

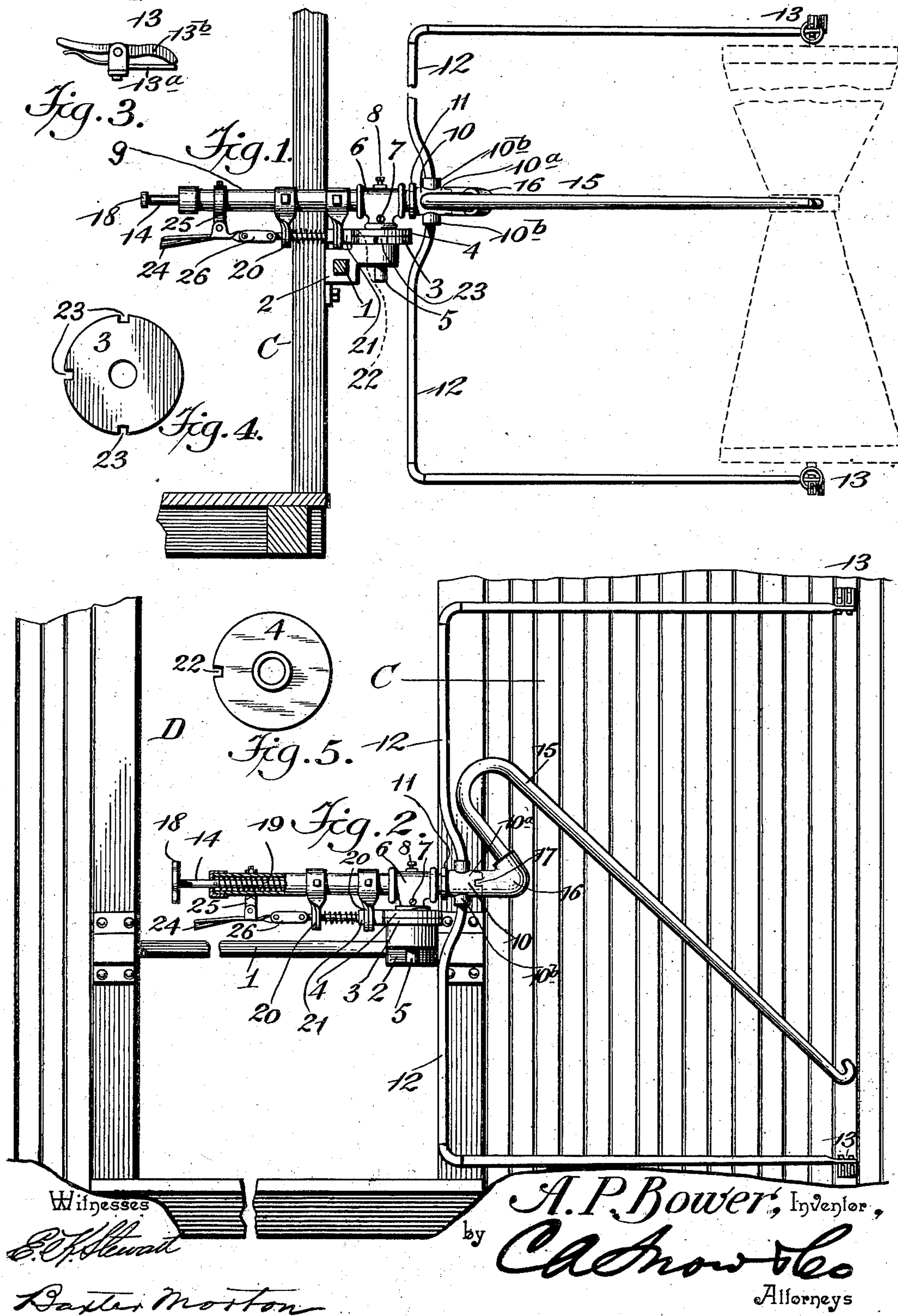
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PATENTED JAN. 26, 1904.

A. P. BOWER.
MAIL BAG CATCHER.

APPLICATION FILED JUNE 1, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

ALMOND P. BOWER, OF PLEASANTHILL, ILLINOIS.

MAIL-BAG CATCHER.

SPECIFICATION forming part of Letters Patent No. 750,341, dated January 26, 1904.

Application filed June 1, 1903. Serial No. 159,561. (No model.)

To all whom it may concern:

Be it known that I, ALMOND P. BOWER, a citizen of the United States, residing at Pleasanthill, in the county of Pike and State of Illinois, have invented a new and useful Mail-Bag Catcher, of which the following is a specification.

This invention relates to mail-bag catchers, and more especially to mail-bag catchers having associated therewith means for suspending a mail-bag to be caught by the crane from which a bag is caught by the hook of the catcher.

The object of the invention is to provide in a mail-bag catcher of the type described an improved construction by means of which the catcher is adapted to be set toward either end of the mail-car without detachment from the supporting structure upon which it is mounted and which will permit the catcher when not in use to be folded back against the outer surface of the side wall of the mail-car.

A further object of the invention is to provide a mail-bag catcher of the type specified in which no unnecessary elements are employed in the construction thereof and which may be simply and easily placed in operative or inoperative position.

A further object of the invention is to provide a mail-bag catcher of the type specified which will always be certain and positive in operation and which will withstand effectively the strains placed thereon in continued practical use.

With the objects above stated in view and others which will appear as the invention is more fully disclosed the same consists in the construction and combination of parts of a mail-bag catcher hereinafter fully described and claimed and having the novel features thereof specifically pointed out in the appended claims.

In the drawings, Figure 1 is a view in transverse section through a portion of a mail-car, showing the mail-bag catcher in operative position with a mail-bag shown in dotted lines therein. Fig. 2 is a view in side elevation of a portion of a mail-car with the mail-bag catcher shown in inoperative position, part of the

catcher being broken away to show the internal construction. Fig. 3 is a detail view showing the construction of one of the bag-holding clips. Fig. 4 is a detail plan view of the bearing-plate 3. Fig. 5 is a detail plan view of the bearing-plate 4.

Corresponding parts are designated by the same characters of reference in the several views in which they appear.

Referring to the drawings for detailed description of the invention, C designates a side wall of a mail-car having a door D, across which is supported a square bar 1, which is rigidly attached in any suitable manner to the sides of the door-frame. Slidably mounted upon the bar 1 is a bearing-block 2, which has a square horizontal aperture therein for the passage of the bar 1 and has a prolongation outward, at the top of which is secured a circular plate 3, which forms a bearing-surface for a similar plate 4, above which is mounted the rest of the structure of the mail-bag catcher. An opening extending downward through the center of the plate 3 and the prolongation of the bearing-block 2, upon which said plate is secured, forms a journal for a downwardly-disposed stud 5, the upper end of which projects through the plate 4 and into the end of a tubular T 6, to which both the plate 4 and the stud 5 are rigidly secured, as by means of a set-screw 7, which passes through a threaded aperture in the side of the T and engages with an upwardly-disposed flange (not shown) upon the plate 4 and with the upper end of the stud 5.

Rigidly mounted in the horizontally-disposed portion of the tubular T 6 and clamped by a set-screw 8, upon one end of which is rigidly secured a bracket 10, comprising a horizontally-disposed portion 10^a, which is threaded upon the tube 9 and held thereon by means of a jam-nut 11 and a vertical tubular portion 10^b, into the ends of which are screwed bent arms 12, which are preferably formed of sections of iron pipe connected by elbow connections, as shown. The arms 12 are permanently secured in the ends of the tubular portion 10^b of the bracket 10 and are held against rotation therein by means of rivets or other

suitable fastening means. The arms 12 consist of the vertical portions attached to the bracket 10 and horizontal portions which extend outward from the vertical portions and bear at the free ends thereof spring-clips for supporting a mail-bag in position to be caught by a mail-crane of suitable construction—such, for example, as that described in my prior patent, No. 725,209, issued April 14, 1903.

The spring-clips 13, provided at the ends of arms 12, are arranged in pairs, one pair comprising a clip on each arm, and there being two pairs, one of which is directed in one direction and the other in the opposite direction, this arrangement being made in order that the mail-bag may be supported in position to be caught by a mail-crane when the mail-car is traveling with either end forward. The clips 13 may be of any preferred form, but consist, preferably, of a horizontal base member 13^a, which is rigidly secured to one of the arms 12, and a spring-actuated pivot member 13^b, supported in brackets above the base member 13^a, as shown.

Extending through the tube 9 is a shaft 14, which is mounted for sliding and rotary movement within the tube. The shaft 14 has rigidly secured thereto at the end which passes through the tubular bracket 10 a hook 15, of slightly different form from those generally employed in mail-bag catchers, and at the base of the hook 15, where it is secured to the shaft 14, is provided a collar 16, rigidly associated with the shaft and provided with a plurality of lugs 17, disposed, preferably, at intervals of ninety degrees around the collar and adapted to engage with suitable recesses similarly placed in the adjacent end of the horizontal section 10^a of the tubular bracket 10. When the lugs 17 are in engagement with the recesses provided in the end of horizontal section 10^b of the tubular bracket 10, the hook 15 will obviously be held rigidly in position; but by sliding the shaft 14 a short distance longitudinally of the tube 9 lugs 17 will be moved out of engagement with the said recesses, and the shaft 14 may then be rotated within the tube 9 to turn the hook 15 into any desired position. The shaft 14 is susceptible of very limited longitudinal movement within the tube 9 and is normally forced toward the end of tube 9 opposite the bracket 10, so that the lugs 17 are normally held in engagement with the recesses provided for them in the bracket 10. At the end of the shaft 14 opposite the hook 15 is provided a suitable handle 18, by means of which the shaft 14 may be turned within the tube 9, and there is provided in the tube 9 a spring 19, which normally forces the shaft 14 in the direction above specified.

Supported in a series of brackets 20, which encircle the tube 9 and extend downwardly therefrom, is a spring-actuated locking-bolt 21, the squared head of which is adapted to

engage a recess 22, formed in the circular plate 4, and a similar recess 23, provided in the circular plate 3, to lock the plates 3 and 4 against relative movement when desired. The locking-bolt 21 is retracted by means of a pivoted lever 24, supported by a bracket 25 in proximity to the handle 18 on the shaft 14 and connected with the locking-bolt by means of links 26, as shown. By this arrangement the shaft 14 may be shifted in position in the tube 9 and the locking-bolt 21 drawn into and out of engagement with the recesses provided therefor in the plates 3 and 4 with one hand.

When it is desired to place the catcher in operative position, the locking-bolt 21 will be withdrawn from engagement with plates 3 and 4 and the plate 4, with all the superstructure carried thereby, will be turned until the arms 12 are disposed at right angles to the bar 1 and the locking-bolt 21 is in position to engage with the recess 23, which lies above the bar 1, when the locking-bolt will be allowed to spring forward and lock the plates 3 and 4 in position to hold the arms 12 disposed at right angles to bar 1. The shaft 14 will then be pressed outward through the tube 9 against the tension of the spring 19 until the lugs 17 are thrown out of engagement with the recesses provided in the bracket 10, and the shaft 14 will then be turned by means of the handle 18 until the hook 15 takes the position shown in Fig. 1, when the shaft 14 will be allowed to return under the pressure of the spring 19 to its original position and the lugs 17 will engage their recesses to hold the hook in operative position. If a mail-bag is to be dropped at the same time that one is caught by the hook 15, it will be supported between the pair of clips 13, disposed toward the rear of the car, the mail-bag being secured in the clips before the arms 12 are swung outward at right angles to the side wall of the car. When the mail-car passes the crane at the side of the track, the bag suspended between the arms 12 will be snatched therefrom by the crane and the bag suspended in the crane will be caught by the hook 15 and will lodge in the bend at the base of the hook in the usual manner. When the catcher has performed its function and it is desired to turn it out of the way, the hook 15 will be returned to its original position, with the extremity thereof disposed downward, and the locking-bolt 21 having been withdrawn from plates 3 and 4 the plate 4, with its superstructure, will be turned upon the plate 3 until the arms 12 are disposed either across the door of the car or against the outside wall thereof, as may be desired.

While I have described the preferred form of embodiment of my invention and have illustrated the same in the drawings accompanying this specification, I do not desire to be limited to the exact form, proportions, and mode of

assemblage of the elements as shown and described, but reserve the right to make such changes therein as do not depart from the spirit of the invention and lie within the scope of the appended claims.

Having thus described the construction and operation of my invention, what I claim as new, and desire to secure by Letters Patent, is—

10 1. The combination in a mail-bag catcher, of a supporting-bar adapted to be fixed across the door of a mail-car, a bearing-block slidably mounted on said bar, and a mail-bag hook and mail-bag-supporting arms pivotally supported on said block.

20 2. The combination in a mail-bag catcher, of a square supporting-bar adapted to be fixed in horizontal position across a car-door, a bearing-block slidably mounted on said supporting-bar, and a mail-bag hook and mail-bag-supporting arms pivotally supported on said block.

25 3. The combination in a mail-bag catcher, of a supporting-bar, a bearing-block slidably mounted on said bar, a member pivotally mounted on said bearing-block, a mail-bag hook, mail-bag-supporting arms carried by said member, and means for locking said member in position upon said bearing-block.

30 4. The combination in a mail-bag catcher, of a supporting-bar, a bearing-block slidably mounted on said bar and having a recessed bearing-plate formed on the upper surface thereof, a member having a recessed bearing-plate pivotally mounted on said supporting-block with the bearing-plate of said member resting upon the bearing-plate of said block, a mail-bag hook and mail-bag-supporting arms carried by said member, and a locking-bolt 40 carried by said member and adapted to engage the recesses provided in said bearing-plates to lock them in adjusted position.

45 5. The combination in a mail-bag catcher, of a supporting-bar, a bearing-block slidably mounted on said supporting-bar, a tubular supporting member pivotally mounted on said

bearing-block, a shaft journaled in said supporting member, a mail-bag hook rigidly attached to said shaft, means for locking said supporting member in relation to said bearing-block, and means for locking said shaft against rotation in said supporting member.

6. The combination in a mail-bag catcher, of a suitable support, a bearing-block carried thereby, a tubular supporting member pivotally mounted on said bearing-block, a shaft journaled within said tubular supporting member and susceptible of longitudinal movement therein, a mail-bag hook rigidly attached to said shaft, a fixed locking-lug carried by said shaft and adapted to engage recesses in the end of said tubular supporting member, and means for locking said supporting member in position on said bearing-block.

7. The combination in a mail-bag catcher, of a suitable support, a bearing-block mounted thereon, a tubular supporting member pivotally mounted on said bearing-block and having recesses formed at one end thereof, a shaft journaled in said tubular member and susceptible of longitudinal movement therein, a locking-lug rigidly attached to said shaft, a spring in said tubular member adapted to hold said locking-lug normally in engagement with one of said recesses, and means for locking said tubular member to said bearing-block.

8. The combination in a mail-bag catcher, of a suitable supporting structure, a bearing-block mounted on said supporting structure, a supporting member pivotally mounted on said bearing-block, a pair of mail-bag-supporting arms carried by said member, and a pair of oppositely-disposed mail-bag-supporting clips secured to each of said arms.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ALMOND P. BOWER.

Witnesses:

BEAUCHAMP BERTON,
M. E. DECAMP.