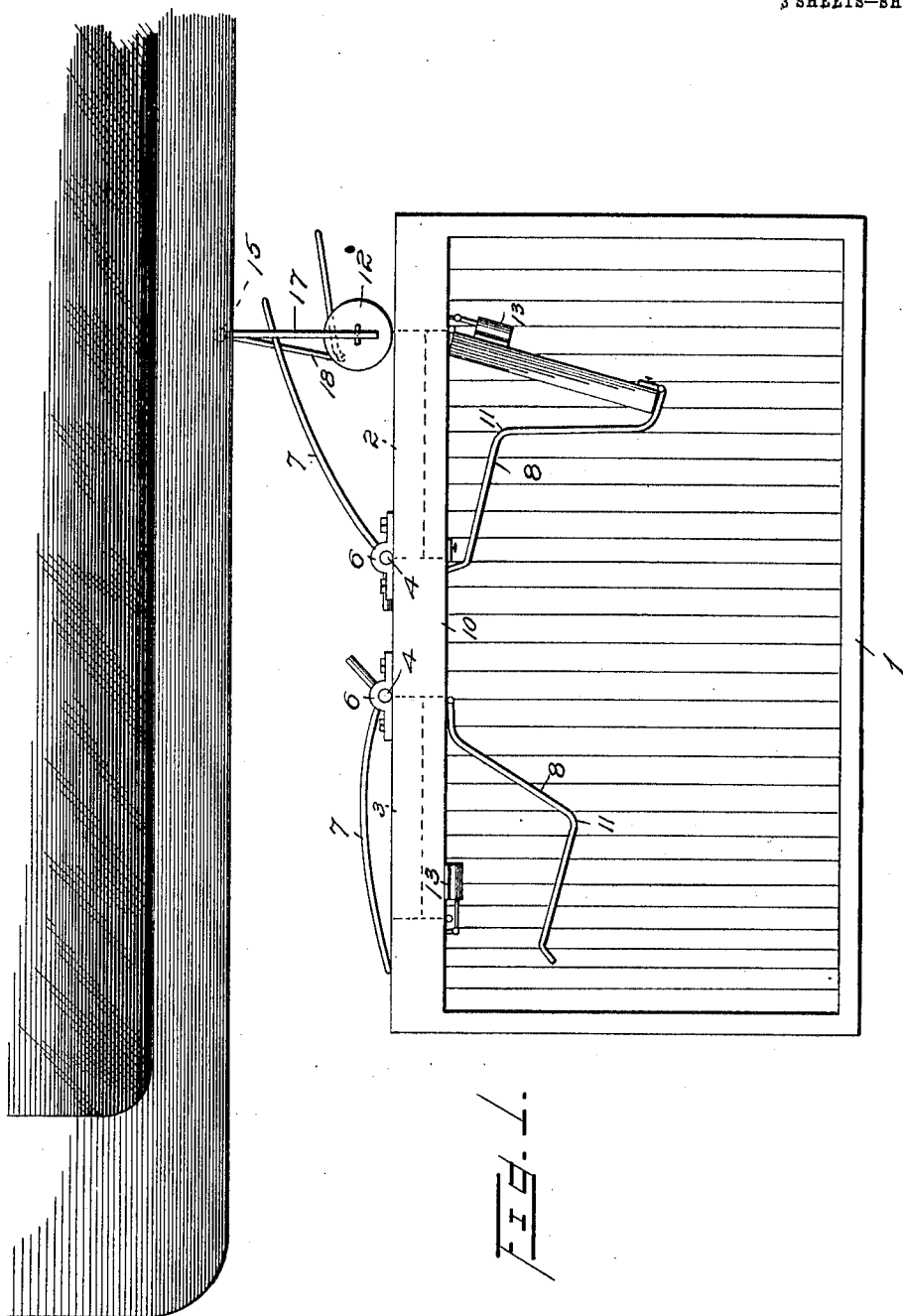


G. F. MORIN.
MAIL BAG DELIVERER.
APPLICATION FILED NOV. 29, 1911.

1,019,823.

Patented Mar. 12, 1912.

3 SHEETS—SHEET 1.



WITNESSES

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N. E. Harner

INVENTOR

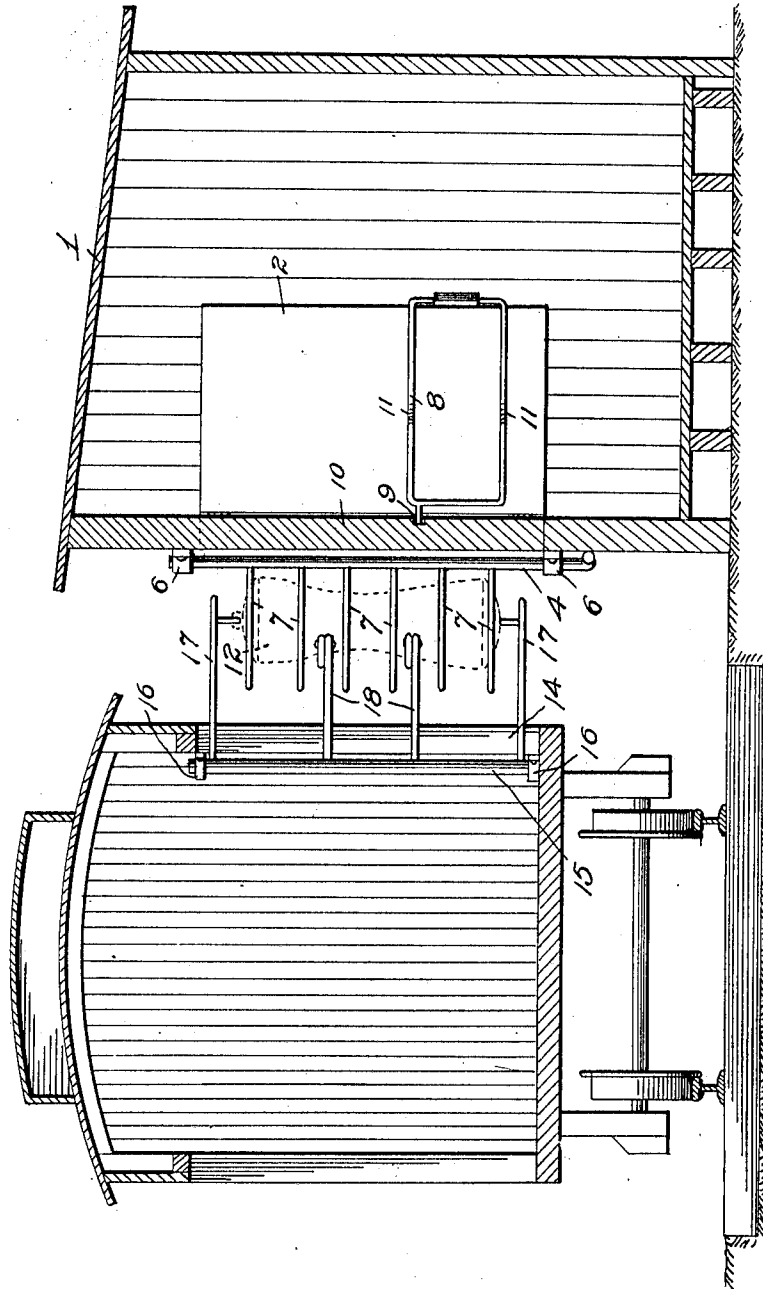
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FIG. 2.



WITNESSES

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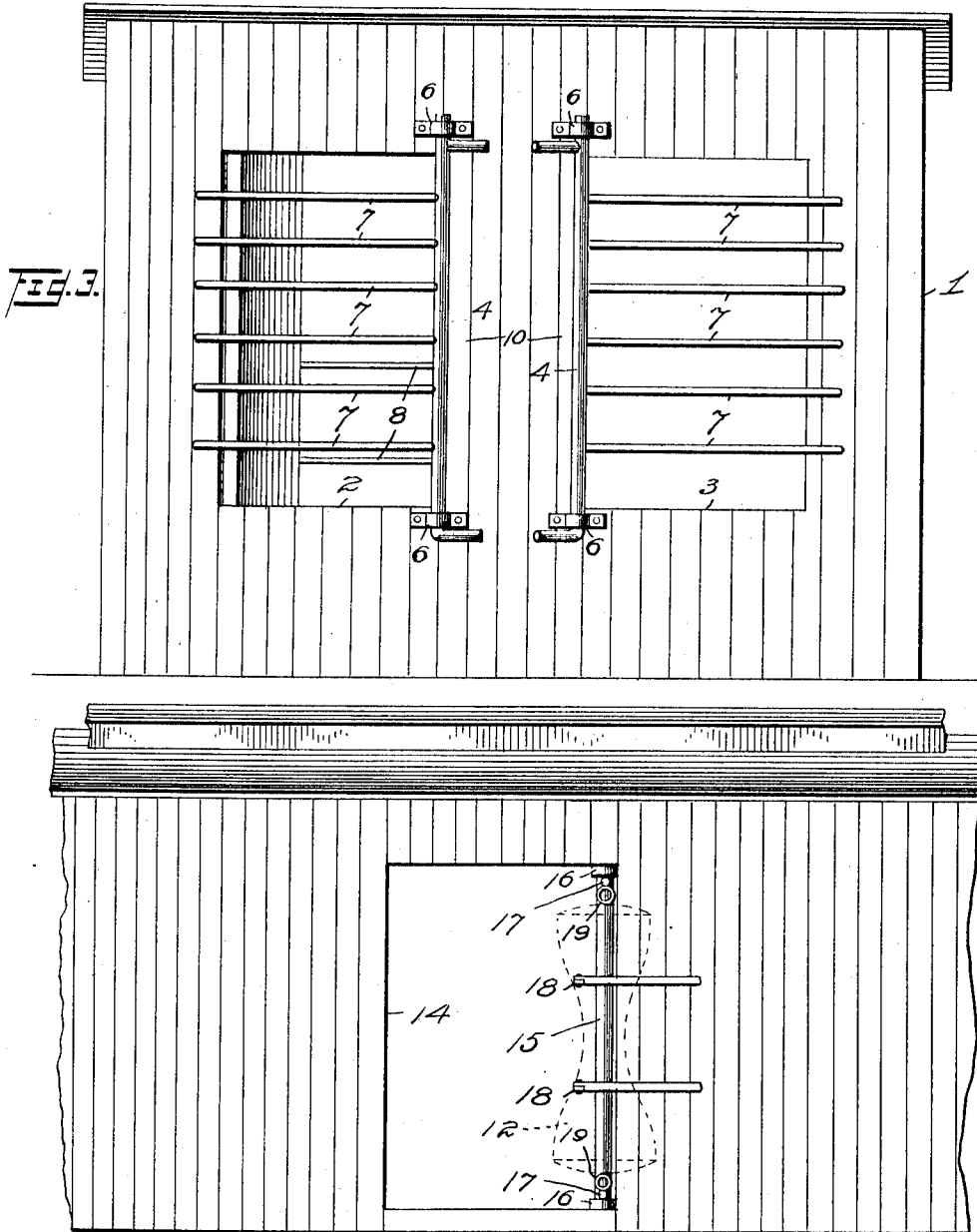
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UNITED STATES PATENT OFFICE.

GEORGE F. MORIN, OF BENSON, MINNESOTA.

MAIL-BAG DELIVERER.

1,019,823.

Specification of Letters Patent.

Patented Mar. 12, 1912.

Application filed November 29, 1911. Serial No. 663,055.

To all whom it may concern:

Be it known that I, GEORGE F. MORIN, a citizen of the United States, residing at Benson, in the county of Swift and State of Minnesota, have invented certain new and useful Improvements in Mail-Bag Deliverers, of which the following is a specification.

This invention has relation to new and useful improvements in mail bag deliverers and the main object thereof is to produce a device of this nature that will be efficient in operation and comparatively simple in construction.

A further object of my invention is to provide means for throwing the mail bag from the mail coach on that side of the train not adjacent to the depot platform, thereby eliminating the danger of injury to people who are standing on said platform.

A further object of my invention is to provide a small house into which the mail bag is shot, when the door, which is propped open, is automatically closed and locked, thereby preventing the removal of the mail bag until the door is unlocked by a person whose duty it is to collect the mail. It will be here pointed out that the doors of the small house are supposed to be closed until just before train time, when one door at a time is opened, it depending upon from which direction the train is coming.

A further object of my invention is to provide means for automatically closing the doors of the small house, when the mail bag is shot into the same.

With the foregoing and other objects in view my invention consists of the novel features of construction, combination and arrangement of parts as are described in this specification, illustrated in the accompanying drawings forming a part thereof and particularly pointed out in the appended claims.

Reference being had to the drawings; Figure 1 is a top plan view of a portion of a small house employed in the operation of the invention, the roof of the small house having been removed. Fig. 2 is a vertical, transverse, sectional view through said house and the mail car, just as the small house is about to receive the mail bag. Fig. 3 is a front, elevational view of the small house one of the doors thereof being in open position while the other door is in closed position. Fig. 4 is a side, elevational view of a mail car, the mail bag indicated by dotted lines

being held in readiness to be received by the small house.

Referring more particularly to the drawings, in which like numerals designate like parts throughout, my invention is described as follows:

The small house 1 is provided with two doors 2 and 3. The object in providing two doors is so that a mail bag can be caught in either direction. Provided along the edge of each door is a vertical rod 4, which rods are pivotally held in bearings 6, which bearings are arranged over the top and below the bottom edges of each of the door openings. Projecting from each of the vertical rods 4 and at right angles thereto is a plurality of slightly curved prongs 7, whose purpose it is to catch the mail bags and guide them in their course into the small house in a manner that will be brought forth more fully hereinafter.

When the train is about to pass the proper door 2 or 3 is held open by means of a catch or support 8, one end of which is hingedly secured to the outer edge of said door, the other end of which is adapted to catch in a notch or groove 9, provided adjacent the edge of the door frame 10. Said catch or support is bent centrally at 11 so that when the mail bag 12 is shot into the small house 1 and strikes against said support 8, it will throw the support out of that position illustrated in Fig. 1 (which holds the door in open position), and allow the door to automatically swing into closed position, when it becomes automatically locked in said position. The means whereby the door is automatically closed consists of an air spring 13 provided at the top of each door, said air spring being of any construction adapted for the purpose.

I will now proceed to describe the construction of the means illustrated upon the mail car for securing the bag in position to be engaged by the prongs 7. Provided adjacent the door frame 14 of the mail coach, is a vertical rod 15, which is pivotally held in position in bearings 16. Protruding from the vertical rod 15 are four steel arms 17 and 18. The top and bottom arms 17 are approximately three feet long or the same length as the width of the door, which is about three feet in most mail cars. The two inner steel rods are approximately five feet in length, each being provided with an elbow centrally or approximately two and

one-half feet from the vertical bar 15. This elbow enables the outer part of the inner arms 18 to swing back, but they are stationary when swung forward at right angles to their inner sections, as when in that position illustrated in Fig. 4. The function of these arms 18 is to so catch and hold the mail bag that it will be free from the suction of the moving train. Provided upon the end of each upper and lower arm 17 is a hanger-on or ring 19, to which the upper and lower end of the mail bag are secured.

The mail bag or sack is attached to the upper and lower ring in the car and the arms are not swung out until, let us say, the train is two or three blocks from the station. The upper bar 17 may also be secured or held in a suitable manner inside of the car until the proper time arrives to swing the mail bag out of the position intercepted by said prongs 7, in which case the arm is secured to that portion of the car adjoining it within.

The operation of the invention is described as follows: The mail bag is secured to the arms 17 as illustrated in Fig. 2, the body portion thereof pressing upon the outer sections of the arms 18 (see Fig. 4). When the train approaches a station the arms 17 and 18 are swung outward at right-angles to the car so that the mail bag is held a predetermined distance from the mail car. When the mail bag is contacted by the curved arm 7 the cords or fastenings that secure said bag to the rings provided upon said arms 17 are parted and simultaneously the mail bag is shot into the small house 1, doing which it strikes the bent support 8 releasing it from that portion which secures its respective door in open position. The door then automatically swings shut aided by the air spring 13, and, upon slamming shut automatically locks itself in closed position. The arms 17 and 18 are then swung back into normal position within the car by the mail clerk therein.

Although I have specifically described the novel features of construction, combination and arrangement of the several parts of my invention, yet I reserve and may exercise the right to make such changes therein as do not depart from the spirit of the invention or the scope of the appended claims.

Having described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a mail bag deliverer of the kind described comprising a small house, two doors

provided therein, a vertical rod held adjacent the inner edge of each door frame upon the outer surface of the small house, said rod held in bearings adjacent the upper and lower edges of the door opening, a plurality of curved prongs extending from each vertical rod at right-angles thereto, and means provided upon the mail car for suspending the mail bag in position to be intercepted by said prongs, said door of the small house automatically closing when the mail bag enters the small house through the door opening.

2. In a mail bag deliverer of the kind described comprising a small house, a pair of doors provided in said small house, one for receiving the mail bag from each direction, a vertical rod held adjacent the inner edge of each door from upon the outer face of the small house, said rods held in bearings, a plurality of inwardly curved prongs extending from each vertical rod approximately at right angles thereto, and means provided upon the mail car for suspending the mail bag in position to be intercepted by said prongs, said door of the small house automatically closing when the mail bag enters the small house through the door opening, said means consisting of an air spring.

3. In a mail bag deliverer comprising a small house, a pair of doors provided in said small house, one for receiving the mail bag from each direction, means to intercept a mail bag suspended from a passing train and cause it to pass or be shot into the small house through one of its doors and means to suspend a mail bag from a mail car in position to be intercepted, said last-named means comprising a vertical rod pivoted to the door frame of the car, a plurality of arms extending from the rod, the upper and lower of the arms equal in length to the width of the door of the car, the central pair of arms provided with elbows approximately centrally, said vertical rod adapted to swing outward so that the arms are at right angles to the car, the mail bag being secured to the upper and lower arms, its central portion resting against the outer extensions of the inner arms, and means consisting of rings to secure the bag to said upper and lower arms.

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

GEORGE F. MORIN.

Witnesses:

JOHN I. DAVIS,
DUNCAN L. KENNEDY.