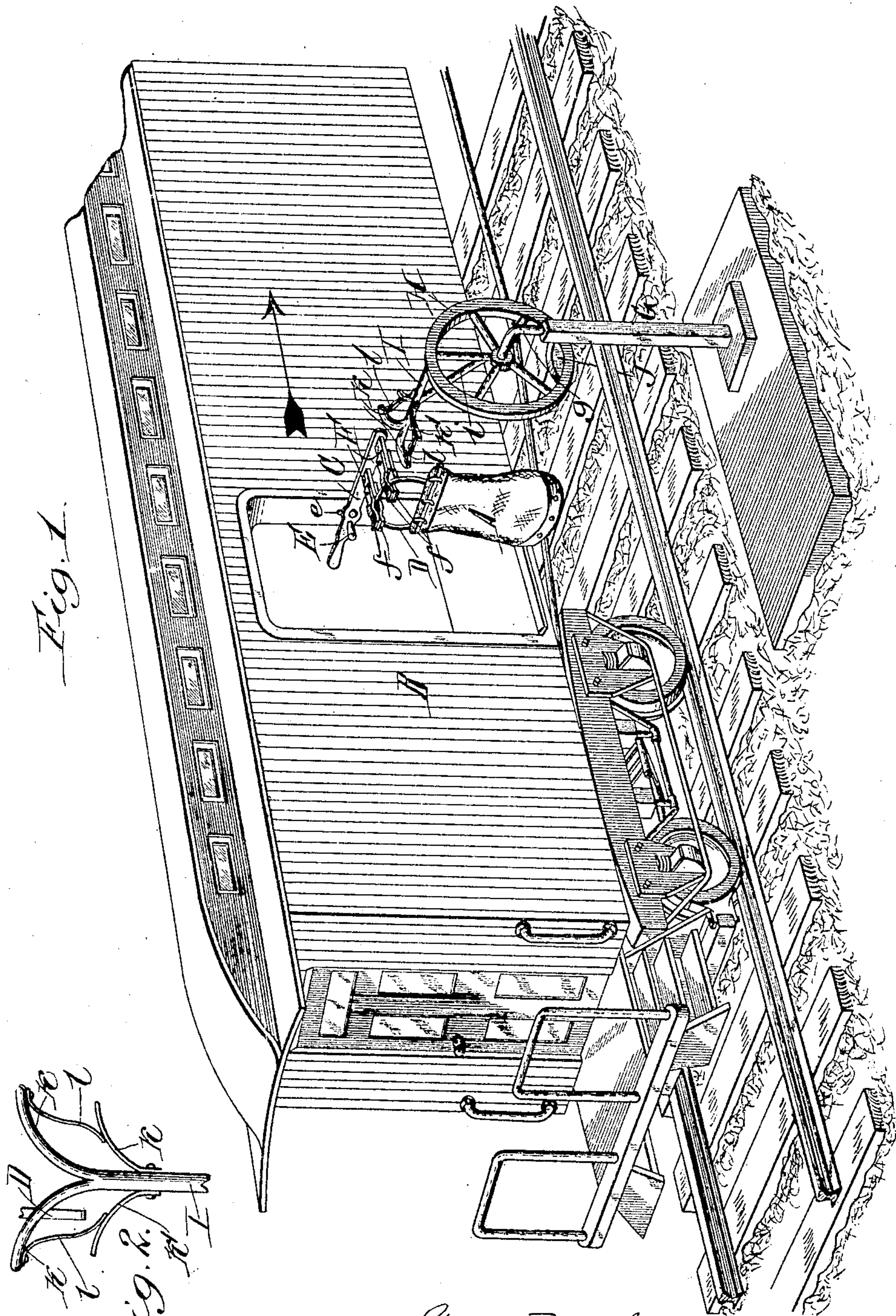


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G. ZURCHER.
PACKAGE OR MAIL CATCHER.
APPLICATION FILED OCT. 25, 1907.



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UNITED STATES PATENT OFFICE.

GEORGE ZURCHER, OF LA SALLE, NEW YORK.

PACKAGE OR MAIL CATCHER.

No. 882,227.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed October 25, 1907. Serial No. 399,125.

To all whom it may concern:

Be it known that I, GEORGE ZURCHER, a citizen of the United States, residing at La Salle, in the county of Niagara and State of New York, have invented a new and useful Improvement in Package or Mail Catchers, of which the following is a specification.

This invention has the object to produce a package or mail catcher of simple and durable construction for delivering a package or mail bag from a moving car to a way station so as to avoid the liability of the car running over the same and destroying or scattering its contents.

In the accompanying drawings: Figure 1 is a perspective view of my improved package or mail catcher in position for delivering a package or bag from a car to a way station. Fig. 2 is a fragmentary top plan view of the package or bag catcher at the station.

Similar letters of reference refer to like parts in both figures.

Various means may be employed for supporting the package or bag A on the car B preparatory to delivering the same to the way station, the preferred means for this purpose shown in the drawings being constructed as follows: C represents a delivery or supporting rock lever which is pivoted on the door frame in the side of the car or otherwise and normally held in a horizontal position so that its outer arm projects laterally from the side of the car and forms a support which carries the package or bag A in position to be transferred to the station. When no package or bag is on the delivery lever the same is turned so that its outer arm is retracted within the door opening. The means shown in the drawings for thus holding the delivery lever in its horizontal operative position or permitting the same to fold inwardly into the car is suitable for this purpose and consists of a pin E passing through the inner arm of the delivery lever and engaging with suitable openings e in the door frame when the delivery lever is in its operative or inoperative position.

On one side the outer arm of the delivery lever is provided with two fingers F which in the operative position of the lever are arranged horizontally side by side transversely of the car and project from the rear side of this lever in a direction lengthwise of the car and opposite to that toward which the car moves. At the rear end of each of these

fingers the same is provided with a spring catch which preferably consists of two spring jaws f arranged one above the other and secured with their front ends to opposite sides of the respective finger while their rear ends yieldingly engage each other and form a mouth between the same.

At its upper end the package or bag is provided with a loop, ring, bail, hoop or handle D which is preferably constructed of metal. This loop is engaged with the mouths of the spring catches f on both fingers of the delivery lever by springing the jaws of these catches apart. While the loop of the bag is thus engaged with the spring catches the same is supported at two points in a position transversely to the car and thereby insures proper engagement of this loop with the device at the station which is intended to receive the package or bag.

When the car is moving in the opposite direction from that indicated by the arrow on the drawings, the delivery or supporting lever is reversed on the car so that its fingers project in the opposite direction and permit the bag-receiving device at the station to strip the bag from the catches f, f.

The bag receiving device at the station commonly known as a crane is so constructed that when the same is engaged by the ring or loop of the package or bag the latter will be caught and retained at the station and forcibly withdrawn from the spring catches on the car.

The preferred construction of the bag receiving device or crane at the station which is shown in the drawings is as follows: G represents a standard or upright support arranged at the station adjacent to the railway track. At its upper end this standard is provided with a horizontal transverse pivot g which projects laterally toward the track. Upon this pivot is journaled a rotatable support H which preferably has the form of a wheel arranged in a plane parallel with the tracks. Projecting laterally from the upper part of this wheel toward the railway track is a horizontal receiving arm I which is connected about midway of its length with the central part of the wheel by means of an incline brace i for holding this arm in place.

Normally the wheel is yieldingly held in position so that its receiving arm is on the upper part of the wheel with its outer or front end in line with the central part of the path

of the loop of the package or bag on the car. The preferred means for thus retaining the receiving arm in this position consists of a weight J applied to the wheel diametrically
 5 opposite the receiving arm which weight is sufficiently heavy that it will always turn the wheel so that the weight is on the lower side of the wheel and move the receiving arm to the upper side of the wheel when the same is
 10 free from the load of a package or bag. At its front end the receiving arm is provided with two hooks or fingers k , k which normally project in opposite directions lengthwise of the direction of movement of the mail car.
 15 As the mail car passes the station the loop of the package or bag supported thereon is thrown against the station receiving arm and over that hook or finger which faces the package or bag, whereby the latter is caught
 20 on the receiving arm and forcibly pulled out of the catches on the car, thereby effecting the transfer of the bag from the car to the crane. As the package or bag strikes the receiving arm the latter yields under the
 25 blow and turns the wheel H, whereby the weight J is raised from the lower side of the wheel to the top of the same and the supporting or receiving arm owing to the preponderating weight of the package or bag
 30 hanging thereon descends to the lower part of the wheel. The crane is thus relieved from the shock which it would otherwise suffer when it is hit by the car bag and the latter is gradually brought to rest without
 35 undue wear or strain of any of the parts. While in this lowered position the package or bag is in convenient reach for detaching the same from the receiving arm. Upon removing the package or bag from the receiving
 40 arm the latter is automatically returned to its elevated receiving position by the weight J preparatory to receiving the next package or bag from the car.

By providing the receiving arm with catch
 45 hooks or fingers which project in both directions, it is possible for the crane to catch packages or bags from cars moving in either direction.

In order to prevent the loop of the package
 50 or bag from becoming detached from the fingers of the crane after being deposited thereon, a detent device of any suitable construction may be employed, that shown in the drawings consisting of abutments k^1 ar-
 55 ranged on the receiving arm opposite the inner sides of the catch fingers, and springs l secured at their front ends to the fingers and bearing at their rear end against the abutments, and forming inwardly converging
 60 throats. As the car bag passes the station crane the outer side of the loop strikes the detent spring on the operative side of the crane, whereby the latter is deflected permitting the loop to enter the mouth between the
 65 catch finger and abutment from which it

cannot escape owing to the detent spring which resumes its normal position and closes the entrance to said mouth.

My improved package or mail catcher contains but very few parts, it is not liable to get
 70 out of order and the same can be installed at comparatively low cost.

I claim as my invention:

1. A package or mail catcher comprising a support, a member rotatable in a vertical
 75 plane on said support and adapted to be rotated by the impact of a package or bag, and means for receiving a package or bag arranged on said member on one side of its pivot, substantially as set forth. 80

2. A package or mail catcher comprising a support, a member rotatable in a vertical
 85 plane on said support and adapted to be rotated by the impact of a package or bag, means for receiving a package or bag arranged on said member on one side of its pivot, and means for yieldingly holding said member in its normal position, substantially as set forth. 90

3. A package or mail catcher comprising a support, a vertically rotatable member piv-
 95 otally supported on said support, a receiving arm arranged on said member for engaging a package or bag on a car, and means for yieldingly holding said member in its normal position, substantially as set forth. 100

4. A package or mail catcher comprising a support, a vertically rotatable member piv-
 105 otally supported on said support, a receiving arm arranged on said member on one side of its pivot, and a weight arranged on said member on the opposite side of its pivot and operating to hold said member and arm in their normal position, substantially as set forth. 110

5. A package or mail catcher comprising a standard, a wheel pivoted on said standard
 115 so as to be rotatable in a vertical plane, a receiving arm projecting laterally from the wheel on one side of its pivot and adapted to engage with a package or bag on a car, and a weight arranged on the wheel on the opposite side of its pivot and operating normally to hold the receiving arm in an elevated position, substantially as set forth. 120

6. A package or mail catcher comprising a standard, a wheel pivoted on said standard
 125 so as to be rotatable in a vertical plane, a receiving arm projecting laterally from the wheel on one side of its pivot and adapted to engage with a package or bag on a car, a finger arranged on the front end of said arm and projecting normally in the direction of an approaching car, and a weight arranged on the wheel on the opposite side of its pivot and operating normally to hold the receiving arm in an elevated position, substantially as set forth. 130

7. A package or mail catcher comprising a standard, a wheel pivoted on said standard

so as to be rotatable in a vertical plane, a receiving arm projecting laterally from the wheel on one side of its pivot and adapted to engage with a package or bag on a car, two
5 fingers arranged at the front end of the receiving arm and normally projecting in horizontally opposite directions, substantially as set forth.

8. A package or mail catcher comprising a
10 support adapted to project laterally from a car, two fingers normally arranged transversely side by side on said support, and

spring catches arranged at the rear ends of said fingers and adapted to engage with a loop-shaped hanger on a package or bag 15 adapted to be engaged by a crane at a station, substantially as set forth.

Witness my hand this 23d day of October, 1907.

GEORGE ZURCHER.

Witnesses:

C. F. GEYER,
ANNA HEIGIS.