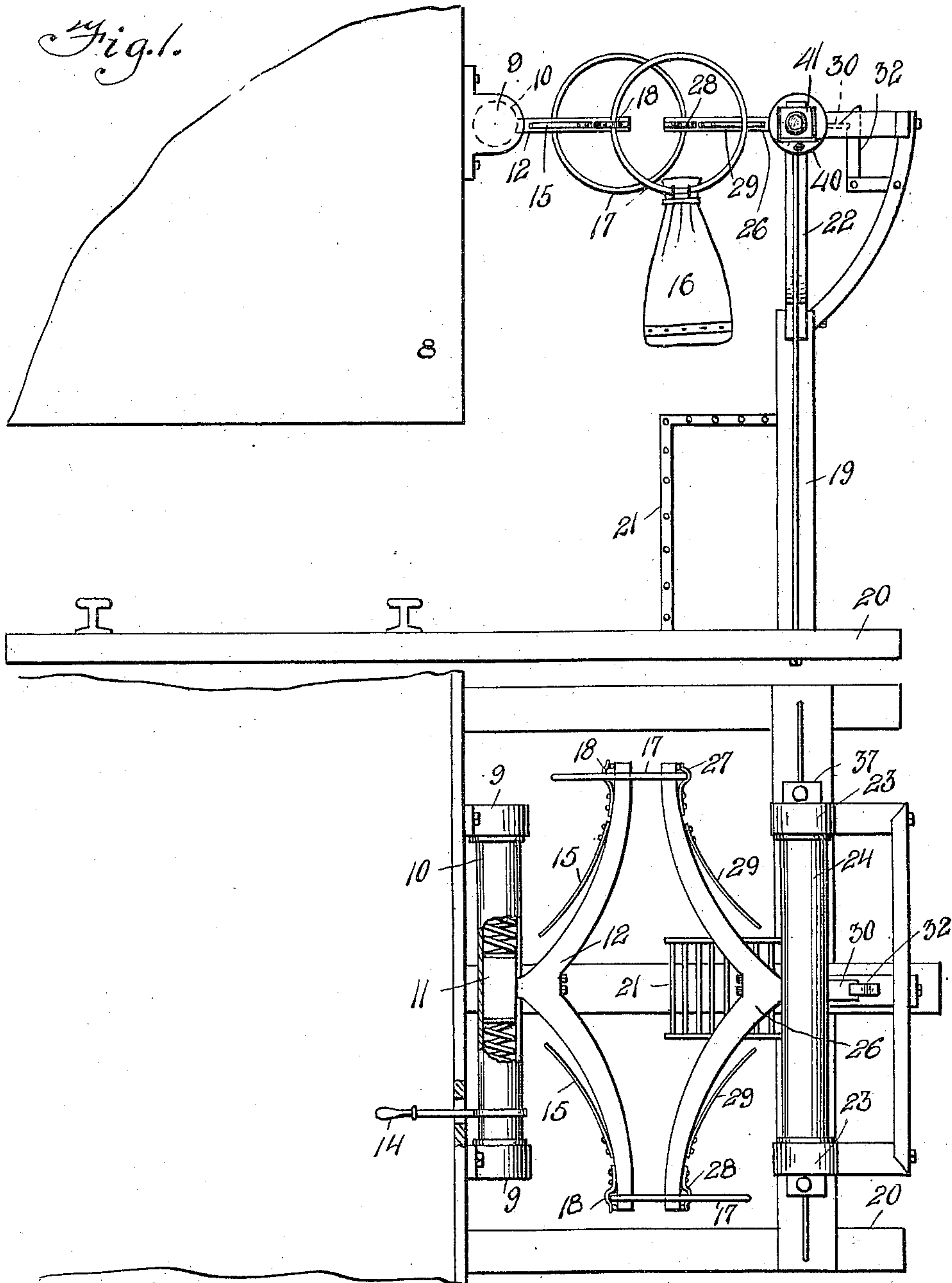


G. E. WATKINS.
MAIL BAG CATCHER.
APPLICATION FILED SEPT. 9, 1910.

983,100.

Patented Jan. 31, 1911.

2 SHEETS—SHEET 1.



WITNESSES
G. M. Spring
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Fig. 2.

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GUY E. WATKINS, OF McCOMB, MISSISSIPPI.

MAIL-BAG CATCHER.

983,100.

Specification of Letters Patent.

Patented Jan. 31, 1911.

Application filed September 9, 1910. Serial No. 581,177.

To all whom it may concern:

Be it known that I, GUY E. WATKINS, a citizen of the United States of America, and resident of McComb, in the county of Pike and State of Mississippi, have invented certain new and useful Improvements in Mail-Bag Catchers, of which the following is a specification.

This invention relates to mail bag catchers and particularly to a mail bag catcher which has a cooperating member on a car for the purpose of delivering and receiving mail sacks.

An object of this invention is to provide novel means for suspending a mail sack, means being provided in the path of travel of an arm or receiver carried by a car whereby the said means is removed from the stationary support at the side of the track and the said stationary support at the side of the track being also provided with novel means for receiving a mail sack or mail sack engaging device in order that the delivery of a mail sack to a stationary crane and the removal of a mail sack from the stationary crane may be practically simultaneously accomplished.

A still further object of this invention is to provide a device of the character described provided with novel cushioning devices in order that the jar or shock incident to the delivery and removal of mail sacks may be absorbed in order that the apparatus may not become damaged even though the weight of the mail delivered or removed is unusually great.

A still further object of this invention is to provide an apparatus of the character described which will be simple in operation and automatic when properly set.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views, in which—

Figure 1 illustrates a view in elevation of a fragment of a car body showing the mail crane and the coacting parts in operative relation to the said car body; Fig. 2 illustrates a top plan view thereof; Fig. 3 illustrates

a view in elevation of the stationary crane; Fig. 4 illustrates a detail sectional view of the members for absorbing the shock; Fig. 5 illustrates a view in elevation of the shock absorbing device with the arms in section; Fig. 6 illustrates a sectional view of the shock absorber and the means for holding the arms elevated; and Fig. 7 illustrates a detail view of the shock absorber and the means for holding the arms elevated.

In these drawings 8 denotes a fragment of a car body which may be of any ordinary construction, the same having thereon the brackets 9 in which the cylinder 10 is rotatable, the said cylinder being provided with a slot 11 in which the bifurcated arm 12 is slidable, the said arm being connected to a piston 13 within the cylinder 10. The cylinder 10 is trunnioned in the brackets 9 so that it can be partially rotated therein by the handle 14 by which means the arm 12 is oscillated. Each branch of the arm 12 has the outer end of a spring 15 anchored to it the said spring standing away from the surface of the arm toward the inner end thereof and acting as a guard for the member to which the mail bag is attached which member is to be caught by a branch arm. In the form shown in the drawing, the mail sack 16 is attached to a ring 17 and a branch of the arm 12 enters the ring and as said ring travels inwardly on the branch arm, it contacts the springs 15 and rides thereover until it reaches the end of the said spring after which the said spring acts as a guard to prevent the removal of the said ring except when properly manipulated. Each branch arm is also provided with a latch 18 adapted to hold the ring for supporting a mail sack and in order that the said branch arms may be used regardless of the construction of the car. By the construction just stated, it will follow that by the operation of the handle 14, the branch arms may be brought to approximately a horizontal position or they may be allowed to hang downwardly along the side of the car body until they are to be used for the purpose of removing a mail sack or delivering a mail sack to a stationary crane to be now described.

The standard or frame of the stationary crane is immaterial as to detail and may be variously modified but I show a post 19 which may be anchored in any appropriate way to the cross ties 20 or to any suitable

base and I also provide the said post with a ladder 21 by which the mail sacks may be applied to or removed from the crane.

The post is provided with diverging arms 22 which terminate in trunnion bearings 23 for the purpose of receiving the ends of the cylinder 24, the said cylinder being of practically the construction heretofore described and being provided with a slot 25 through which the bifurcated arms 26 project, the branches of which are provided with latches 27 and 28 for the purpose of holding a ring supporting a mail sack. The branches of the arm 26 are also provided with spring members 29 which are provided for the purpose of holding the rings after they have been applied thereto in the operation of delivering and removing mail sacks.

The bifurcated arm has a rearward extension 30 which travels in a slot 31 of the cylinder 24, the said extension being engaged by a latch 32 when the said arm is at rest but releasing the said arm upon movement of the arm longitudinally of the cylinder. Within the cylinder 24, there are pistons 33 and 34 which engage the bifurcated arm 26, the said pistons in turn being engaged by springs 35 and 36 respectively which hold the pistons normally in the center of the cylinder. When the rings or sack engaging members are applied to the bifurcated arm, the cylinder 24 may be partially rotated until the extension of the arm is in engagement with the latch 32 when the said branch arms will be in approximately a horizontal position and the rings carried by said arms will be in the path of travel of the arms of a mail bag delivering and removing device applied to a car and, therefore, the arms on the stationary crane will coact with the arms on the car for the purposes and in the manner stated. In the act of delivering a mail sack to an arm of the stationary crane, the momentum or impact of the sack carrying member with the arm will result in forcing the piston longitudinally of the cylinder and thus causing a disengagement of the extension of the arm with the said latch and allowing the cylinder to rotate in its bearings in order that the arms may swing downwardly into an approximately vertical position, after which the sack may be readily removed by disengaging it from one of the springs 29.

The arms 22 are provided with blocks 37 to which guy wires 38 are connected for the purpose of bracing the structure, and a rod 39 extends through the arms and blocks 37, the said rod having nuts on its ends and also intermediate their ends bearing on the insides of the arms, and said rod 39 being designed for the purpose of resisting the strain imposed by the guy rods 38. Above the blocks 37 there are brackets 40 which support the lamp 41.

It will be apparent that when the cars are supplied with a mail catching and delivering mechanism that when two cars are passing each other, the catching and delivering mechanism of one car may be utilized for delivering and receiving mail from the car that is passing thus permitting the transfer of mail while the cars are in motion in opposite directions or parallel with the tracks.

I claim—

1. In a mail removing and delivering apparatus, a stationary crane, a cylinder rotatably mounted on the crane, an arm slidable longitudinally of the cylinder, springs for cushioning the arms, means for holding the arms in an approximately horizontal position, and means on the arms for holding the sack supporting members.

2. In a mail removing and delivering apparatus, a stationary crane, a cylinder rotatably mounted on the crane, an arm slidable longitudinally of the cylinder, springs for cushioning the arms, means for holding the arms in an approximately horizontal position, means on the arms for holding sack supporting members, a cylinder rotatably mounted on a moving object, arms movable longitudinally of the cylinder, means for cushioning the said arms, and means on the arms for holding the sack engaging members.

3. In a mail removing and delivering apparatus, a stationary crane, a cylinder rotatably mounted on the crane, an arm slidable longitudinally of the cylinder, springs for cushioning the arms, means for holding the arms in an approximately horizontal position, means on the arms for holding sack supporting members, a cylinder rotatably mounted on a moving object, arms movable longitudinally of the cylinder, means for cushioning the said arms, means on the arms for holding the sack engaging members, and means on the arms for preventing dislodgment of the sack engaging members.

4. In a mail receiving and delivering device, a stationary crane having diverging arms, a cylinder trunnioned therein and having longitudinally disposed slots, an arm slidable in one of the slots and having an extension slidable in the other slot, a latch for engaging the extension for holding the arm in an elevated position, and means in the cylinder for cushioning the arm.

5. In a mail receiving and delivering device, a stationary crane having diverging arms, a cylinder trunnioned therein and having longitudinally disposed slots, an arm slidable in one of the slots and having an extension slidable in the other slot, a latch for engaging the extension for holding the arm in an elevated position, pistons in the cylinder engaging the arm, and springs for cushioning the piston.

6. In a mail receiving and delivering de-

vice, a stationary crane having diverging arms, a cylinder trunnioned therein and having longitudinally disposed slots, an arm slidable in one of the slots and having an extension slidable in the other slot, a latch for engaging the extension for holding the arm in an elevated position, pistons in the cylinder engaging the arm, springs for cushioning the piston, a cylinder rotatably mounted on a movable object, said cylinder having a slot therein, an arm slidable in the slot and means for cushioning the arm.

7. In a mail receiving and delivering device, a stationary crane having diverging arms, a cylinder trunnioned therein and having longitudinally disposed slots, an arm

slidable in one of the slots and having an extension slidable in the other slot, a latch for engaging the extension for holding the arm in an elevated position, pistons in the cylinder engaging the arm, springs for cushioning the piston, a cylinder having a slot therein, means for rotatably mounting the cylinder on a movable object, pistons in the cylinder, springs for cushioning the pistons, and arms engaged by the pistons.

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

GUY E. WATKINS.

Witnesses:

J. ALFORD,

R. M. MARTIN.