UNITED STATES PATENT OFFICE.

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MAIL-BAG CATCHER.

986,298.

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To all whom it may concern:

Be it known that I, JOHN D. LEONARD, a citizen of the United States, residing at Kenneth, in the county of Mackinac, State of Michigan, have invented certain new and useful Improvements in Mail-Bag Catchers; 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.

This invention relates to mail-bag catchers.

The object of the invention resides in the construction of a mail-bag catcher adapted to catch mail-bags disposed adjacent to a moving train and to this end embodies certain novel construction and arrangement of parts to be hereinafter more particularly described and pointed out in the claims.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters of reference denote corresponding parts in the several views; and in which,

Figure 1 is a side elevation of a fragment of a car door with the invention associated therewith; Fig. 2, a view similar to Fig. 1 with the invention disposed in active position; Fig. 3, a top plan view partly in section; Fig. 4, a side elevation of the invention detached from the car door and shown partly in section; and, Fig. 5, a section on the line 5—5 of Fig. 3.

Referring to the drawings, 10 indicates the frame of a car door which has secured to opposite sides thereof outwardly projecting journal brackets 11 and 12. Each of the brackets 11 and 12 are provided with openings 13 and 14 respectively, the opening 13 being extended laterally at 13' in the manner shown. Journaled in the brackets 11 and 12 is a rod 17 which has formed therein on one side of its longitudinal center an aperture 18 of cylindrical formation and on the other side of its longitudinal center a slot 19. Projecting laterally from the rod 17, adjacent the journal bracket 11 is a lug 20 corresponding in cross section substantially to the extension 13' of the opening 13 of the journal bracket 11. It will be noted that the rod 17 is constructed so as to be capable of limited longitudinal movement in the journal brackets 11 and 12 and at the same time freely rotatable therein except under conditions that will be hereinafter more particularly described. Mounted in one end of the aperture 18 is a hollow handle 21 having its upper end closed as at 22. A latch 23 is pivotally mounted in the slot 19 and has its upper end projecting through said slot and engaged by one end of a spring 24, the other end of said spring being attached to the rod 17. By this construction it will be apparent that the lower end of the latch 23 is moved toward the adjacent end of the rod 17 by the influence of the spring 24. A recess 25 is formed in said latch on its outer side just beneath the rod 17. A head 26 projects laterally from the rod 17 just opposite the lug 20 and a rigid arm 27 is secured to the head 26 and extends in divergence with respect to the rod 17 toward the latch 23.

A pivoted clamping member is secured to the head 26 and adapted in one position to lie against the rigid arm 27. Said clamping member is formed of a single piece of metal bent upon itself to form parallel side arms 28 and 29 which are disposed respectively on opposite sides of the head 26 at their terminals and pivotally secured to said head by a common pivot pin 30. A catch 31 adapted to be engaged by the latch 23 is mounted between the arms 28 and 29 so that as said clamping member is moved toward the rod 17 the lower end of the latch will be forced inwardly of the rod until the catch 31 moves into registration with the recess 25 of the latch when the spring 24 will force the lower end of the latch toward the outer end of the rod 17 and thus lock the clamping member against movement toward the rigid arm 27 until such time as the pivoted latch 23 is moved out of engagement with the catch 31. A lug 32 is disposed between the arms 28 and 29 just beneath the aperture 18 and a stud 33 rises from said lug and is encircled by the lower end of a spring 34, the upper end of said spring extending through the aperture 18 and into the handle 21 with its extreme upper end in engagement with the closed end 22 of said handle.

When the lug 20 is disposed out of the extension 13' it will be apparent that the rigid arm 27 and the pivoted clamping member will cause the rod 17 to rotate, as a result of the influence of gravity, so that said rigid arm and pivoted clamping member will be disposed in a common vertical plane with the rod 17. In this position the device is...
what might be termed inactive. In order to move the device from the inactive position just described to a position ready to engage and catch a mail bag disposed adjacent a moving train, it is only necessary to grip the handle 21 and rotate the rod 17 until the lug 20 registers with the extension 13 of the journal bracket 11. The rod 17 is then moved longitudinally so that the lug 20 will enter the recess 15 and thus lock said rod 17 against rotation. In this position the rigid arm 27 and the pivoted clamping member are disposed in a common horizontal plane with said rod 17. The pivoted clamping member is then moved toward the rod 17 against the influence of the spring 34 until the catch 31 is engaged by the latch 23 when the said pivoted clamping member will be locked against movement toward the rigid arm 27 under the influence of the spring 34. When the parts of the device are disposed in this position a mail bag entering between the rigid arm 27 and the pivoted clamping member will trip the latch 23 and release said pivoted clamping member to the influence of the spring 34 and said mail bag as a result of such release will be gripped between the pivoted clamping member and the rigid arm 27. The rod 17 is then moved longitudinally to disengage the lug 20 from the journal bracket 11 and the bag carried by the device will swing toward the interior of the car under the influence of gravity. It will be further noted that even should the setting of the pivoted clamping member be overlooked by the operator the pivoted latch 23 will serve to engage and hold the mail bag in a sufficiently efficient manner for successfully performing the necessary function of the device.

What is claimed is:

1. In a mail bag catcher, the combination with a car door frame, of a rod rotatably mounted between opposite sides of said frame, a handle on the rod having an open inner end, a head secured to said rod and projecting laterally therefrom, a rigid arm secured to said head, a movable arm also secured to said head and disposed between said rod and rigid arm, a stud projecting laterally from said movable arm, a spring having one end encircling said stud and disposed against the movable arm and its other end disposed in the open inner end of the handle, said spring constantly tending to force the movable arm into engagement with the rigid arm, and a trigger for locking said movable arm out of engagement with the rigid arm against the tendency of said spring.

2. In a mail bag catcher, the combination with a car door frame, of a rod rotatably mounted between opposite sides of said frame and having a longitudinal slot therein at one end, a trigger having one end pivotally mounted in said slot, spring actuated means constantly tending to move the other end of said trigger toward the adjacent end of the rod, a head secured to said rod and projecting laterally therefrom, a rigid arm secured to said head, a movable arm pivoted between the head and disposed between said rod and rigid arm, a spring disposed between the rod and movable arm constantly tending to move the latter into engagement with the former, and a catch carried by the movable arm adapted to engage the trigger to hold said movable arm out of engagement with the rigid arm.

3. In a mail bag catcher, the combination with a car door frame, of a rod rotatably mounted between opposite sides of said frame and having a longitudinal slot therein at one end, a trigger having one end pivotally mounted in said slot, spring actuated means constantly tending to move the other end of said trigger toward the adjacent end of the rod, a head secured to said rod and projecting laterally therefrom, a rigid arm secured to said head, a movable member pivoted to the head and disposed between said rod and rigid arm, said movable member comprising a single piece of metal bent upon itself to form parallel spaced arms, a spring disposed between the rod and movable member constantly tending to force said movable arm into engagement with the rigid arm, and a catch disposed between the arms of the movable member adapted to engage the trigger to hold the movable member out of engagement with the rigid arm.

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

JOHN D. LEONARD.

Witnesses:

JACOB E. BERGLUND,
PERRY LEIGHTON.

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