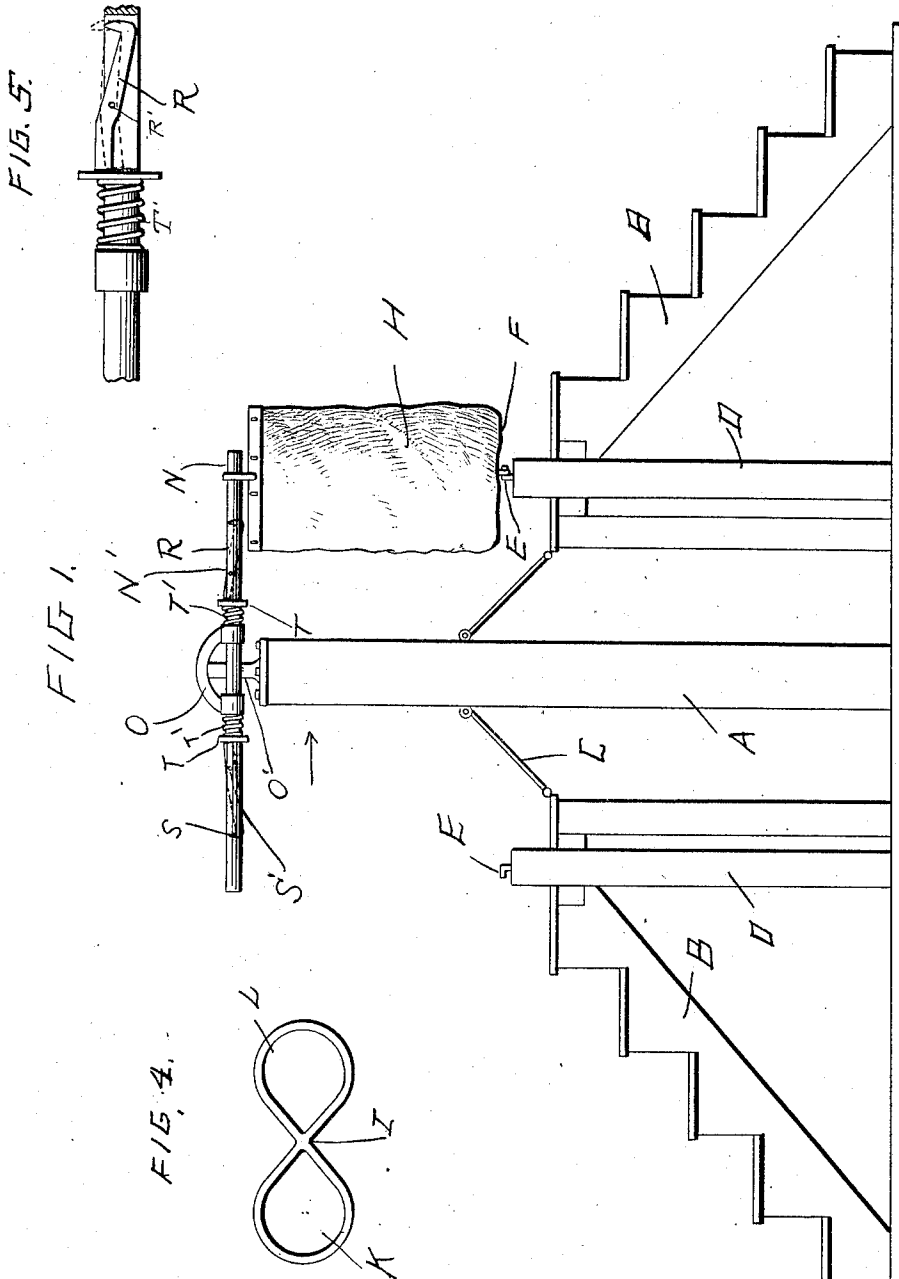


A. J. JONES.
MAIL DELIVERY APPARATUS.
APPLICATION FILED JULY 5, 1911

Patented July 30, 1912.

2 SHEETS-SHEET 1.

1,034,116.



WITNESSES:

A. B. Fowler
A. C. Blahney

BY

INVENTOR

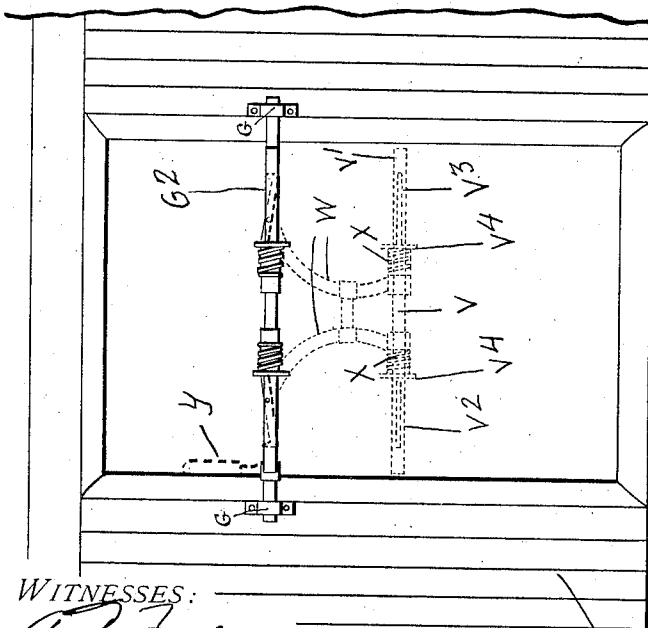
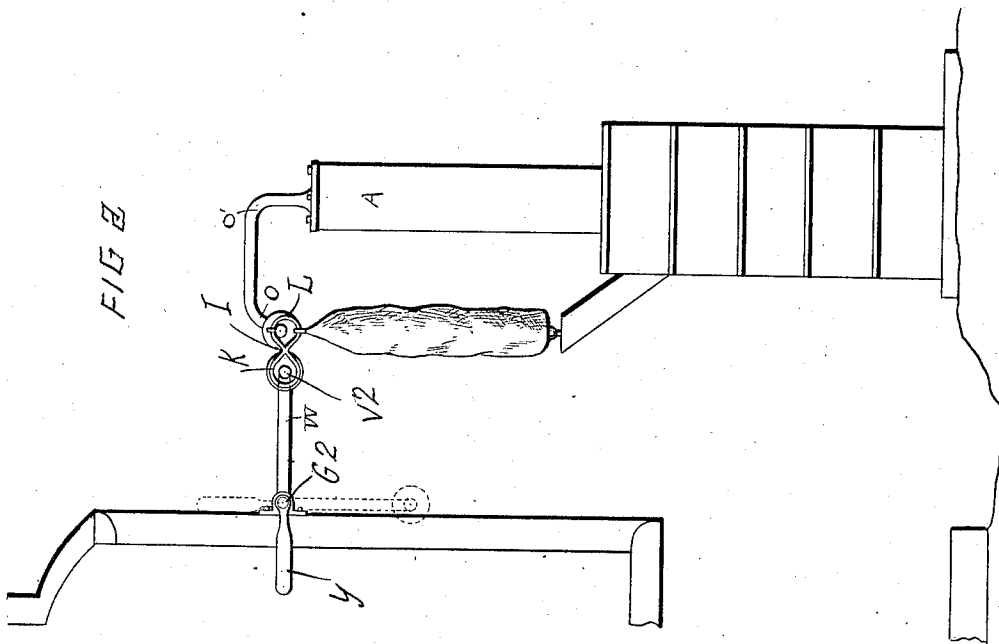
Arthur J. Jones
A. L. Hough
Attorney

A. J. JONES.
MAIL DELIVERY APPARATUS.
APPLICATION FILED JULY 6, 1911.

1,034,116.

Patented July 30, 1912.

2 SHEETS—SHEET 2.



WITNESSES:

A. B. Fowler
A. B. Blakely

BY

INVENTOR
Arthur J. Jones
A. L. Hough
Attorney

UNITED STATES PATENT OFFICE.

ARTHUR J. JONES, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF ONE-HALF
TO FREDERICK W. PRATT, OF WASHINGTON, DISTRICT OF COLUMBIA.

MAIL-DELIVERY APPARATUS.

1,034,116.

Specification of Letters Patent.

Patented July 30, 1912.

Application filed July 5, 1911. Serial No. 637,004.

To all whom it may concern:

Be it known that I, ARTHUR J. JONES, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Mail-Delivery Apparatus; 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, 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 mail delivery apparatus for railway trains and comprises a simple and efficient apparatus of this nature having various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying drawings, in which:—

Figure 1 is an elevation showing the apparatus for supporting and receiving mail bags. Fig. 2 is a vertical sectional view transversely through a portion of a car showing the delivery apparatus and also the means for supporting the mail bag upon the ground. Fig. 3 is a plan view showing the door of a car and the delivery and receiving apparatus connected to the edges thereof. Fig. 4 is a detail view of a loop adapted to be fastened to the bag and through which the catching device is adapted to pass, and Fig. 5 is an enlarged detail in side elevation.

Reference now being had to the details of the drawings by letter, A designates a standard held rigidly upon a platform or upon the ground, and B designates steps which have brace rods C connecting the same and said post. Posts D are mounted adjacent to the steps and parallel with said standard and each is provided with a hook E at its upper end adapted to engage a loop or eye F fastened at one end of the mail bag H. A mail bag supporting loop I, a detail of which is shown clearly in Fig. 4 of the drawings, is made preferably in the shape of the figure 8 and provided with two eyes K and L, one of which is adapted to engage the mail bag, as shown in Figs. 1 and 2 of

the drawings, and the other adapted to be mounted upon one end N of the horizontally disposed bar N', which latter is mounted in the arms of the yoke O, having a shank portion O' which is fastened to the top of the standard. Said bar has two slots therein, one of which is shown clearly in Fig. 5 of the drawings, and hooked levers R and S are mounted respectively upon pivotal pins R' and S', each within one of said slots. A buffer plate T is mounted upon each arm of the bar N' and a coiled spring T' is mounted upon each arm of the bar and bears between the buffer plate and the edge of the arm through which the bar N passes.

It will be noted upon reference to the drawings that the hooked lever is normally positioned as shown in Figs. 1 and 5 of the drawings, in which the hooked end is seated within the recess and each lever is inclined slightly with a portion projecting above the bar so that, when a loop I fastened to a mail bag passes over one end of the bar and coming into contact with the inner pivotal end of the lever will cause the same to tilt and throw the hook above the bar N', thus forming means for holding the mail bag upon the bar.

Pivotaly mounted in bearings G near the marginal edges of the door of the car G' is a rock shaft G² from which project the arms W which support a bar V similar in construction to the rod N' before described, and said bar V has two arms V' and V² and has recesses in which pivotal levers V³ are mounted and upon each arm of the lever of the bar V is a buffer plate V⁴ and interposed between each buffer plate V⁴ and the arm in which the bar V is supported is a coiled spring X. A handle Y is fixed to the rock shaft G², affording means whereby, when it is desired to deliver and receive a mail bag, said shaft G² may be rocked so that the rod V will be thrown to the position shown in Fig. 2.

The operation of my apparatus will be readily understood and is as follows:—Assuming that the mail bag to be taken up by the rapidly moving train is positioned as shown in Fig. 1 of the drawings and it is desired to deliver from the car to the holder upon the ground another bag, the latter is placed upon the arm V² of the bar V, assuming that the car is moving in the direction shown by the arrow in Figs. 1 and 3.

The shaft G^2 is rocked so that the bar V will assume the position shown in Fig. 2. The mail bag, which is supported upon the arm V^2 , will engage an eye L with the eye K thereof in alinement with the bar N' and so positioned that, as the car comes opposite the standard, one end of the bar will pass through the eye K and coming against the upper edge of that part of the lever which projects above the slot will cause the lever to tilt and throw the hooked end above the rod N' and serve as a means for retaining the mail bag upon said arm. The force of the mail bag coming in contact with the buffer plate T will cause the same to yield against the spring T' . The arm V' of the bar V will enter the eye K of the loop which is fastened to the mail bag H and draw the same over from the supporting arm N and, as the mail bag H is taken off the supporting rod N' and received upon the arm V' , it will contact with the shank portion of the hook lever upon said arm V' , causing said hook to be tilted up to retain the bag while the latter coming against the buffer plate V^4 will break the momentum of the bag and, by rocking the shaft, the bag may be delivered inside the car.

From the foregoing, it will be noted that, by the provision of an apparatus as shown and described, an automatic device is afforded whereby mail bags may be delivered from rapidly moving cars and caught upon standards and simultaneously with the receiving or taking in of the bag, which has been previously mounted upon the stationary delivery support.

What I claim to be new is:—

1. A mail delivery apparatus comprising a stationary horizontally disposed bar, means for supporting the same, pivotal levers mounted upon said bar, buffer means upon the latter, a rock shaft adapted to be mounted in suitable bearings and adjacent to the door frame of a car, a bar supported by the rock shaft, pivotal levers mounted upon said bar secured to the rock shaft, a loop designed to be fastened to a mail bag and provided with two eyes adapted to be held in registration one with each of said bars.

2. A mail delivery apparatus comprising

a stationary horizontally disposed bar, means for supporting the same, pivotal levers mounted upon said bar, buffer means upon the latter, a rock shaft adapted to be mounted in suitable bearings and adjacent to the door frame of a car, a bar supported by the rock shaft, pivotal levers mounted upon said bar secured to the rock shaft, a loop designed to be fastened to a mail bag and provided with two eyes adapted to be held in registration one with each of said bars, and buffer means mounted upon each of said bars.

3. A mail delivery apparatus comprising a standard, a bar mounted thereon at one side of the standard, spring-pressed buffer plates mounted upon each arm of the bar, a pivotal hook lever mounted upon each arm of the bar and having their hooked ends normally below the upper edge of the latter and their opposite ends normally above the bar, a rock shaft adapted to be mounted in suitable bearings adjacent to an opening in a car door, a bar fastened to and supported upon said rock shaft, buffer means and pivotal levers mounted upon the bar which is fastened to said rock shaft, a loop having two eyes, one of which is adapted to support a mail bag and the other adapted to be engaged by one of said bars.

4. A mail delivery apparatus comprising a standard, a yoke mounted thereon and having arms which are apertured, a bar mounted in said apertures, said bar being slotted, a pivotal hook lever mounted one in each of said slots, collars fixed to said bar, buffer plates upon the latter, a spring interposed between each plate and collar, a rock shaft adapted to be mounted in suitable bearings adjacent to the opposite edges of the door of a car, arms projecting from the rock shaft, a bar fastened to said arms and slotted, a pivotal lever mounted in each of the slots, and spring-pressed buffer plates upon said bar which is supported by the arms.

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

ARTHUR J. JONES.

Witnesses:

A. L. HOUGH,
A. R. FOWLER.