No. 891,518.

PATENTED JUNE 23, 1908.

W. E. ALLEN.

MAIL POUCH CATCHER.

APPLICATION FILED DEC. 26, 1907.

2 SHEETS—SHEET 1.

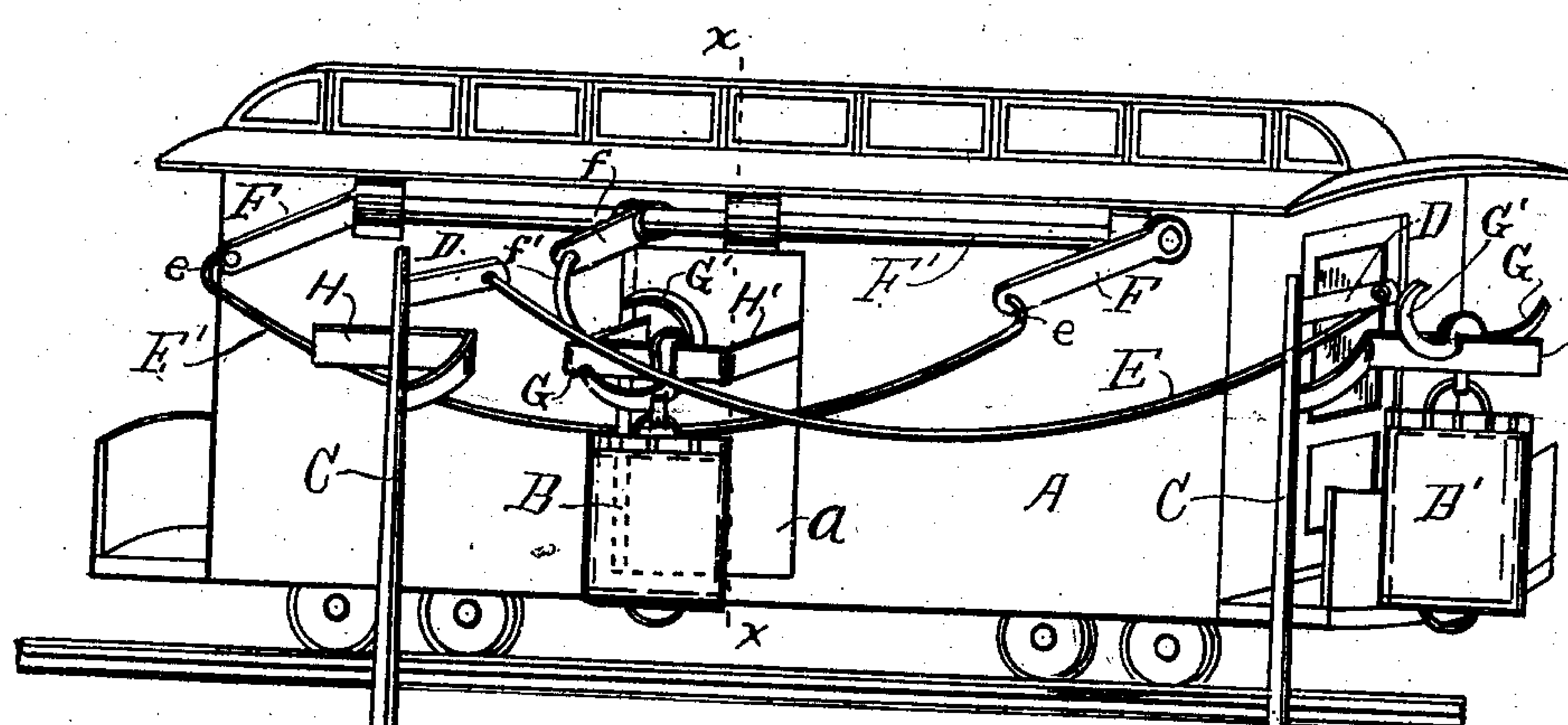

Fig. 1.

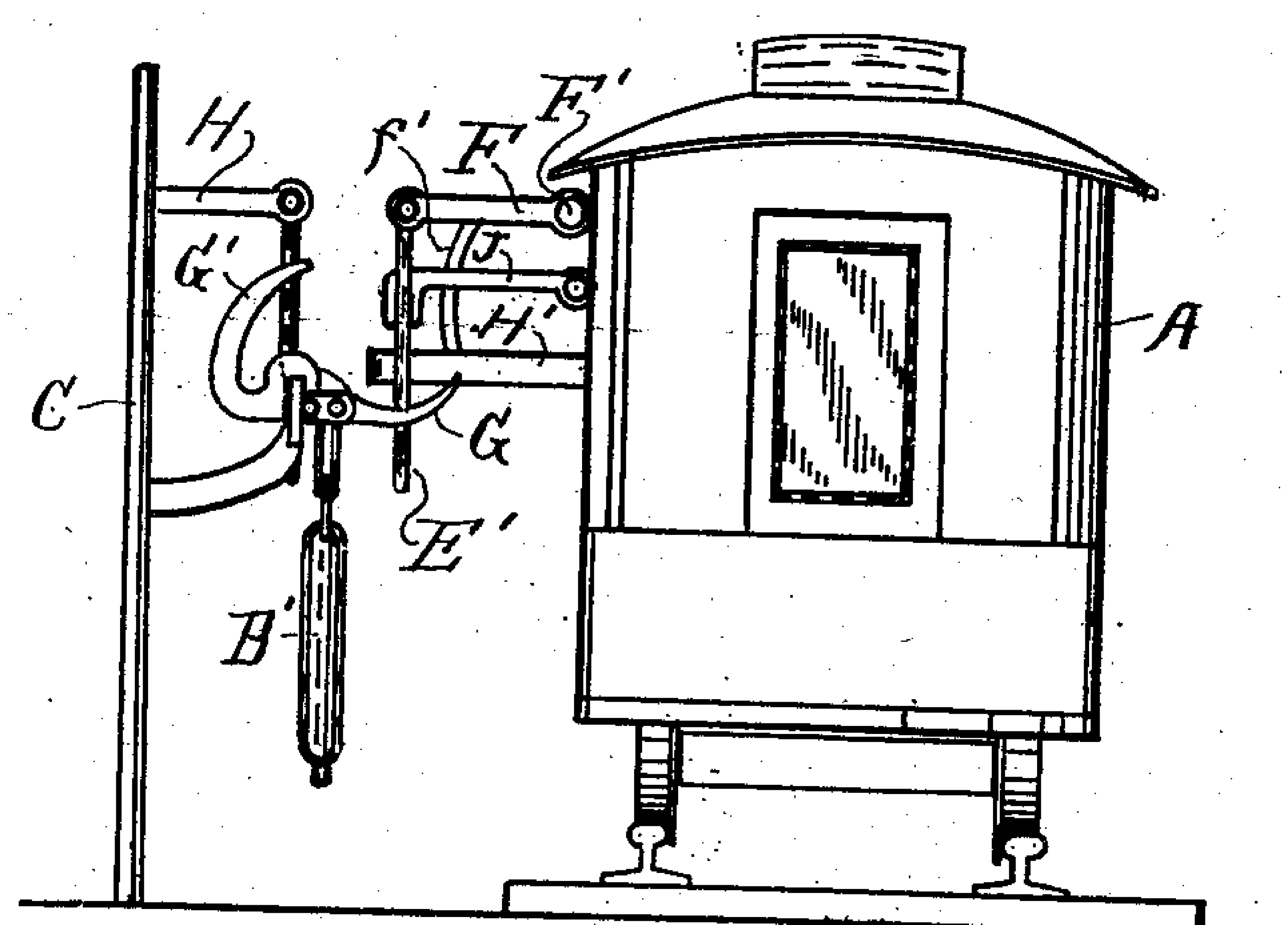

Fig. 2.

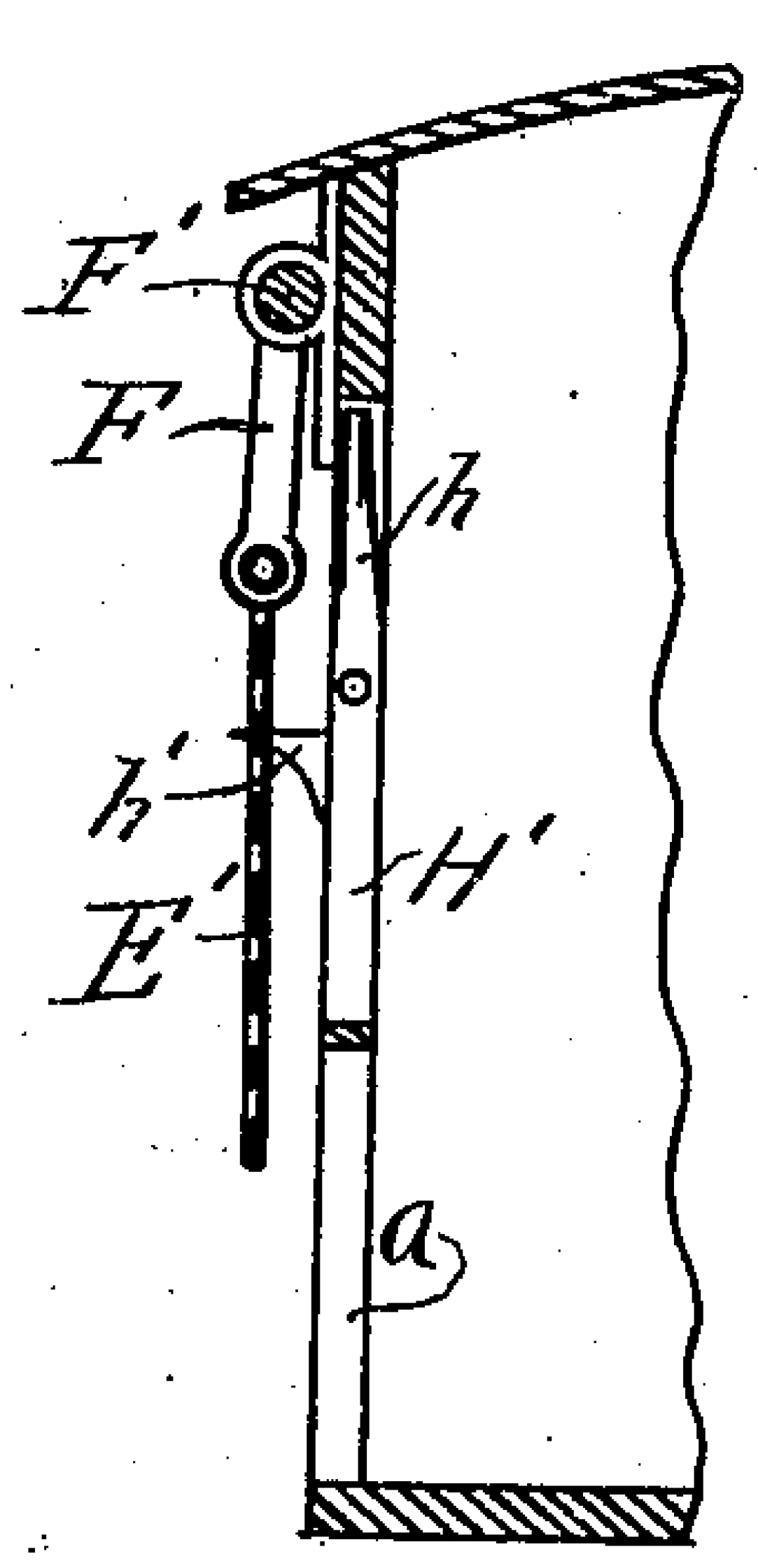

Fig. 3.

Inventor

Witnesses

C. P. Damstra
Pieter Klynnard

William E. Allen

By

Idriel J. Cilley

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

No. 891,518. PATENTED JUNE 23, 1908.

W. E. ALLEN.

MAIL POUCH CATCHER.

APPLICATION FILED DEC. 26, 1907.

2 SHEETS—SHEET 2.

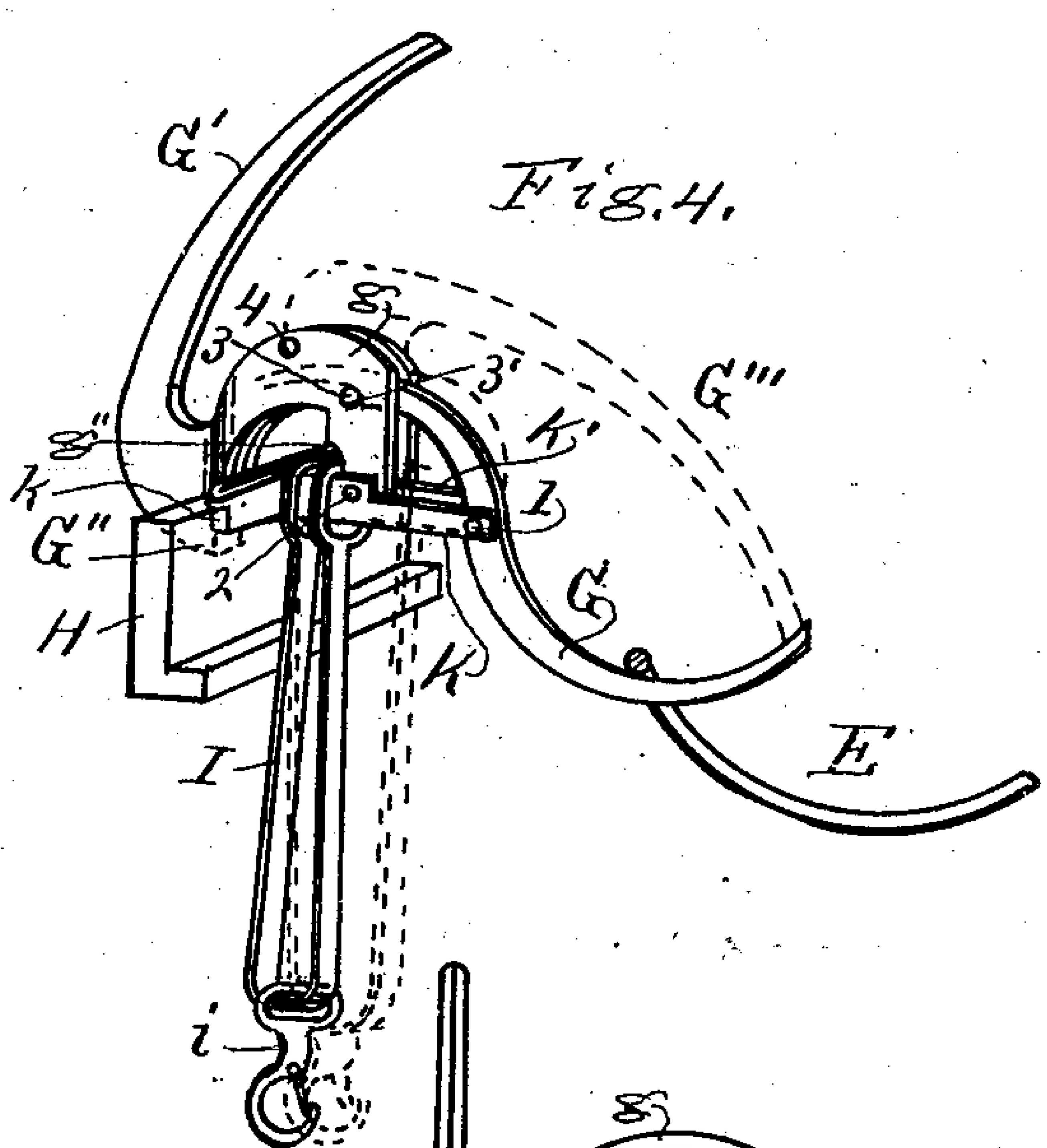

Fig. 4.

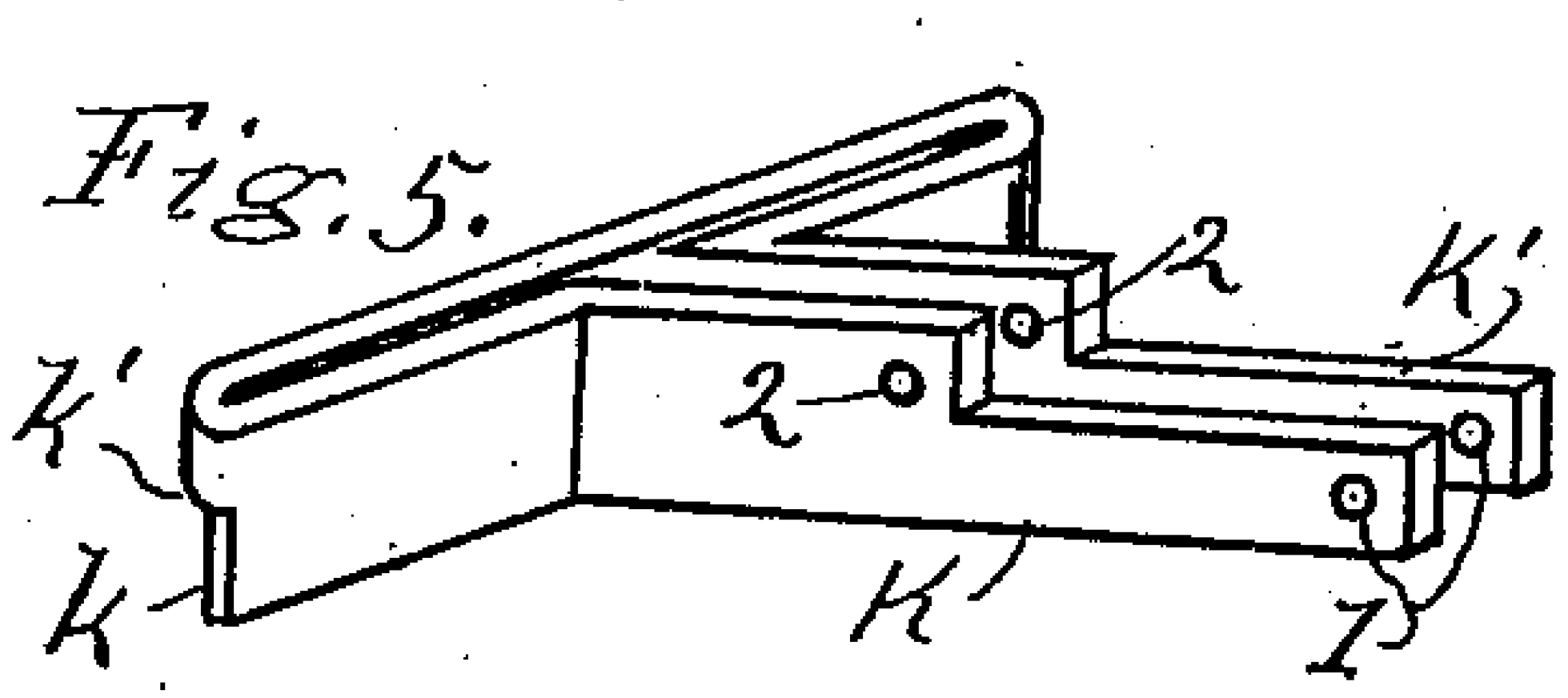

Fig. 5.

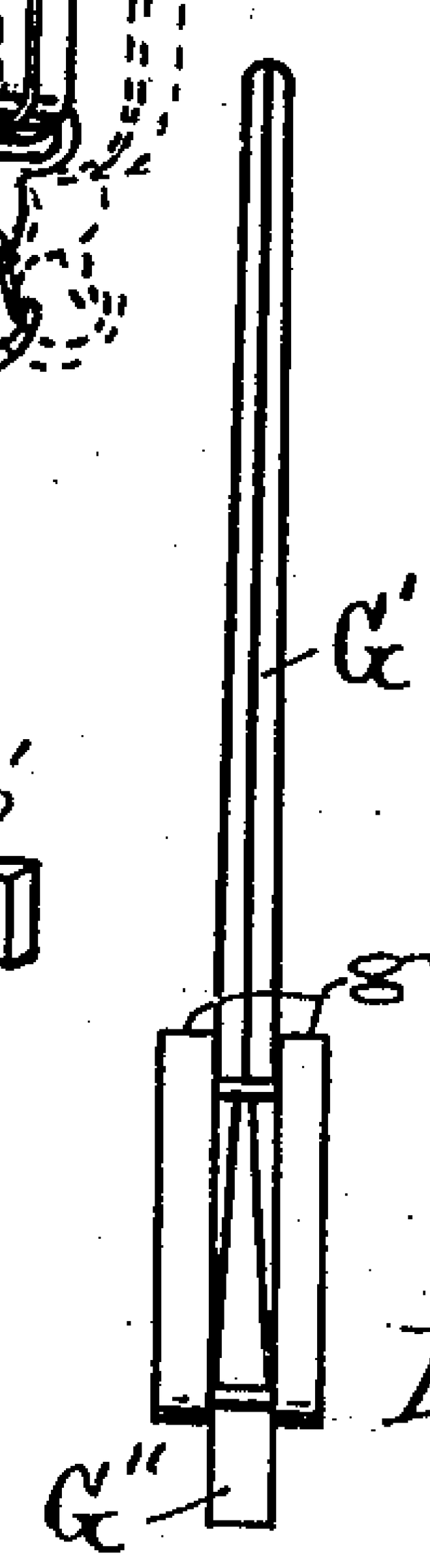

Fig. 6.

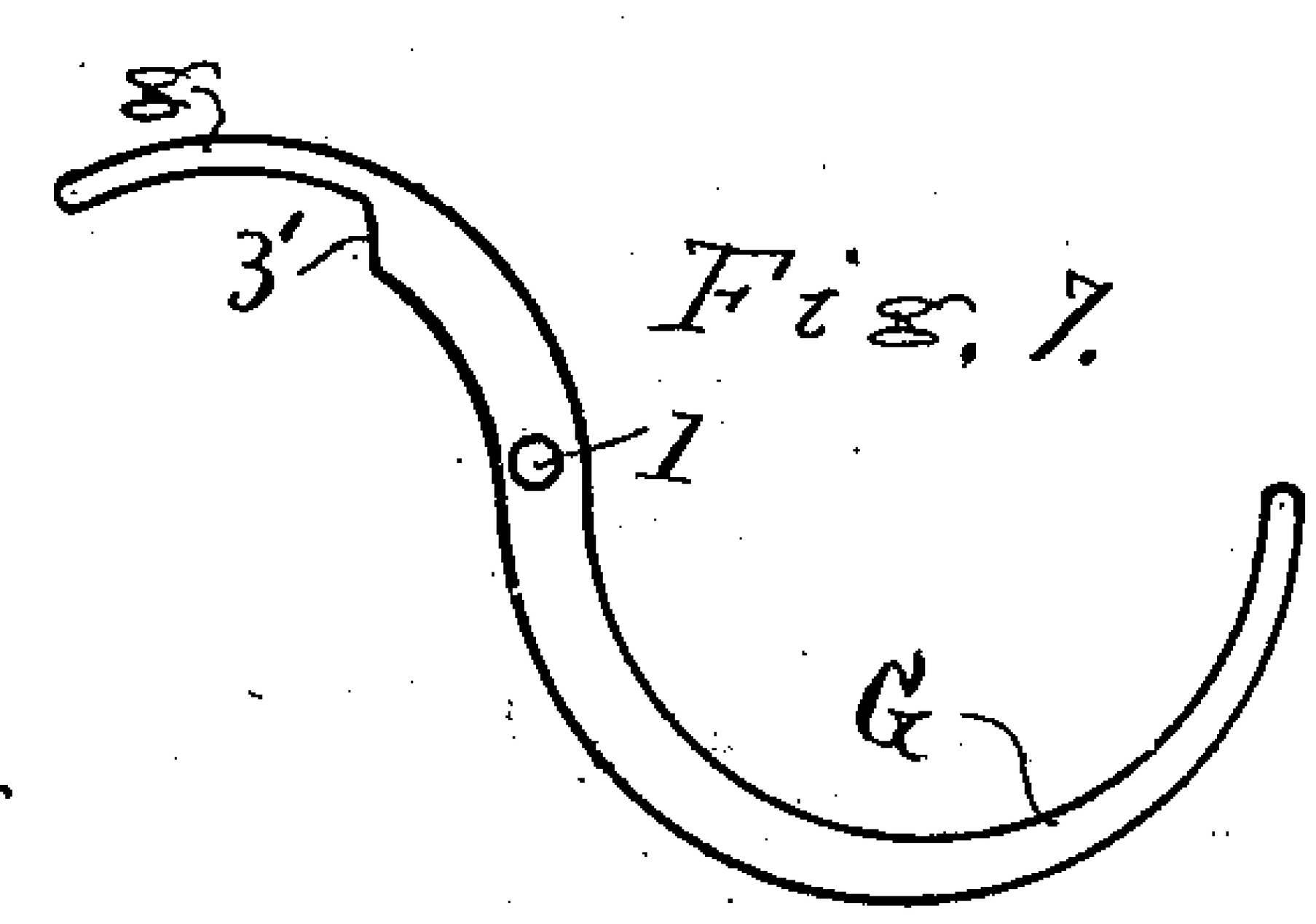

Fig. 7.

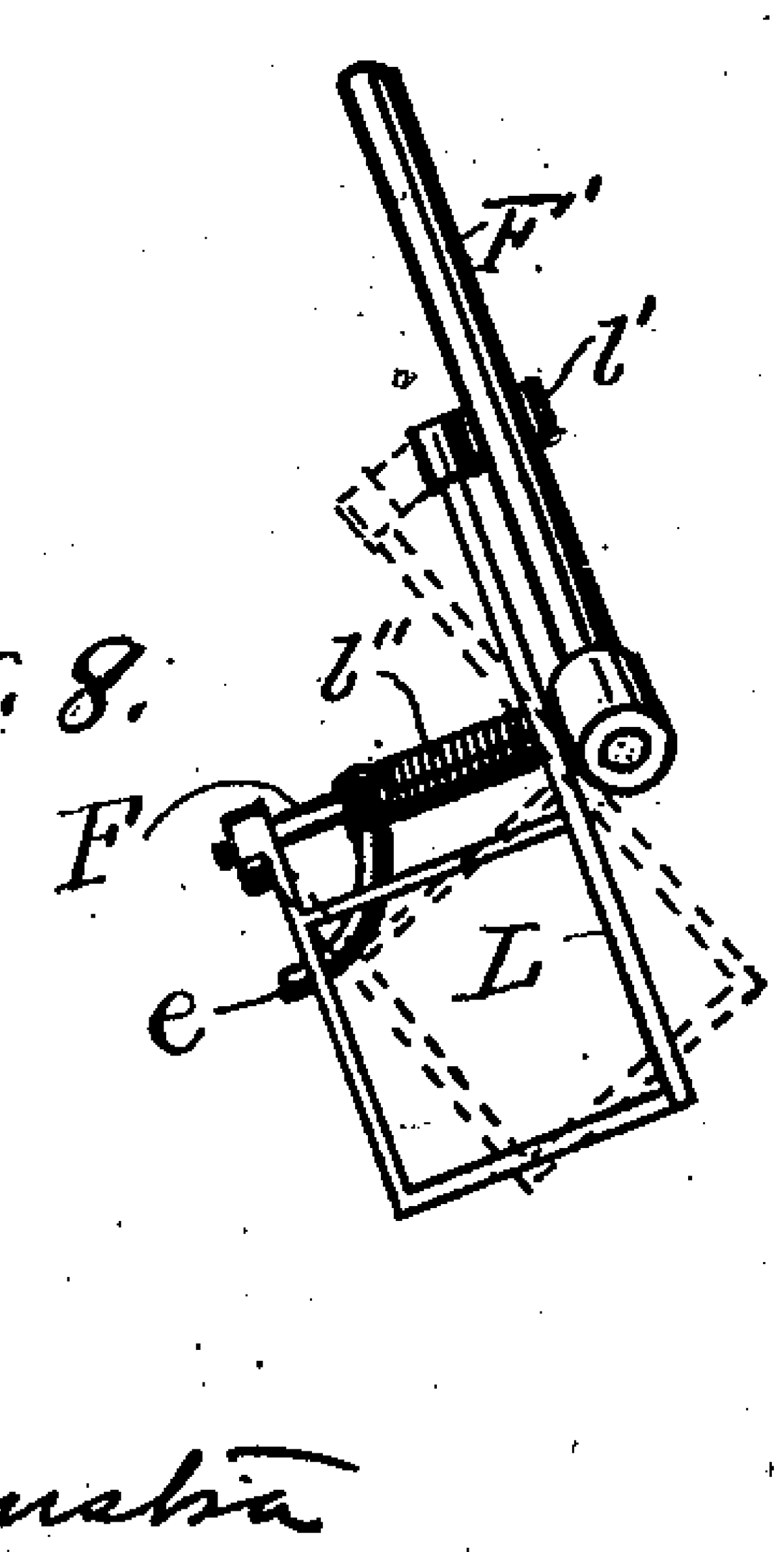

Fig. 8.

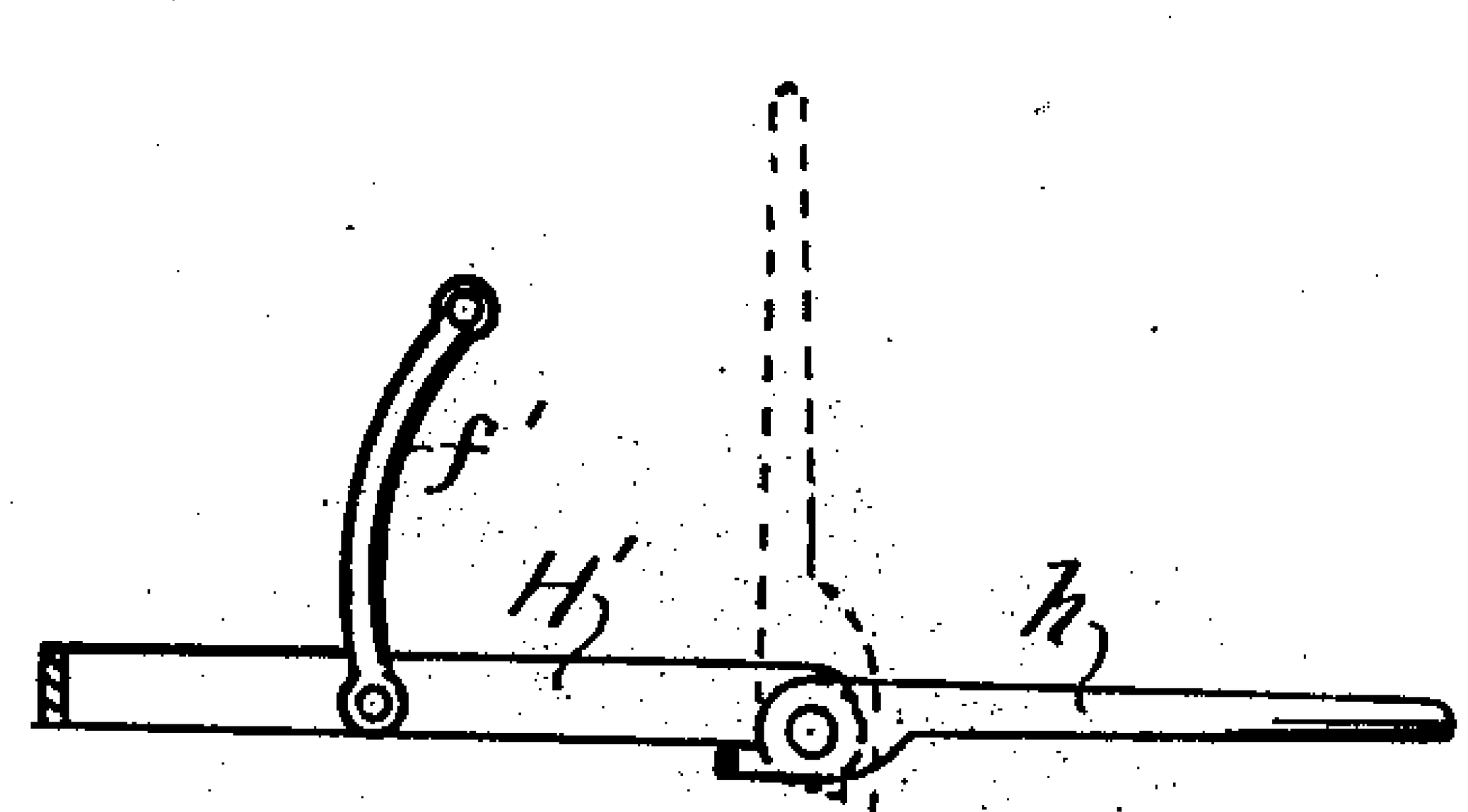

Fig. 9

Witnesses

C. P. Damsta

Peter Klynnard

Inventor

William E Allen

By Petrick J. Cilley

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM E. ALLEN, OF ROSS, MICHIGAN.

MAIL-POUCH CATCHER.

No. 891,518. Specification of Letters Patent. Patented June 23, 1908.

Application filed December 26, 1907. Serial No. 408,195.

To all whom it may concern:

Be it known that I, WILLIAM E. ALLEN, a citizen of the United States, residing at Ross, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Mail-Pouch Catchers, of which the following is a specification.

My invention relates to improvements in appliances for passing mail pouches to and from a moving railway car, and its objects are: First, to provide a means whereby one or more mail pouches may be discharged from or received by a moving car. Second, to provide a means whereby the receiving and discharging appliance on a car may be folded out of the way when not in use, and, third, to provide a means whereby the appliance for clamping the discharging and receiving appliances will be positive in its action, and will avert the common danger of the mail sack becoming disengaged and being thrown upon or dragged along the station platform. I attain these objects by the mechanism illustrated in the accompanying drawing, in which

Figure 1 is a perspective view of a car with my appliance attached and the auxiliary attachment suspended beside the track. Fig. 2 is an end elevation of the same. Fig. 3 is a sectional elevation of one side of a car on the line *x x* of Fig. 1. Fig. 4 is a perspective view of the pouch supporting and transferring device. Fig. 5 shows the pivotal bracket of said device detached. Fig. 6 is a front elevation of the bail or link that engages the supporting cable. Fig. 7 is a side elevation of the trip disconnected from the supporting bail. Fig. 8 is a perspective view of the end of the arm that supports the receiving cable on the car, showing a device attached to prevent the mail pouch from being forced too far when being received upon a fast moving train, and Fig. 9 is a side view of one arm of the delivering bracket on the car, and of the lever by which it is manipulated.

Similar letters refer to similar parts throughout the several views.

In the accompanying drawing A represents the car and B represents a mail pouch that is to be received upon or discharged from the car. To carry out the objects of my invention I pivotally connect the side arms of the bracket H′ to the casings of the car doorway *a* as indicated in Figs. 1 and 3, in such a manner that it may be carried parallel with the casings of the doorway, as indicated in Fig. 3, or it may be extended out at right angles with the side of the car, as shown in Fig. 1, in position to support a mail pouch that is to be delivered from a moving car. This bracket may be operated by means of a lever *h*, which may be made integral with the bracket, or it may be so pivoted to the end of the arm of the bracket that it may be folded up out of the way when the bracket is in position to support the pouch, and the bracket H′ may be supported on a small bracket *h′*, when extended for supporting a mail pouch.

It is understood that the same car that is discharging a mail pouch must be provided with appliances for receiving a pouch or pouches at the same time, and to provide for this I place poles C C to one side of the track upon which the car travels, and place brackets H thereon, and the mail pouches B and B′ are supported upon these brackets by means of a supporting clamp consisting of a bail G′, a trip G and a supporting body K. The bail G′ is pivotally secured between the arms K′ K′ of the body K, as at 2, and is so formed that when thrown to the position of its solid lines in Fig. 4 the point G″ of the bail and *k* of the body K will firmly clamp the bracket H or H′ and will be held firmly to place by the trip G as follows: The trip G is pivotally supported between the arms K′ K′ of the body K at the point 1, some distance from the point 2 where the bail is pivoted, in such a manner that its back end will pass between the sides *g′* of the supporting portion of the bail G′ so that the offset 3′ will engage the pin 3 and will hold the bail G′ firmly to place until the trip G is actuated by contact with some properly arranged approaching object, as the cable E, which may throw the trip G down far enough to disengage the offset 3′ when the bail will be thrown to the position indicated by its dotted lines G‴ when the spring I will open so that the rings at the upper ends will engage the portion *g″* of the body of the bail G′ and hold the bail firmly to place over the cable E, and thus securely support any mail pouch that may be supported by the clasp *i*. The pin 4 is designed as a stop to prevent the back end of the trip G from raising too high, and it, at the same time, acts as a contact point

with which to force the bail over more forcibly, by reason of the leverage of the trip, than it would otherwise move. The spring I, it will be seen, acts a triple purpose, namely: first, to sustain the mail pouch that is to be delivered; second, to force the bail suddenly to place over the cable, and, third, to firmly hold the bail to place upon the cable after it has been released by the trip.

Thus far I have described only the supporting appliances for holding and delivering the mail pouch. The appliance for receiving the pouch from the brackets H and H′ consists of a cable E suspended from the arms D on the posts C C and sagging sufficiently to engage and actuate the trip G that is supported on the bracket H′ on the car, and a like cable supported upon arms F F projecting out from the side of the car in position to engage and actuate the trip G that is supported on the bracket H on the posts C C. When either of these cables engage the trip G the weight of the mail pouch B or B′ together with the rebound of the spring I, actuates the bail so quickly as to positively insure its swinging over and engaging the actuating cable, E if the pouch B is to be taken from the car, or E′, if the pouch B′ is to be received by the car.

The arms F F that support the cable E′, are pivotally connected with the side of the car A, preferably by means of a shaft F′, so that they may be projected out to support the cable some distance from the side of the car, or may be folded down close to the car so that the cable will not be in position to endanger objects to one side of the car when the cable is not in use for transferring mail pouches. I sometimes place a third arm, *f*, upon the shaft F′, and connect it with the arm of the bracket H′, by means of a link *f′*, so that when the bracket H′ is raised or lowered its movement will be transmitted to the shaft F′ and will cause the arms F F to be projected or folded down, as the case may be, thus actuating both the bracket and the cable supports simultaneously.

Provision may be made for averting the danger of the mail pouch being thrown forcibly against the arms F F, either by making a short curve *e e* at each end of the cable to form a curve for the pouch to swing upon, or by placing wings L upon the arms F F, with a resistance spring *l″* upon the arm F which will so hold the wing L against the impact of the oncoming pouch that the motion of the pouch will be stopped thereby before any undue strain is brought to bear upon the arm F. The wing L is held to normal position by the arm *l′* engaging the shaft F′, as indicated in Fig. 8.

To avert the danger of the cable swinging with the motion of the car or by reason of a heavy wind, I have provided for pivoting latches J to the side of the car in position to be thrown over and engage the cable at the proper time, though but one of these latches should be used at a time for the reason that if both were used the bail G′, when sliding along on the cable, would be likely to strike the latch so forcibly as to break the latch or greatly injure the bail and its accessory parts.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is:

1. In combination with a mail car, a delivering bracket, a trip and a bail for supporting a mail pouch and clamping it to the bracket, a cable placed parallel with the car in position to actuate the trip and cause the bail to disengage from the bracket and engage the cable.

2. In combination with a mail car, a delivering bracket pivotally secured to the car, posts standing to one side of the line of travel of the car, delivering brackets secured to said posts, arms projecting from the tops of the posts towards the car, a trip and bail for supporting a mail pouch and clamping it to the delivering brackets, a cable suspended from the arms on the posts in position to actuate the trip that is secured to the delivering bracket on the car, and a cable suspended from arms on the car in position to engage the trip that is secured to the delivering bracket on the posts.

3. In combination with a mail car, a delivering bracket secured to the car, a trip and bail arranged to clamp firmly to said bracket, a cable suspended parallel with the car in position to actuate the trip and cause the bail to disengage from the bracket and engage the cable, and a spring in position to actuate the bail and lock it to place on the cable.

4. In combination with a mail car, a delivering bracket pivotally secured to the car, arms pivotally secured to the car above the bracket, a receiving cable suspended from said arms, and a link connecting the delivering bracket with the arms so that any movement of the bracket will be transmitted to the arms to suspend the cable or to fold it close to the car.

5. In combination with a mail car, posts set to one side on the line of travel of the car, delivering brackets secured to said posts, a trip and bail for supporting a mail pouch and clamping it to the brackets, and a receiving cable suspended from the car in position to actuate the trip and cause the bail to disengage from the bracket and engage the cable.

6. In combination with a mail car, posts set to one side of the line of travel of the car, delivering brackets secured to the posts, a bail and a trip for supporting a mail pouch and clamping it to the bracket, arms secured to the side of the car, a receiving cable suspended from said arms in position to actuate the trip and cause the bail to disengage from

the bracket and engage the cable, and a spring actuated wing pivotally secured to the arm at each end of the cable.

7. In combination with a mail car, a delivering bracket, a body, a trip and a bail pivotally secured to the body and arranged to support a mail bag and clamp it to the bracket, an actuating spring acting upon the body and the bail, and a receiving device in position to actuate the trip and cause the bail to disengage from the bracket and engage the receiving device.

Signed at Grand Rapids Michigan December 21, 1907.

WILLIAM E. ALLEN.

In presence of—
I. J. CILLEY,
R. M. RICHARDS.