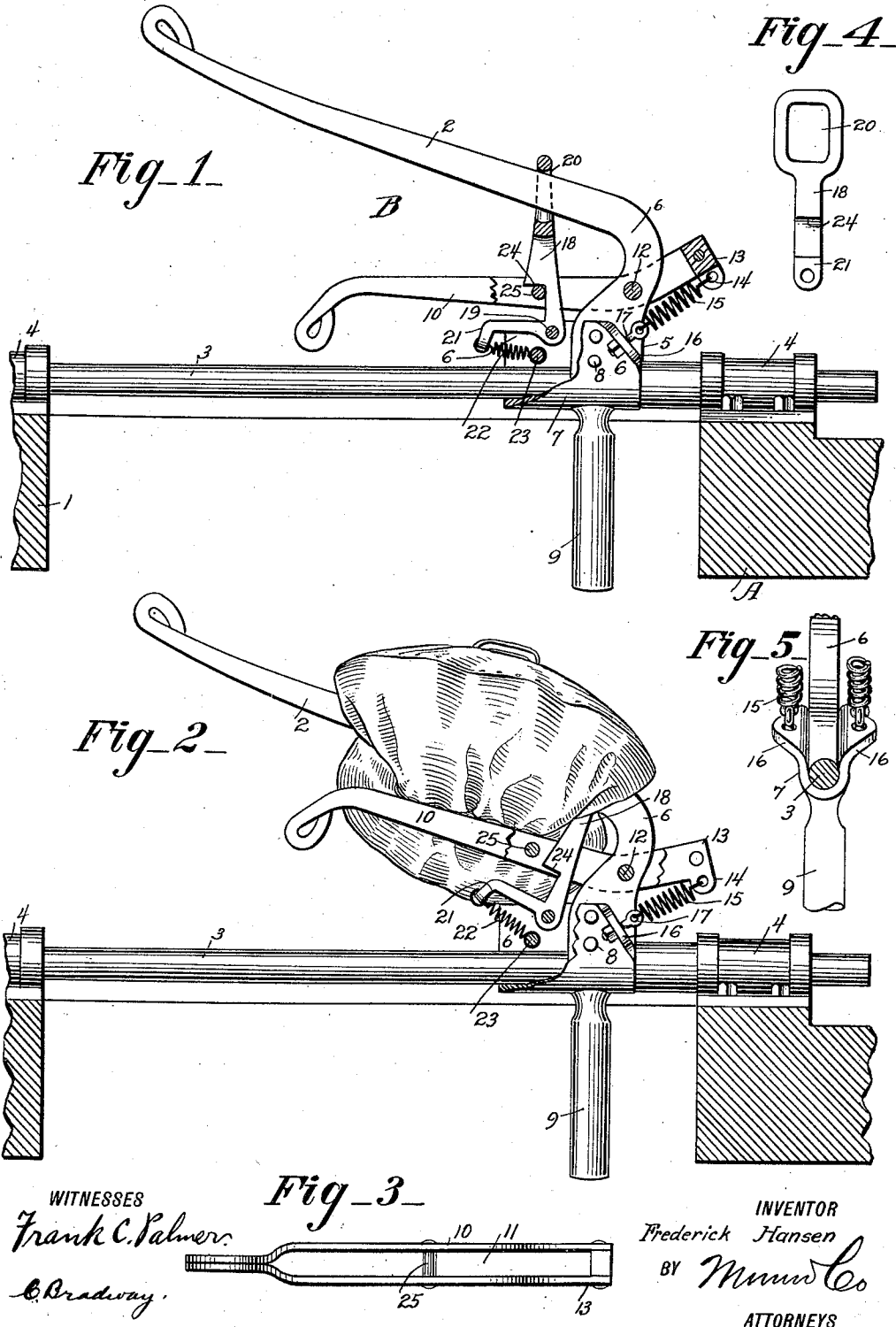


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MAIL BAG CATCHER.
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1,062,461.

Patented May 20, 1913.



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FREDERICK HANSEN, OF WOODBINE, IOWA.

MAIL-BAG CATCHER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FREDERICK HANSEN, a citizen of the United States, and a resident of Woodbine, in the county of Harrison and State of Iowa, have invented a new and Improved Mail-Bag Catcher, of which the following is a full, clear, and exact description.

This invention relates to a mail bag catcher of the hook or crane type, designed for use in connection with fast moving mail cars to take up mail bags from the station apparatus.

The invention has for one of its objects to improve and simplify the construction and operation of mail bag catchers of this character so as to be reliable and efficient in use, composed of few parts, and of durable and suitable design.

Another object of the invention is the employment of a novel retaining device which is automatically tripped by the bag as it reaches the elbow of the hook, and thereby grips the bag and retains it on the elbow, said device being easily and quickly set in operative position and so held by a latch which is struck by the bag to release the retaining device.

With these objects in view, and others as will appear as the description proceeds, the invention comprises various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawings, wherein similar reference characters are employed to designate corresponding parts, Figure 1 is a horizontal section of the mail catching device with the bag-retaining device in open or set position; Fig. 2 is a similar view, showing the bag caught by the hook or crane and held thereon by the retaining device; Fig. 3 is a view of the retaining device removed; Fig. 4 is a view of the bag-released holding latch for the retaining device; and Fig. 5 is a fragmentary view of the base portion of the hook.

Referring to the drawings, A designates the body of a mail car having the usual opening 1, and suitably mounted on the car with respect to the door opening 1 is the mail bag catching device B. This device comprises a hook 2 carried by a bar 3 that is mounted in bearings 4 on the car body and extends across the door opening 1, but

it is to be understood that the catching device may be mounted in any other suitable manner. The root 5 at the elbow portion 6 of the hook is set in between a side member 60 of a saddle or base piece 7 that embraces the rod 3, the hook 2 being secured to this base piece 7 by one or more rivets 8, whereby the base piece is rigidly clamped to the rod 3. Rigidly secured to and extending from the saddle or base piece 7 in a direction opposite from the hook 2 is a handle 9, whereby the device as a whole can be adjusted by the mail clerk to and from operative position.

In connection with the hook 2 is employed a bag-retaining device 10, which serves to hold the bag when the same reaches the elbow 6, thereby preventing the bag from dropping off and falling upon the track. This device 10 is in the form of a lever which has a longitudinal chamber 11, as shown in Fig. 3, so that the elbow portion of the hook can extend through the lever or device 10 for pivotal connection thereto at 12. The heel portion 13 of the device 10 has an apertured lug 14 to which are connected the rear ends of springs 15, the front ends of said springs being connected to the lugs 16 formed by laterally bending the side members of the saddle piece 7. To provide for adjusting the tension of the springs the lugs 16 have bolts 17, to which the springs are directly connected. These springs tend to throw the forward or bag-engaging portion of the device or lever 10 toward the hook 2, thereby clamping the bag against the hook.

In order to hold the bag-retaining device 10 in set or open position a latch 18 is provided in such a manner that it will be struck by the mail bag and released from the retaining device 10, so that the latter can perform its function. This latch has its elbow portion fulcrumed at 19 between the side members 6 of the saddle piece 7, and it projects outwardly from the pivot 19 through the chamber 11 of the retaining device 10, and terminates in an eye 20, through which the hook 2 extends. The latch has an arm 21 extending forwardly from the pivot 19, and connected to this arm is a spring 22 which extends rearwardly into the saddle piece 7 and is connected to a pin or equivalent means 23 in such saddle piece. This spring 22 tends to hold the latch forwardly, so that the shoulder 24 of the latch will en-

gage an abutment 25 on the retaining device 10.

In operation, when the device is held in operative position a bag will strike the hook 2 and slide along the same toward the elbow 6, passing between the hook and the retaining device 10, when the latter is in the set position shown in Fig. 1. The bag strikes the latch 16 and throws the same rearwardly, as shown in Fig. 2, thereby releasing the part 24 of the latch from the abutment 25. The springs 15 immediately come into play and throw the retaining device 10 into engagement with the bag, as shown in Fig. 2, thereby retaining the bag in place. In releasing the bag it is merely necessary to move the retaining device 10 in a direction away from the hook 2, and in so doing the abutment 25 of the device 10 will pass under the part 24 of the latch, thus automatically resetting the latch and retaining device 10.

From the foregoing description taken in connection with the accompanying drawings, the advantages of the method of operation and of the apparatus shown will be readily understood by those skilled in the art to which the invention appertains, and while I have described the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative and that such changes may be made when desired as are within the scope of the appended claims.

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

1. A mail bag catcher comprising a hook, said device having an opening through which the hook passes, a retaining device mounted at the elbow of the hook, a spring for actuating said device toward the hook, and a latch mounted at the base of the hook for holding the said retaining device in operative position, said latch being disposed in front of the elbow of the hook to be struck by the mail bag for releasing the retaining device.

2. A mail bag catcher comprising a supporting bar, a hook, a base on the bar to which the hook is fastened, a bag-retaining device pivoted on the elbow portion of the

hook, and having its rear portion extending rearwardly from the hook, a spring connected with the rear portion of the said device and with said base for urging the device toward the hook, and a spring-actuated bag-released latch mounted on the base and engaged with the device for holding the same in set position.

3. A mail bag catcher comprising a supporting bar, a U-shaped base or saddle piece straddling the bar, a hook having its root fastened between the side portions of the saddle piece, a latch pivoted between the side portions of the saddle piece and extending toward the hook, and a spring-actuated retaining device mounted on the hook between the elbow and root thereof and arranged to be held in operative position by said latch.

4. A mail bag catcher comprising a supporting bar, a U-shaped base or saddle piece mounted on the bar and having its rear corners bent oppositely, a hook fastened between the side portions of the saddle piece, a retaining device movably mounted on the hook, a latch mounted on the saddle piece for holding the retaining device in set position, and springs connected with the said device and the outwardly-bent corners of the saddle piece for urging the said device into bag-engaging position when the latch is struck and released by a bag.

5. A mail bag catcher comprising a base piece, a hook extending therefrom, a retaining device through which the hook extends, means for pivotally mounting the device on the hook, spring means between the base and rear portion of the device for urging the forward portion toward the hook, a latch pivoted on the base and extending through the said device toward the hook, to be engaged by a mail bag, means on the device with which the latch engages, and a spring between the latch and base for holding the latch in engagement with said means.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK HANSEN.

Witnesses:

C. G. CATER,
HERNAR LACKNEN.