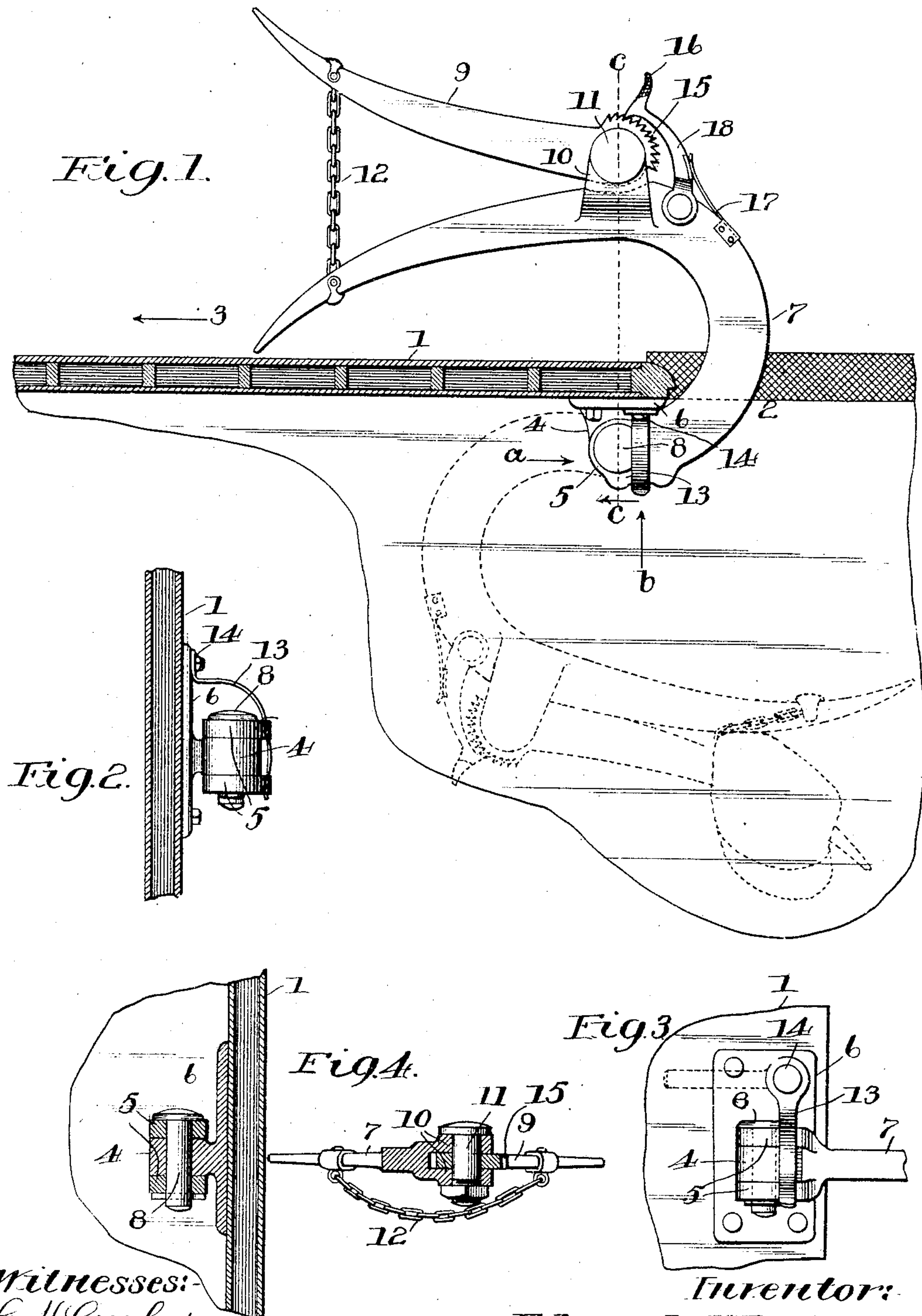


No. 785,795.

PATENTED MAR. 28, 1905.

E. A. BUELL.
MAIL CATCHER.
APPLICATION FILED JUNE 11, 1904.



Witnesses:
C. H. Crawford
Leon Stroh

Inventor:
Edward A. Buell
by *C. L. Cragg*
Attorney

UNITED STATES PATENT OFFICE.

EDWARD A. BUELL, OF DEKALB, ILLINOIS, ASSIGNOR OF ONE-HALF TO
TIMOTHY F. McDERMOTT, OF DEKALB, ILLINOIS.

MAIL-CATCHER.

SPECIFICATION forming part of Letters Patent No. 785,795, dated March 28, 1905.

Application filed June 11, 1904. Serial No. 212,126.

To all whom it may concern:

Be it known that I, EDWARD A. BUELL, a citizen of Canada, residing at Dekalb, in the county of Dekalb and State of Illinois, have
5 invented a certain new and useful Improvement in Mail-Catchers, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.
10 My invention relates to railway mail-service, and has for its object the provision of improved mechanism for seizing mail-sacks placed at mail-stations along the line of travel in position to be caught by catching mechanism located upon the mail-cars, and it is to
15 this catching mechanism that my invention particularly relates.

In accordance with the preferred form of my invention some of the operations are automatically performed, as I desirably so construct the catching device that after it has engaged the mail-sack it will be automatically operated to bring the mail-sack into the car without the aid of an attendant. While a
25 very important feature of my invention resides in this automatic operation, there are features thereof that are decided improvements over the devices of the prior art irrespective of such automatic operation, and I do
30 not, therefore, wish to be limited in all embodiments of the invention to such operation.

There is provided in the preferred embodiment of the invention a mounting for the catcher within the car, which permits the
35 catcher to be swung in a substantially horizontal plane.

In all embodiments of the invention I preferably employ two relatively movable and desirably pivotally connected jaws in combination with an instrumentality (preferably a link connected between the jaws) operated upon by the mail-sack to effect the closure or partial closure of the jaws, and thereby a gripping action by the said jaws upon the sack.
40 There is preferably provided a locking device acting temporarily and with sufficient force to maintain the jaws in engagement with the sack.

I will explain the preferred embodiment of my invention by reference to the accompanying drawings and will point out the invention in its various aspects in the claims. 50

In the drawings, Figure 1 is plan view of the preferred form of my improved mechanism in place upon a wall of the mail-car, a portion of the wall forward of the door-opening being shown in horizontal section. Fig. 2 is a view of the device shown in Fig. 1 in the direction of arrow *a*. Fig. 3 is a view of a portion of the device in the direction of arrow *b*. Fig. 4 is a sectional view on line *c c* of Fig. 1. 55 60

Like parts are indicated by similar characters of reference throughout the different figures.

The wall or side portion 1 of the car is that portion in front of the door-opening 2, the car being supposed to travel in the direction indicated by the arrow 3. As one form of mounting there may be disposed upon the inner side of the wall 1 near the door-opening a jaw construction 4, embraced by the jaw-like construction 5, provided upon the jaw 7, whereby the latter may be removably secured in place. The jaw 7 is rearwardly extended and preferably has a pivotal connection with the ear 4 through the agency of a pintle 8, whereby the catching mechanism is permitted to rotate in a substantially horizontal plane. The jaw 7 is preferably curved throughout, the rear portion being a continuous extension of the curvature of the front portion. As the jaw 7 is the only jaw that preferably has direct pivotal engagement upon the mounting 6, there is provided thereupon a formation that affords pivotal union with the companion jaw 9. This formation preferably resides in two ears 10, desirably integrally formed in one piece with the jaw 7, through which ears a pintle 11 may pass, this pintle also passing through a knuckle upon the rear end of the jaw 9, whereby the pivotal union of the jaws 7 and 9 is effected. The forward ends of the jaws 7 and 9 are free, except for the link connection 12, that is desirably located near the tips of the jaws, but sufficiently to the rear of these tips to enable the sack to enter between the jaws before the said sack engages 85 90 95

the said link connection. This link connection is desirably a chain and is preferably anchored to the bottom of the jaws, so that when the said chain bends it will not be interposed
5 between the jaws, by which arrangement the said chain does not prevent the approach of the jaws.

The position which the mechanism occupies for the purpose of catching the sack is indicated in full lines. The position which said
10 device occupies when the sack is brought within the car is indicated by dotted lines in Fig. 1.

In order to prevent the device from being prematurely or accidentally removed from the
15 position shown in full lines, some such device as a stiff leaf-spring 13 may be employed, which possesses sufficient tension for the purpose stated, but which will readily be thrown out of engagement when the said device is sub-
20 ject to the violent impact of a mail-sack. The spring 13 is desirably mounted at 14 upon the mounting 6, readily to permit its disengagement and readily to permit its adjustment to the position indicated when the catcher is to be
25 set outside of the car.

In order that the jaw 9 may not prematurely approach the jaw 7, some such formation as a ratchet 15 and an engaging dog 16 may be employed, the ratchet being desirably
30 integrally formed upon the knuckle of the jaw 9 and being preferably concentric with the axis of the pintle 11. This dog and ratchet prevent the jaws from being separated after they have been relatively approached by the
35 sack, so that the said jaws grip the sack, it being necessary to release the dog before the jaws may be restored to their normal position. The leaf-spring 17 is desirably provided upon the rear extension of the jaw 7 to engage the
40 arm 18, upon which the dog 16 is provided, the construction, as illustrated, serving to hold the jaws 7 and 9 in their widest separated relation until the mail-sack is received thereby, the teeth of the ratchet sloping in a manner
45 to permit the dog 16 to ride over the same when the said jaws are approached through the agency of the sack and the link 12. When the mail-sack is caught, it is brought within the car, whereafter the catcher may again be
50 brought into the position indicated in full lines to receive another sack or whereafter the catcher may be bodily removed, if desired. It may be preferred, however, to have a permanent mounting for the catcher, in which
55 case the said catcher may normally be upon the exterior of the car or upon the interior of the car, as preferred.

It will be seen that the mail-sack comes into contact with a yielding catcher, whereby se-
60 vere strain upon the sack is greatly reduced and whereby the force or momentum of the sack is decreased by the time it reaches the interior of the car, so as to prevent harmful results

In the device of my invention the catcher 65 is preferably mounted to swing in a substantially horizontal position.

It is obvious that changes may readily be made in the precise embodiment of my invention illustrated herein without departing
70 from the spirit of the invention, and I do not, therefore, wish to be limited to the precise construction shown nor to all embodiments of various features of my invention that may be devised; but,

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

1. A mail-sack-catching mechanism carried upon a mail-car having a mounting permit-
80 ting it to swing or rotate when engaged by a mail-sack, said catching mechanism including relatively movable jaws between which the mail-sack is received, substantially as de-
85 scribed.

2. A mail-sack-catching mechanism carried upon a mail-car having a mounting that per-
90 mits it to rotate or swing in a substantially horizontal plane when engaged by a mail-sack, said catching mechanism including relatively movable jaws between which the mail-sack is received, substantially as described.

3. A mail-sack-catching mechanism carried upon a mail-car having a mounting permit-
95 ting it to swing or rotate when engaged by a mail-sack, said mounting being located adjacent to the forward vertical margin or meeting edge of the doorway of the car, said catching mechanism including relatively movable
100 jaws between which the mail-sack is received, substantially as described.

4. A mail-sack-catching mechanism carried upon a mail-car having a mounting that per-
105 mits it to rotate or swing in a substantially horizontal plane when engaged by a mail-sack, said mounting being located adjacent to the forward vertical margin or meeting edge of the doorway of the car, said catching mechanism including relatively movable jaws be-
110 tween which the mail-sack is received, substantially as described.

5. A mail-sack-catching mechanism carried upon a mail-car having a mounting permitting it to swing or rotate when engaged by a mail-
115 sack, said catching mechanism including a pair of relatively movable jaws, and a link uniting the said jaws adapted to be engaged by the mail-sack to effect the relative approach of the jaws, substantially as described.

6. A mail-sack-catching mechanism carried
120 upon a mail-car having a mounting that permits it to rotate or swing in a substantially horizontal plane when engaged by a mail-sack, said catching mechanism including a pair of relatively movable jaws, and a link uniting the
125 said jaws adapted to be engaged by the mail-sack to effect the relative approach of the jaws, substantially as described.

7. A mail-sack-catching mechanism carried upon a mail-car having a mounting permitting it to swing or rotate when engaged by a mail-sack, said mounting being located adjacent to the forward vertical margin or meeting edge of the doorway of the car, said catching mechanism including a pair of relatively movable jaws, and a link uniting the said jaws adapted to be engaged by the mail-sack to effect the relative approach of the jaws, substantially as described.

8. A mail-sack-catching mechanism carried upon a mail-car having a mounting that permits it to rotate or swing in a substantially horizontal plane when engaged by a mail-sack, said mounting being located adjacent to the forward vertical margin or meeting edge of the doorway of the car, said catching mechanism including a pair of relatively movable jaws, and a link uniting the said jaws adapted to be engaged by the mail-sack to effect the relative approach of the jaws, substantially as described.

9. A mail-sack-catching mechanism carried upon a mail-car having a mounting permitting it to swing or rotate when engaged by a mail-sack, said catching mechanism including relatively movable jaws between which the mail-sack is received, and a link uniting the said jaws adapted to be engaged by the mail-sack to effect the relative approach of the jaws, substantially as described.

10. A mail-sack-catching mechanism carried upon a mail-car having a mounting that permits it to rotate or swing in a substantially horizontal plane when engaged by a mail-sack, said catching mechanism including relatively movable jaws between which the mail-sack is received, and a link uniting the said jaws adapted to be engaged by the mail-sack to effect the relative approach of the jaws, substantially as described.

11. A mail-sack-catching mechanism carried upon a mail-car having a mounting permitting it to swing or rotate when engaged by a mail-sack, said mounting being located adjacent to the forward vertical margin or meeting edge of the doorway of the car, said catching mechanism including relatively movable jaws between which the mail-sack is received, and a link uniting the said jaws adapted to be engaged by the mail-sack to effect the relative approach of the jaws, substantially as described.

12. A mail-sack-catching mechanism carried upon a mail-car having a mounting that permits it to rotate or swing in a substantially horizontal plane when engaged by a mail-sack, said mounting being located adjacent to the forward vertical margin or meeting edge of the doorway of the car, said catching mechanism including relatively movable jaws between which the mail-car is received, and a link uniting the said jaws adapted to be en-

gaged by the mail-sack to effect the relative approach of the jaws, substantially as described.

13. A mail-sack-catching mechanism carried upon a mail-car and including two pivotally-united jaws, and also a link connection between the jaws to be engaged by the mail-sack, substantially as described.

14. A mail-sack-catching mechanism carried upon a mail-car and including two relatively movable jaws, a link connection between the jaws to be engaged by the mail-sack, and a locking device to hold the jaws in engagement with the sack, substantially as described.

15. A mail-sack-catching mechanism carried upon a mail-car and including two relatively movable jaws, a link connection between the jaws to be engaged by the mail-sack, a locking device to hold the jaws in engagement with the sack, and a mounting for the catching mechanism permitting its bodily movement within the car when engaged by a mail-sack, substantially as described.

16. A mail-sack-catching mechanism carried upon a mail-car and including two pivotally-united jaws, a locking device for holding the said jaws in engagement with the sack, and a mounting for the catching mechanism permitting its bodily movement within the car when engaged by a mail-sack, substantially as described.

17. A mail-sack-catching mechanism carried upon a mail-car and including two pivotally-united jaws, a link connection between the jaws to be engaged by the mail-sack, a locking device to hold the jaws in engagement with the sack, and a mounting for the catching mechanism permitting its bodily movement within the car when engaged by a mail-sack, substantially as described.

18. A mail-sack-catching mechanism carried upon a mail-car and including two pivotally-united jaws, a locking device for holding the jaws in engagement with the sack, and a mounting for the catching mechanism permitting its bodily movement within the car when engaged by a mail-sack, substantially as described.

19. A mail-sack-catching mechanism carried upon a mail-car and including two relatively movable jaws together forming the mail-catch and between and with which the sack is initially engaged, a locking device for holding the jaws in engagement with the sack, and a mounting for the catching mechanism permitting its bodily movement within the car when engaged by a mail-sack, substantially as described.

In witness whereof I hereunto subscribe my name this 6th day of June, A. D. 1904.

EDWARD A. BUELL.

Witnesses:

G. L. CRAGG,

C. H. CRAWFORD.