hangers. Fig. 3 is a vertical cross-section through the carrier *p*, showing one of the guide loops or rings *k*. Fig. 4 is a fragmentary vertical section through one end of the carrier *p* with hinged end or cover open. Fig. 5 is a perspective view of one of the guide loops or rings *k*, showing the track-wire and pull-cord. Fig. 6 is a detail perspective view. Fig. 7 is a perspective view showing an end post and the pull-cord connection thereto. Fig. 8 is a detail view showing track-hanger connection to post.

The invention relates to means of transmission for letters or packages; and it consists in the novel construction and combinations of parts, as hereinafter set forth.

The object of the invention is chiefly to carry mail-matter from a house to the road along which the postman passes; but it may be used for carrying parcels in stores and for similar purposes wherever needed.

In the accompanying drawings, illustrating the invention, the letter *a* designates the track-wire, which is supported by means of hangers *b* from posts *c*. Along straight courses the posts are provided with arms *d*, from which the hangers *b* depend.

The hanger consists, usually, of a hook *e*, which is connected to a ring in the arm of the post. To the hook is connected the sheet-metal ear *f*, which is attached by its lower edge portion to the track-wire, as indicated at *g*, in such wise that said edge portion neatly surrounds the wire, while the thin plate of the ear extends axially therefrom, so that there is on each side of the lower portion of said plate sufficient projection of the wire and its covering to provide a lateral track-bearing for the inclined wheels of the carrier.

Where the course is curved, the arm of the post is unnecessary, because the hanger of the track-wire will be held off at an angle by the tension of the track.

The pulling-cord *h* is guided by the loops or rings *k*, which are attached to the track-wire by means of cylinder connections *m*, which, like those of the hanger-ears *f*, provide lateral track-bearings. These guide-loops are designed to be large enough for the carrier to pass through them.

The carrier *p* is designed to be of cylindrical form, having the hinged conical ends *t*, by opening which access is had to the interior. To the bottom of the carrier are attached the hooks *q* for the pulling-cord *h*, which pulls the carrier to inclined position to pass the hangers on a curve of the track. To the upper portion of the body of the carrier the upward and outward inclined arms *r* are secured, and to these arms are pivoted the carrier-wheels *w*, whose planes of rotation are inclined to each other at an angle of about ninety degrees, so that their rim-bearings *s*, which engage the lateral bearings of the track-wire, are inclined to each other at a similar angle. Between the rims of each pair of carrier-wheels is a small interval which is sufficient to enable the wheels to pass the hanger-ears and the guide-loop connections without obstruction. In the construction shown a pair of wheels is provided at or near each end of the carrier-body, and the wheels of each pair are pivoted to the inclined doubled arms of the V-form-strap connection *z*, the ends of which are riveted to the body of the carrier. In this manner it is designed to make these inclined arms quite strong and to insure their relative angular position by the bracing angular bend *u* at the middle of the strap connection.

The pulling-cord *h* of the carrier is designed to pass at the house end of the course over a

grooved pulley having a cranked shaft whereby said cord can be moved around this pulley and around a pulley at the road end of the course to cause the carrier to move on the trackway.

Gearing may be arranged in connection with the shaft and crank in order to increase the speed of rotation of the pulleys if it is desired to have the carrier move very rapidly.

The lower branch of the pulling-cord is designed to pass through the small eye-bearings r of the guide-loops and serves to stay them in position.

Having described the invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination with a carrier and the inclined slightly-separated carrier-wheels, of the track-wire, its hanger-ears, hangers and supports, substantially as specified.

2. The combination with a carrier, and the inclined slightly-separated carrier-wheels, of the track-wire, its hanger-ears, hangers and supports, the pulling-cord and pulleys, substantially as specified.

3. The combination with a carrier and the inclined slightly-separated carrier-wheels, the track-wire and its hanger-ears, of the supports and hangers, the pulling-cord and its pulleys, and the guide-loops for said pulling-cord, substantially as specified.

4. The combination with a carrier and the inclined slightly-separated carrier-wheels, the supports and hangers, the pulling-cord and pulleys, loops, of the track-wire, and its hanger-ears, substantially as specified.

5. The combination with a carrier and its inclined slightly-separated carrier-wheels, the supports and hangers, the pulling-cord and the pulleys therefor, of the track-wire, its hanger-ears, and the guide-loops, substantially as specified.

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

CHARLES F. ZIMMERMAN.
HARRY C. ZIMMERMAN.
CHARLES ZIMMERMAN.

Witnesses:
CHAS. B. T. HENDRICKSON,
C. ALBERT GILSON.