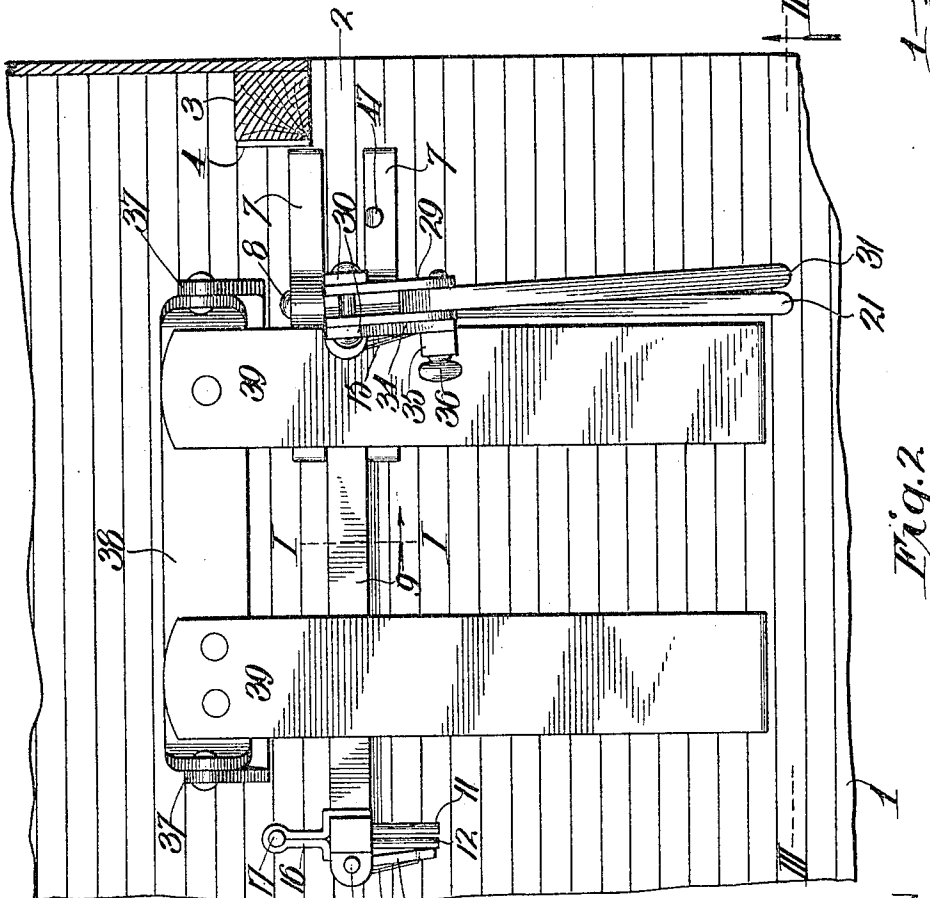
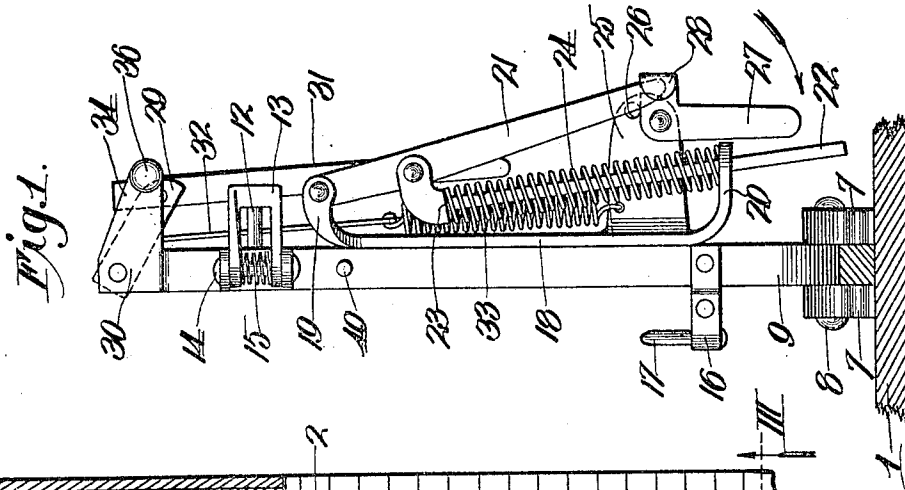


H. J. HEDRICK.
MAIL BAG DELIVERING APPARATUS.
APPLICATION FILED OCT. 14, 1909.

943,876.

Patented Dec. 21, 1909.

3 SHEETS—SHEET 1.



Witnesses
Frank R. Glom
H. C. Rodgers

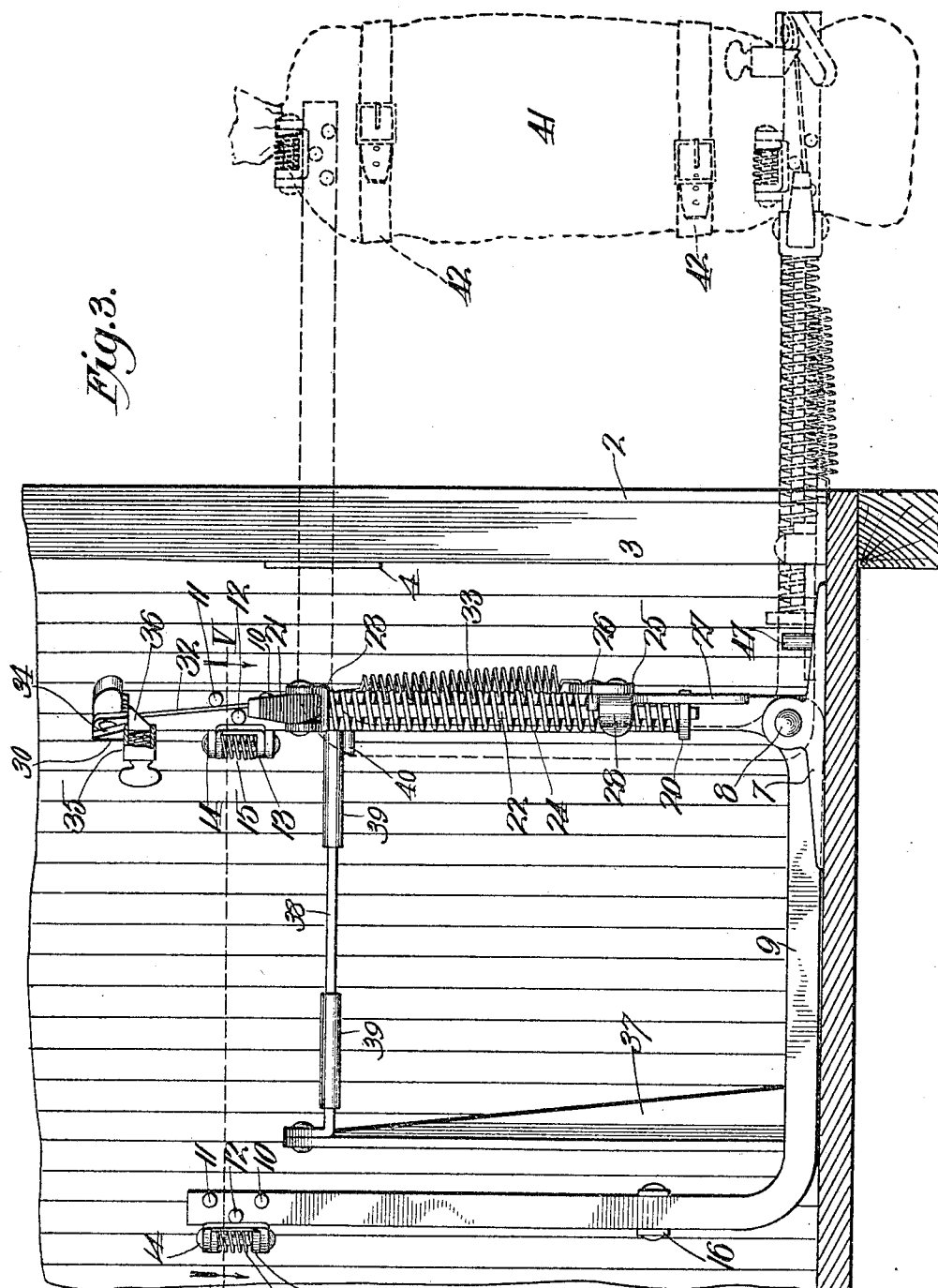
Inventor
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Witnesses
Frank R. Hon.
H. C. Rodgers.

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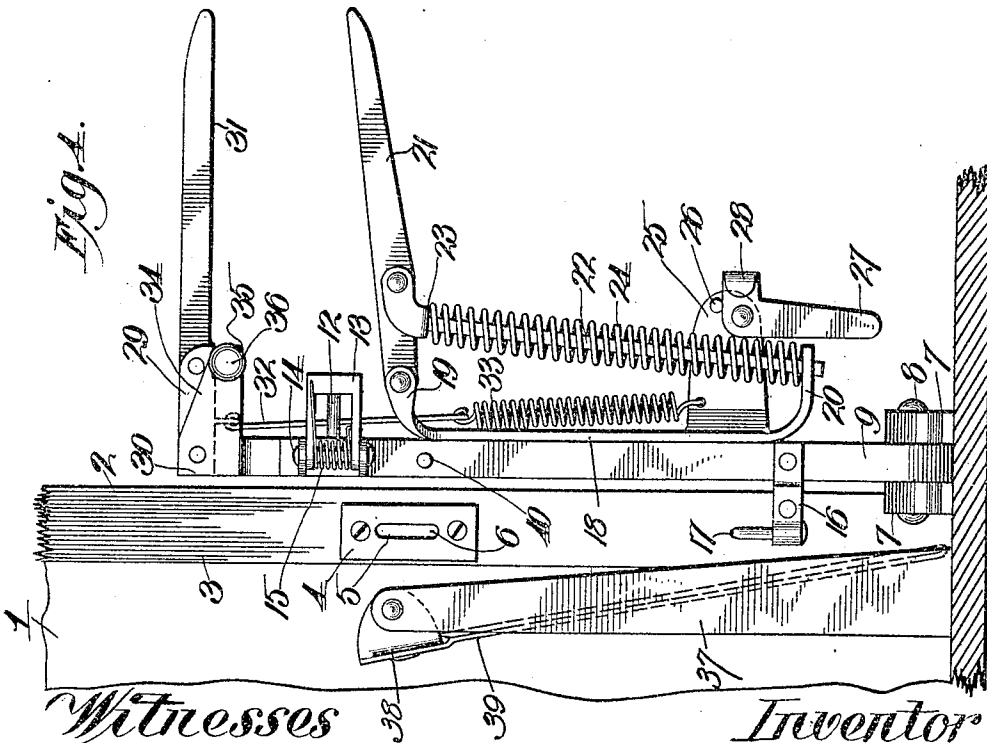
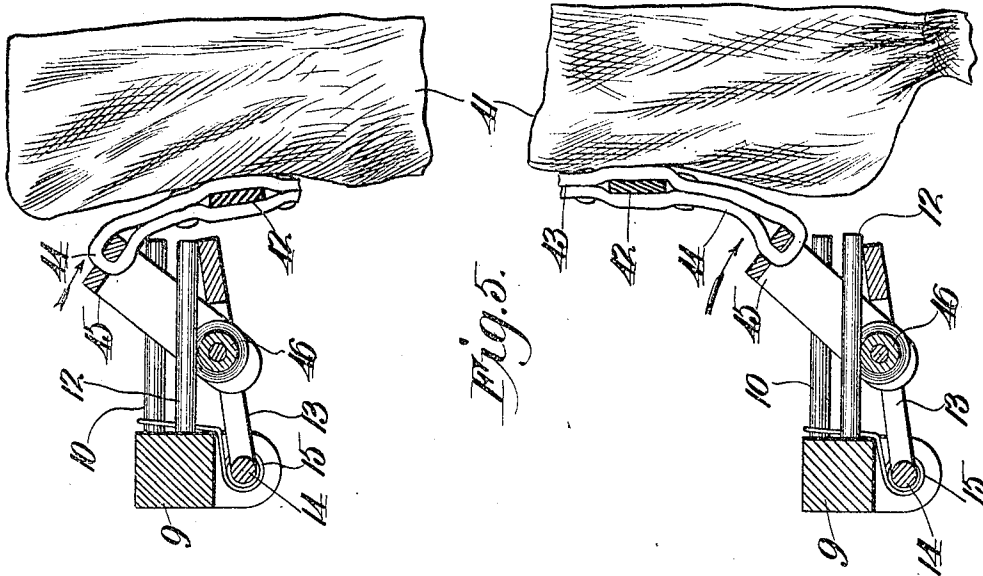
BY George Sharp Atty.

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3 SHEETS—SHEET 3.



Witnesses
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UNITED STATES PATENT OFFICE,

HENRY J. HEDRICK, OF LACON, ILLINOIS.

MAIL-BAG-DELIVERING APPARATUS.

943,876.

Specification of Letters Patent. Patented Dec. 21, 1909.

Application filed October 14, 1909. Serial No. 522,592.

To all whom it may concern:

Be it known that I, HENRY J. HEDRICK, a citizen of the United States, residing at Lacon, in the county of Marshall and State of Illinois, have invented certain new and useful Improvements in Mail-Bag-Delivering Apparatus, of which the following is a specification.

This invention relates to mail bag delivering apparatus and more especially to apparatus for safely transferring mail bags from a moving car to a mail catcher at a station, and my object is to produce apparatus of the character named which can be readily and easily shifted from its loading to its delivering position and vice versa, and which is of compact construction so that when in inoperative position it shall take up but little room in the car and thus not interfere to any appreciable extent with the general duties of the mail clerks.

With this general object in view and others as hereinafter appear, the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawings, in which;

Figure 1, is a vertical section on the line I—I of Fig. 2, of apparatus embodying my invention, the same occupying its inoperative position. Fig. 2, is a top plan view of the apparatus in its loading position, said figure showing a portion of the car in horizontal section. Fig. 3, is a section on the line III—III of Fig. 2, with the apparatus occupying its delivering position in dotted lines. Fig. 4, is a view similar to Fig. 1, but with the apparatus in loading position, said figure also showing a loading table in inoperative position. Fig. 5, is an enlarged horizontal section taken on the line V—V of Fig. 3, with a mail bag detachably secured thereto.

Referring now to the drawings where like reference characters identify corresponding parts, 1 is a mail car of any suitable or preferred type, provided with the customary door-opening 2, and secured in the inner face of one of the door posts 3 is a reinforce plate 4, having a vertical slot 5 communicating with a vertically elongated recess 6 in post 3.

7 is a pair of base plates secured in any

suitable manner to the flooring of the car and extending transversely of the same adjacent to post 3, and fitting between and pivoted to said base plates at 8 is a U-shaped frame 9, the base of which normally rests upon the floor of the car.

10, 11 and 12 indicate pins projecting rearward from each arm of the pivoted frame, said pins being disposed triangularly with respect to each other, the pins 12 forming the apices of the triangles.

13 are bag-retainer loops hinged at their front ends at 14 to the sides of the arms of the pivoted frame most remote from the door-opening 2, and 15 are springs tending to hold the free ends of said loops pressed against pins 12 near the rear ends of the same.

16 is a bracket projecting forward from the innermost arm of the pivoted frame and 17 is a locking pin which projects vertically upward from said bracket when the pivoted frame occupies its normal position and adapted when said frame is swung out through the door-opening, to enter the slotted reinforce plate 4 and the recess 6 to brace the, at the time, upper arm of the pivoted frame against lateral movement, that is movement toward or from the adjacent post 3 of the door-opening.

Projecting rearward from the outermost arm of the pivoted frame and preferably forming the upper and lower ends respectively of a bracket 18 secured to said arm, are arms 19 and 20, and pivoted to arm 19 is a clamping jaw 21, and pivotally connected at its upper end to said jaw, is a rod 22 extending slidingly through arm 20 and provided by preference with a downwardly-disposed shoulder 23 above said arm as a resistance point or bearing for the upper end of a helical spring 24 fitting loosely around rod 22 and bearing at its lower end against arm 20, and tending to swing the free end of the said clamping-jaw upward. For the purpose of holding said jaw in its depressed or inoperative position, as shown in Fig. 1, a lug 25 projects rearward from the pivoted frame,—being preferably formed integral with bracket 18—and is provided with a stop-pin 26 to limit movement in one direction of a catch 27 pivoted to the lug 25 and terminating in a forwardly-disposed hook 28 for engagement with the free end of the clamping-jaw 21, to hold the same in

its depressed position against the action of spring 24. When it is desired to permit said clamping-jaw to swing upward, the person in control swings the catch by foot-pressure or otherwise, in the direction indicated by the adjacent arrow, Fig. 1, and thus disengages the catch from the clamping-jaw and permits the same to be thrown upward by the spring 24.

10 An upper clamping-jaw of break-joint type, consists of a channeled body portion 29 pivoted to and fitting between the upwardly-projecting ears 30 of a bracket formed integral with or secured to the outermost arm of the pivoted frame, and a handle 31 pivoted to said body portion so that it may swing upward independently of the body portion until it is in line with the latter, when its butt end engages the bottom of the channeled body portion and arrests such independent movement. This upper clamping-jaw is pivotally connected by link 32 to a retractile spring 33 secured at its lower end to lug 25 or any other suitable point fixed with relation to the pivoted frame. When the apparatus is occupying its inoperative position, the spring 33 holds the body portion of the upper clamping-jaw in the position shown in Fig. 1, the pivoted handle being then swung to a vertically pendent position so as to occupy as little space as possible.

One of the ears 30, preferably the one most remote from the door-opening, is provided with a rearward extension 34 equipped with a keeper 35 containing a spring-actuated beveled latch 36, the beveled face of the latch being disposed downward, so that when the handle 31 is swung upward until it is in alinement with body portion 29 and such movement is continued accompanied by the body portion, the latch 36 will yield to the upward movement of the body portion and after the same is fully elevated, will be pressed forward by its spring below said body portion and thus lock the upper jaw, composed of said body portion and handle, in its elevated position as shown clearly in Figs. 3 and 4, the spring 33 being placed under considerable tension by this adjustment of said upper jaw.

37 is a pair of vertical standards secured to the floor of the car forward of the pivoted frame, and pivoted to and between the upper ends of said standards is a cross-bar 38 to which are secured arms 39, the one nearest the door-opening being pivotally supported by cross bar 38, which bar with said arms, forms in effect a pivoted table of which arms 39 constitute the top when swung rearwardly and upwardly through the pivoted frame when the latter occupies its normal position, the outermost arm 29 being pivoted so that it may be swung inward to pass and then outward to rest upon

a supporting-pin 40 projecting inwardly from the outermost arm of the U-shaped frame.

When the table has been disposed as explained and as shown in Figs. 2 and 3, the upper clamping-jaw is swung upward to the position shown in Figs. 3 and 4, in which position it will be automatically secured by the latch 36. A mail bag 41 or a plurality of such bags are then secured together upon the table, opposite the door-opening and below the upper clamping-jaw. By preference a pair of straps 42 are fastened around the mail bag or mail bags, and secured to the latter by said straps or equivalent devices, is a longitudinally-extending strap or its equivalent 43, terminating at its ends in loops 44 to which are attached U-shaped brackets 45,—it being of course immaterial how the brackets are attached to the ends of the straps 43,—and arranged between the arms of and carried by the brackets 45 are anti-friction rollers 46. Assuming that the bag or bags are resting upon the table endwise with respect to the door-opening, the operator slips the roller-carrying ends of the brackets 45 between pins 12 and the spring-actuated bag-retainer loops 13, and then disposes said brackets between the pins 10 and 11, with the pins 12 engaging the rollers, as shown clearly in Fig. 5. The operator next trips catch 27 as hereinbefore explained, to cause the lower clamping-jaw 21 to swing upward and clamp the bag or bags firmly against the upper clamping-jaw, outward of the table top, the latch 36 being withdrawn to permit the retractile spring 33 to cause the upper jaw to press downward on the bag or bags. The pivoted arm of the table is then swung inward to clear supporting-pin 40, and is then released so that by gravity, the table top will swing down to a vertically pendent position, as indicated by dotted lines, in Fig. 4. The operator when ready, grasps the pivoted frame and swings it from the position shown in full lines to the position shown in dotted lines Fig. 3, so as to dispose the bag or bags in a vertical position beyond the side of the car and in position to be removed by a catcher of any suitable or preferred type, the frame being not only braced against lateral movement while in such position by the engagement of pin 17 with the recessed post 3, but also by means of a pin 47 projecting upward from one of the base plates 7, said pin engaging the side of the, at this time, undermost arm of the pivoted frame, most remote from the said recessed post 3, as will be readily understood. As the bag is caught by the catcher, it is readily withdrawn from between the free ends of the clamping-jaws, because under the resistance offered by the catcher to the continued movement of the bag with the car, the brackets 45 swing in the direction indi-

cated by the adjacent arrows, Fig. 5, and are withdrawn from between the pins 12 and the retainer-loops 13, which yield for this purpose, it being obvious that the brackets are easily withdrawn because friction is reduced to the minimum by the use of the antifriction rollers to avoid any chance of binding on pins 12, and furthermore because the brackets in swinging in the direction referred to, act as levers to press the retainer-loops away from said pins, as will be readily perceived by reference to Fig. 5. After the bag or bags have been detached by the catcher, the operator within the car, grasps and swings the pivoted frame inward to its original or normal position. He then depresses the lower jaw 21 until it is caught by the catch 27, and swings the handle 31 downward, it being understood that when the bag is withdrawn by the catcher, the upper jaw is pulled by its spring 33, to the position which the body portion 29 occupies in Fig. 1.

From the above description it will be apparent that I have produced a mail bag delivering apparatus embodying the features of advantage enumerated as desirable, and which is susceptible of modification without departing from the essential spirit and scope or sacrificing any of the advantages of the appended claims.

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

1. In a mail bag deliverer for cars, a U-frame pivotally supported within the car and adapted to be swung to a horizontal position with its arms projecting through the door-opening of the car adjacent to one side of the same, a pin projecting rearward from each arm of said frame, a rearwardly-projecting bag retainer-loop pivotally carried by each arm of the frame, and means for holding said loops yieldingly against said pins.

2. In a mail bag deliverer for cars, a U-frame pivotally supported within the car and adapted to be swung to a horizontal position with its arm projecting through the door-opening of the car adjacent to one side of the same, a pin projecting rearward from each arm of said frame, a rearwardly-projecting bag retainer-loop pivotally carried by each arm of the frame, means for holding said loops yieldingly against said pins, and a pair of pins carried by each arm and projecting rearward therefrom and disposed one above and the other below the plane of the first-named pins.

3. In a mail bag deliverer for cars, a U-frame pivotally supported within the car and adapted to be swung to a horizontal position with its arms projecting through the door-opening of the car adjacent to one side of the same, a pin projecting rearward from each arm of said frame, a rearwardly-

projecting bag retainer-loop pivotally carried by each arm of the frame, and means for holding said loops yieldingly against said pins in combination with a pair of suitably-connected brackets fitting loosely upon said pins in combination with a pair of suit-against their respective pins by the adjacent retainer-loops.

4. In a mail bag deliverer for cars, a U-frame pivotally supported within the car and adapted to be swung to a horizontal position with its arm projecting through the door-opening of the car adjacent to one side of the same, a pin projecting rearward from each arm of said frame, a rearwardly-projecting bag retainer-loop pivotally carried by each arm of the frame, means for holding said loops yieldingly against said pins, and a pair of pins carried by each arm and projecting rearward therefrom and disposed one above and the other below the plane of the first-named pins in combination with a pair of brackets fitting loosely upon the first-named pins and between the adjacent pairs of pins and held by said retainer-loops against the first-named pins.

5. A mail bag deliverer for cars, comprising a U-shaped frame pivoted to and within the car, and adapted to be swung outward through the door-opening of the car, to a horizontal position, a pair of clamping-jaws pivotally carried by one of the arms of said frame to clamp between them one or more mail bags, and means for detachably connecting the mail bag near its extremities to said arms near the free ends of the same to hold the bag in a vertical position at the side of the car when the frame is swung through the door-opening.

6. A mail bag deliverer for cars, comprising a U-shaped frame pivoted to and within the car, and adapted to be swung outward through the door-opening of the car, to a horizontal position, a pair of clamping-jaws pivotally carried by one of the arms of said frame to clamp between them one or more mail bags, means for detachably connecting the mail bag near its extremities to said arms near the free ends of the same to hold the bag in a vertical position at the side of the car when the frame is swung through the door-opening, and means to brace said frame against lateral movement when projecting through the door-opening.

7. A mail bag deliverer for cars, comprising a U-shaped frame pivoted to and within the car, and adapted to be swung outward through the door-opening of the car, to a horizontal position, a pair of clamping-jaws pivotally carried by one of the arms of said frame to clamp between them one or more mail bags, means for detachably connecting the mail bag near its extremities to said arms near the free ends of the same to hold the bag in a vertical position at the side of

the car when the frame is swung through the door-opening, and means to interlock one of said arms with the car when the frame is projecting through the door-opening thereof
5 to brace said frame against lateral movement.

8. A mail bag deliverer for cars, comprising a U-shaped frame arranged transversely in a car and pivoted at its lower
10 outer corner thereto, a clamping-jaw pivoted to the outermost arm of said frame for movement in a vertical plane, a spring to swing said clamping-jaw upwardly, movable means for holding said jaw depressed, a
15 jaw above the first-named jaw and also pivoted to said outermost arm of the frame for movement in a vertical plane, a spring for swinging said jaw downward, and movable means for holding said last-named jaw in its
20 elevated position.

9. A mail bag deliverer for cars, comprising a U-shaped frame arranged transversely in a car and pivoted at its lower outer corner thereto, a clamping-jaw pivoted to the
25 outermost arm of said frame for movement in a vertical plane, a spring to swing said clamping-jaw upwardly, movable means for holding said jaw depressed, a jaw above the first-named jaw and also pivoted to said outer-
30 most arm of the frame for movement in a vertical plane, a spring for swinging said jaw downward, and movable means for holding said last-named jaw in its elevated position; said last-named jaw comprising a body
35 portion and a handle pivoted to the body portion and capable of swinging to a vertically pendent position therefrom.

10. A mail bag deliverer for cars, comprising a U-shaped frame pivoted to and
40 within the car, and adapted to be swung outward through the door-opening of the car, to a horizontal position, a pair of clamping-jaws pivotally carried by one of the arms of said frame to clamp between them one or
45 more mail bags, means for detachably connecting the mail bag near its extremities to said arms near the free ends of the same to hold the bag in a vertical position at the side of the car when the frame is swung through
50 the door-opening, a table embodying a movable top adapted to be arranged horizontally between the arms of said frame below the pivotal point of the undermost of said jaws, and means for supporting said table in such
55 position.

11. A mail bag deliverer for cars, comprising a U-shaped frame pivoted to and within the car, and adapted to be swung outward through the door-opening of the car, to a horizontal position, a pair of clamp-
60 ing-jaws pivotally carried by one of the arms of said frame to clamp between them one or more mail bags, means for detachably connecting the mail bag near its extremities to said arms near the free ends of the same to
65 hold the bag in a vertical position at the side of the car when the frame is swung through the door-opening; a table embodying a movable top adapted to be arranged horizontally between the arms of said frame
70 below the pivotal point of the undermost of said jaws, standards within the car and forward of the U-shaped frame, a cross-bar pivotally carried by said standards, arms projecting from said cross-bar, the outer-
75 most arm being pivoted to the cross-bar; said arms being adapted to hang pendently or to be swung to a horizontal position between the arms of said U-shaped frame, and means projecting from the outermost arm
80 of the U-shaped frame to underlie the pivoted arm of the cross-bar and thus support the arms of the latter in a horizontal position as a temporary support for the mail bag while the same is being secured to the
85 U-shaped frame.

12. A mail bag deliverer for cars, comprising a U-shaped frame pivotally supported within a car and adapted to be swung
90 to a horizontal position through the door-opening to dispose the normally innermost arm of said frame above the normally outermost arm, pins projecting rearward from each of the arms of said frame, movable re-
95 tainer-loops carried by said arm adjacent to said pins, means for pressing said retainer-loops yieldingly against said pins, brackets detachably engaging said pins and held thereon by said retainer-loops, a pair of
100 clamping-jaws carried by one of the arms of said frame and adapted to clamp and hold one or more mail bags between them, and means connecting said mail bag or bags with said brackets.

In testimony whereof I affix my signature, 105
in the presence of two witnesses.

HENRY J. HEDRICK.

Witnesses:

HELEN C. RODGERS,
G. Y. THORPE.