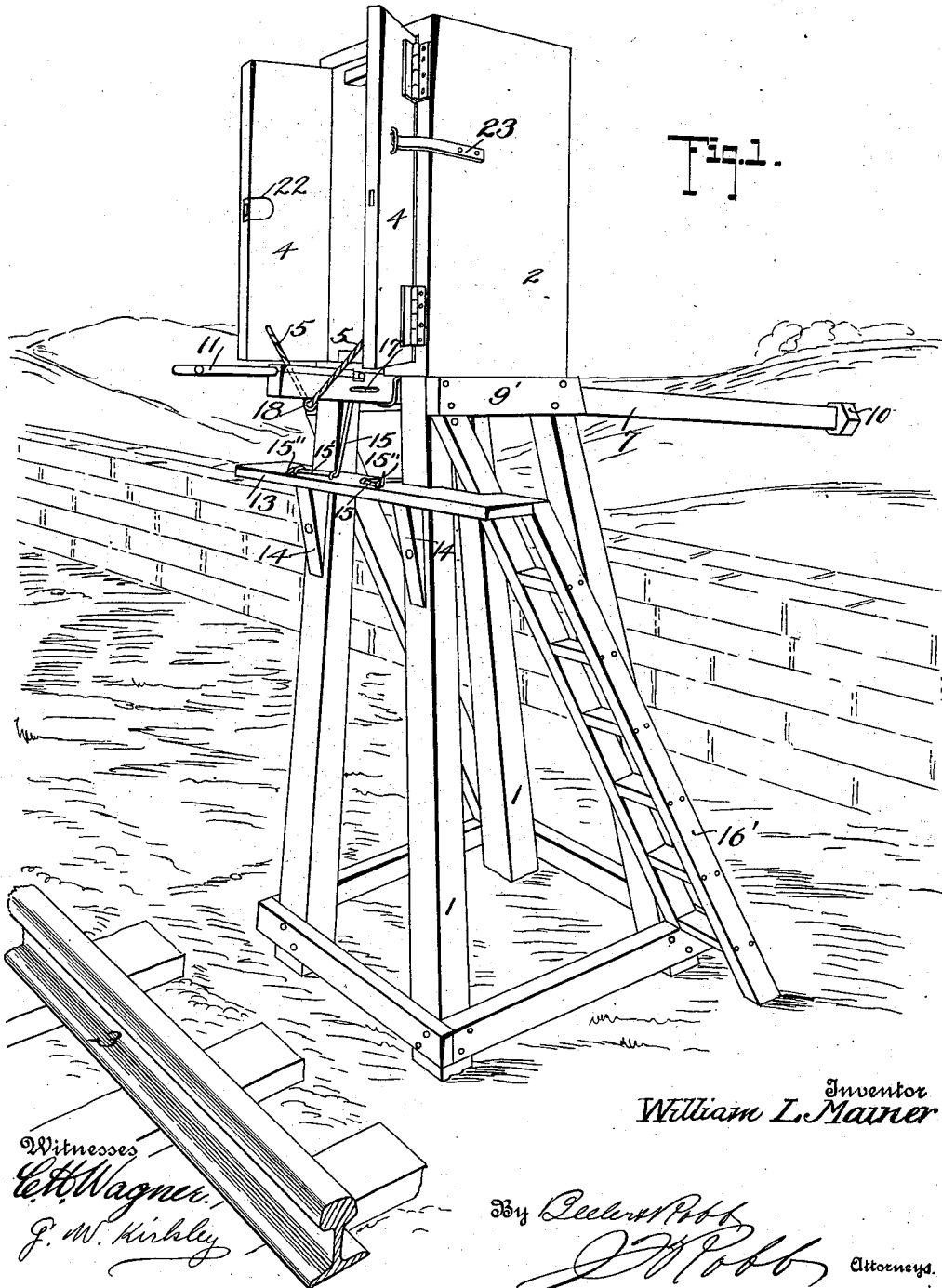


W. L. MAINER.
MAIL RECEIVING APPARATUS.
APPLICATION FILED FEB. 10, 1912.

1,028,756.

Patented June 4, 1912.
2 SHEETS—SHEET 1.

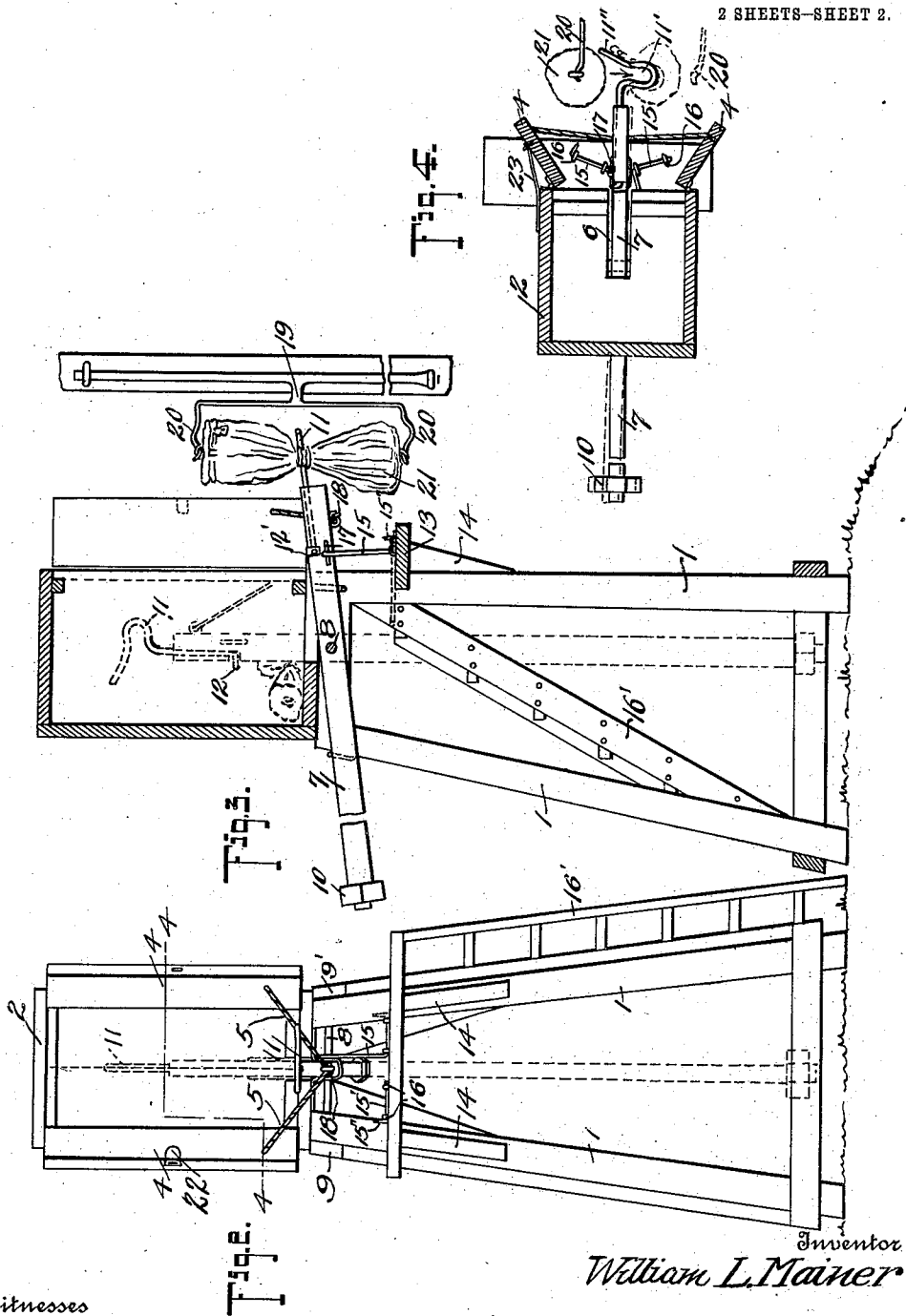


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UNITED STATES PATENT OFFICE.

WILLIAM L. MAINER, OF LAMB, TEXAS, ASSIGNOR OF ONE-HALF TO J. M. HUBERT, OF LAMB, TEXAS.

MAIL-RECEIVING APPARATUS.

1,028,756.

Specification of Letters Patent.

Patented June 4, 1912.

Application filed February 10, 1912. Serial No. 676,790.

To all whom it may concern:

Be it known that I, WILLIAM L. MAINER, a citizen of the United States, residing at Lamb, in the county of Liberty and State of Texas, have invented certain new and useful Improvements in Mail-Receiving Apparatus, of which the following is a specification.

This invention relates to improvements in railway mail receiving devices and particularly to an apparatus for automatically removing mail bags from moving trains.

The primary object of my invention is to provide a simple and efficient construction which will automatically remove mail bags from a moving train and cause said bags to enter a receptacle or housing and simultaneously close said receptacle against unauthorized access.

As will be hereinafter more fully explained, the particular advantage of my device is to overcome any necessity of the postmaster or station-master having charge of the mail, remaining on watch to receive the mail which may be delivered at the station by moving trains, my invention being adapted especially to insure its proper safety in delivery as well as prevent likelihood of the mail being exposed to the elements and thereby injured.

For a full understanding of the present invention, reference is to be had to the following description and the accompanying drawings, in which—

Figure 1 is a perspective view of my invention, showing the same in position to receive a bag of mail. Fig. 2 is a front elevation of the same. Fig. 3 is a side elevation, partly in section, showing the catching arm after the bag has been deposited in the box in dotted lines. Fig. 4 is a horizontal sectional view on the line 4—4 of Fig. 2 showing the arm in position to receive the mail bag.

Throughout the following detail description and on the several figures of the drawings, similar parts are referred to by like reference characters.

Referring now to the drawings, a receiving apparatus constructed in accordance with my invention consists of a plurality of standards 1 having secured on their upper portions a receptacle or housing 2 which may be of any size or shape most suitable for the purpose for which it is desired. The receive-

ing apparatus is designed to be located adjacent the track 3 of the railroad or contiguous to the platform of a station, the side of the receptacle 2 adjacent the track being preferably provided with outwardly opening doors 4 hinged thereto.

In the lower portions and adjacent the outer edges of the doors 4 is secured in any desired manner a flexible connecting member such as a rope 5. The bottom of the receptacle 2 is provided with an open slot 6, said slot extending from the front portion to approximately its center, and directly beneath the slot is pivotally mounted for vertical movement a lever or arm 7, the pivot 8 of said arm having its bearings in the transverse bars 9 and 9' secured to the opposite sides of the upper ends of the standards 1. The arm or receiving member 7 has adjustably mounted at one end a counterbalancing weight 10, the tendency of which is to bring the arm into vertical position, and the end opposite the weight being adapted to swing into the receptacle as clearly shown in Fig. 3 of the drawings. This tendency above referred to is assisted further by mounting the pivot at one side of the center of the arm.

The end of the arm 7 opposite the weight 10 has mounted thereon a grabbing hook 11 formed with a U-shaped portion 11' and elongated end 11'', the shape of the hook being especially provided to most readily catch a bag of mail impinged thereagainst. The hook 11 is furthermore mounted in the arm for partial rotation, the inner end 12 thereof being bent laterally and adapted to move in the notch 12' as will be hereinafter more fully described.

At a suitable point near the upper portion of the front standards 1 is a small platform 13 supported by means of the brackets 14 secured to the standards aforesaid. Mounted on the upper surface of the platform 13 are the retaining hooks or triggers 15, each having a shank 15' secured to the platform as by the staples 16, the extremity of said shank being bent at right angles thereto to form a stopfinger 15'' to permit said hook to rotate only in one direction from its vertical position.

As thus described the operator having charge of the mail opens the doors 4 of the casing 2, access to said casing being provided by the ladder 16' at one side of the

standards 1, said ladder extending to the platform 13, and bearing downwardly on the end of the arm 7 until it assumes an approximately horizontal position, the hook 15 is then engaged over an elongated projection 17 on the side of said arm. As will be noted from the drawings the arm 7 has a screw-eye 18 near its outer end through which the rope 5 passes, and said rope is of sufficient length to permit the arm to assume its horizontal and vertical positions. The grabbing hook 11 is then adjusted so as to present its open portion toward the direction in which the train is to come and the hook 15 on the same side of the arm 7 as this direction is used when adjusting the arm in its operative position. The apparatus requires no further attention on the part of the operator until such time as it is convenient for him to remove the contents of the receptacle.

The car carrying the mail is provided with a swinging crane 19 comprising spaced horizontal arms 20 between which the bag or pouch of mail 21 is removably suspended. Said pouch 21 is tied preferably at its central portion and in passing my apparatus the contracted portion is engaged in the hook 11, the jar imparted by the action described disengaging the retaining hook 15 from the arm 7, whereupon the bag, by reason of the mounting of said arm and the weight 10 on the opposite end thereof, is swung and deposited in the receptacle 2, the arm 7 moving through the slot 6 in the bottom of said receptacle.

Through the instrumentality of the rope 5 which is attached to the arm, the doors 4 are pulled shut and being preferably provided with a lock 22 the receptacle is thus closed against unauthorized access.

A spring 23 secured to the side of the receptacle 2 engages with an eye on the doors 4 to hold them from being swung by the wind, but will readily permit disengagement when the arm is forced upwardly and the rope 5 draws them into closed position.

The mounting of the hook 11 will permit the same to be turned from its horizontal plane by the weight of the bag as it is swung into the receptacle 2 and will assume a position in a vertical plane, as clearly shown in dotted lines in Fig. 3 of the drawings, so that said bag is released from the hook and deposited in the receptacle.

Having thus described the invention, what is claimed as new is:

1. A mail bag receiving apparatus comprising a receptacle, a pivoted receiving member, a trigger cooperating with one end of the receiving member to engage and hold said member in an abnormal position to catch the bag and operable by impact of the bag with the receiving member to disengage the trigger from the latter, and a

weight carried on the other end of the member to move the receiving member when released to carry the bag into the receptacle.

2. A mail bag receiving apparatus, comprising standards, a receptacle carried by said standards, doors for said receptacle, an arm mounted on the standards adapted to remove a bag from a moving train, means to permit the arm to deliver the bag into the receptacle when actuated, and means cooperating with said arm to automatically close the doors aforesaid as the bag is deposited in the receptacle.

3. A mail bag receiving apparatus, comprising standards, a receptacle mounted thereon, doors for said receptacle, an arm pivotally mounted beneath the receptacle, a connection between the doors aforesaid and the arm operable to close the doors when the arm is actuated, and means to hold the arm in operative position and adapted to be released by contact of the bag with said arm.

4. A mail bag receiving apparatus, comprising standards, a receptacle carried thereby, doors for said receptacle, means for catching a bag from a moving train, delivering the bag into said receptacle and simultaneously closing the doors aforesaid.

5. A mail bag receiving apparatus, comprising standards, a receptacle carried thereby, doors for said receptacle, an arm pivotally mounted on the standards having means normally tending to cause the arm to assume a vertical position, means for holding the arm in operative position to receive a bag from a moving train, means connecting the doors and arm aforesaid normally inactive when the latter is in operative position and operable to close the doors when the arm is actuated, and means on the arm to catch the bag and operable by said bag to permit its deposit into the receptacle when the arm is swung thereinto.

6. A mail bag receiving apparatus, comprising standards, a receptacle carried thereby, doors for said receptacle, an arm pivotally mounted beneath said receptacle and having means normally tending to cause the arm to assume a vertical position, a retaining hook to hold the arm in approximately horizontal operative position to receive a bag from a moving train, and operable by contact of the bag to release the arm and permit it to be swung into the receptacle, a flexible connection between the doors aforesaid and connected to the arm, and a grabbing hook mounted on one end of said arm to catch the bag and deposit the same into the receptacle.

7. A mail bag receiving apparatus, comprising standards, a receptacle carried thereby, doors for said receptacle, an arm pivotally mounted beneath said receptacle, having means normally tending to cause the arm to swing thereinto, a platform secured

to the standards aforesaid, retaining hooks
rotatably mounted on said platform and
adapted to engage one end of the arm to
hold the same in operative position to re-
5 ceive a bag from a moving train and adapt-
ed to be released from the arm by contact of
the bag thereagainst, a grabbing hook piv-
otally mounted in one end of the arm and
adapted to catch the bag and to be rotated
10 to release said bag as the arm is swung into
the receptacle, a flexible connection between
the doors aforesaid and connecting with the

arm whereby the doors are automatically
closed as the arm is swung into the recep-
tacle, and locking means on said doors op- 15
erable as they are closed to prevent unauth-
orized access to the said receptacle.

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

WILLIAM L. MAINER.

Witnesses:

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ALBERT RAGSDALE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."