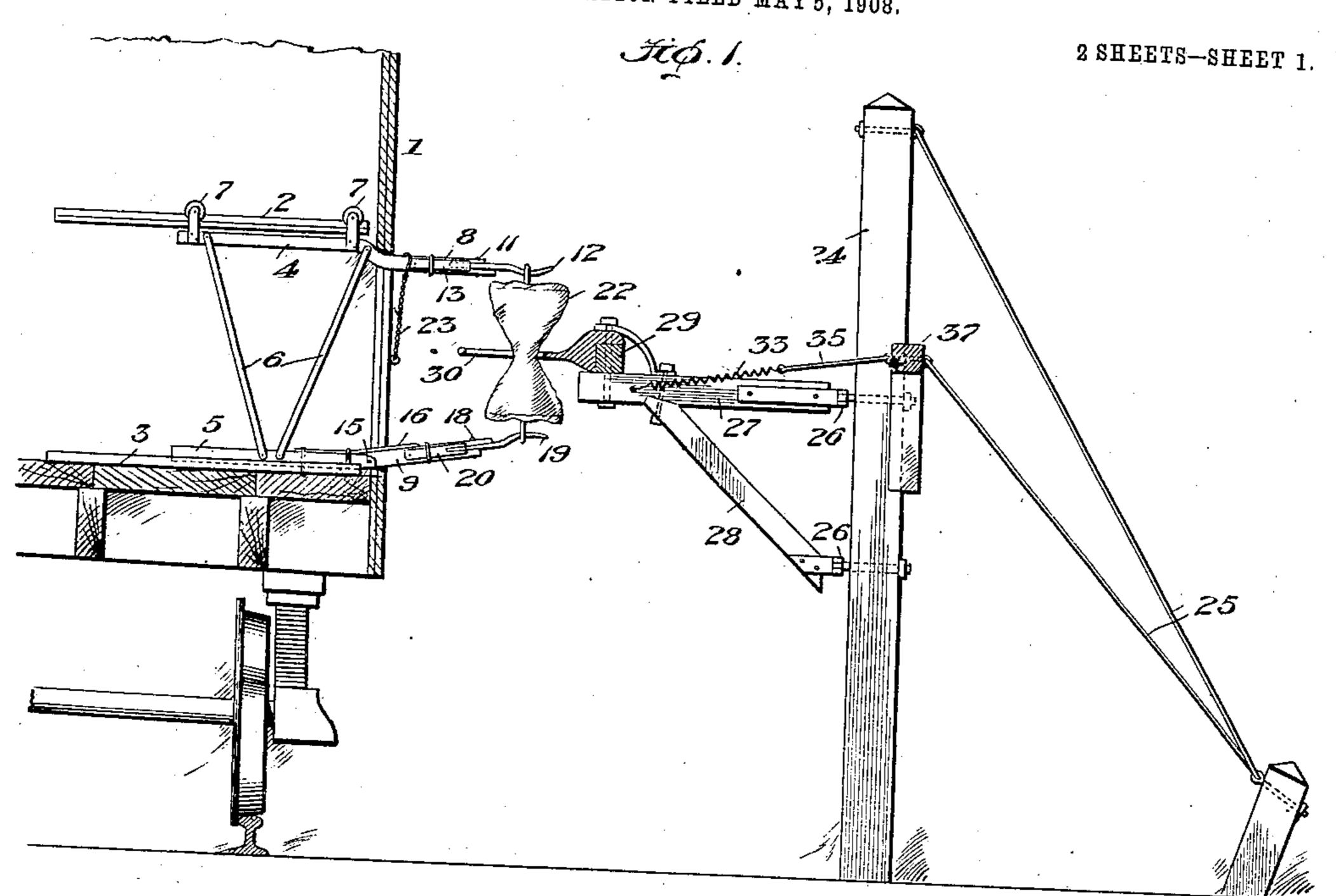
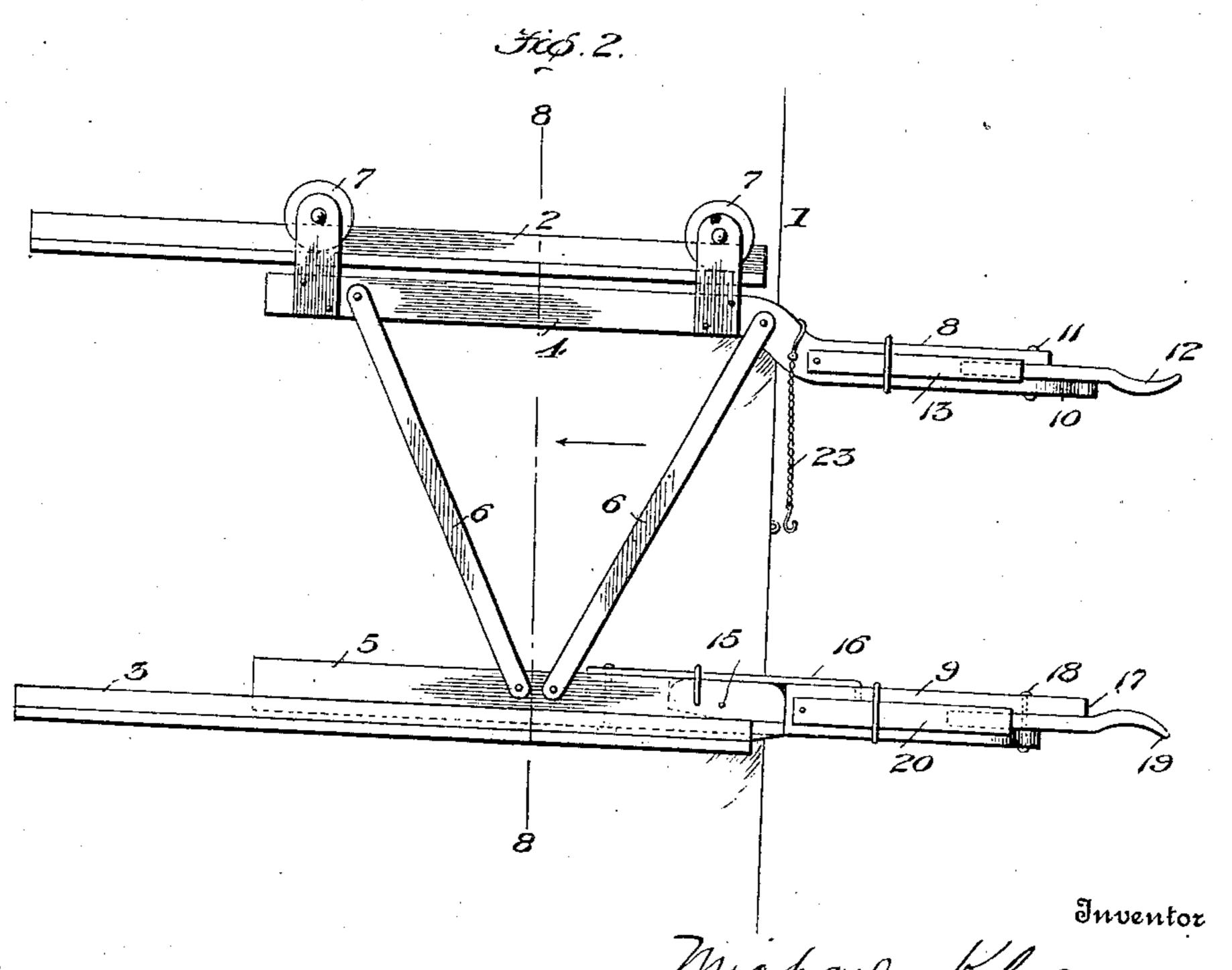
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DEVICE FOR DELIVERING MAIL BAGS FROM MOVING TRAINS.

APPLICATION FILED MAY 5, 1908.





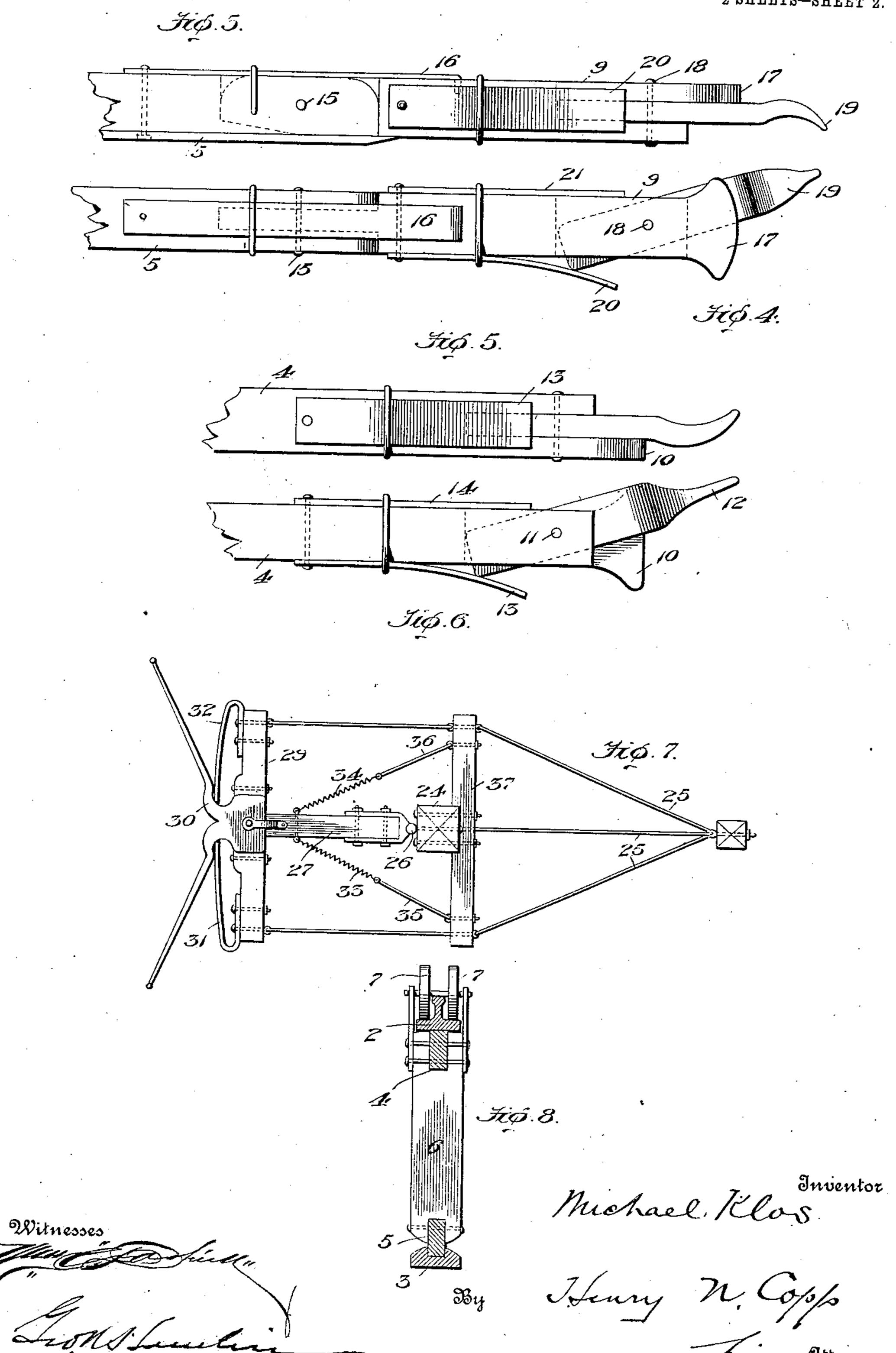
Witnesses

By Henry Th. Copp

M. KLOS.

DEVICE FOR DELIVERING MAIL BAGS FROM MOVING TRAINS. APPLICATION FILED MAY 5, 1908.

2 SHEETS-SHEET 2.



UNITED STATES PATENT OFFICE.

MICHAEL KLOS, OF DYER, INDIANA.

DEVICE FOR DELIVERING MAIL-BAGS FROM MOVING TRAINS.

No. 898,227.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed May 5, 1908. Serial No. 430,932.

To all whom it may concern:

Be it known that I, MICHAEL KLOS, a citizen of the United States, residing at Dyer, county of Lake, and State of Indiana, have 5 invented certain new and useful Improvements in Devices for Delivering Mail-Bags from Moving Trains, of which the following is a specification.

My invention relates to devices for deliv-

10 ering mail bags from moving trains.

The object of the present invention is the provision of novel devices adapted to be carried by a mail car and at the station where the mail bags are to be delivered which will 15 be adapted for the delivery of mail bags from the train with facility, absolute reliability of action and certainty of the bag being caught by the receiving appliance at the station without damage to the bag or the ap-20 pliances.

The invention contemplates the provision | of a novel mail bag holder carried by the car and a novel catcher located at the station or other point where the bag is to be delivered.

The invention is set forth fully hereinafter and the novel features thereof are recited in

the appended claims.

In the accompanying drawings:—Figure 1 is a side elevation, partly in section, of the 30 complete apparatus when the mail bag is being delivered; Fig. 2, an enlarged side elevation of the apparatus carried by the car; Fig. 3, a detail side elevation of the lower mail bag holder; Fig. 4, a plan view thereof 35 with the hook moved laterally; Figs. 5 and 6, views similar to Figs. 3 and 4 showing the upper mail bag holder; Fig. 7, a plan view of the catcher; and Fig. 8, a cross-section of Fig. 2 on line 8—8.

The ordinary mail car 1 carries the mail bag holding appliance and to this end it is equipped with upper and lower tracks 2 and 3 extending transversely of the car in suitable relation to the door thereof. The frame 45 of the mail bag holder consists of upper and lower shoes 4 and 5 securely connected by braces 6, the upper shoe being provided with wheels 7 running on the track 2 while the shoe 5 travels in the track 3. The upper 50 shoe is extended into an arm 8 and the lower skid into an arm 9.

The arm 8 is enlarged at 10 and it has pivoted thereto at 11 a mail bag hook 12, the rear end of which is held normally in aline-55 ment with the arm by leaf springs 13 and 14 |

on opposite sides thereof which are adapted to yield and cushion the shock of delivery of the bag. By using two springs, the device is adapted for employment when the train

is traveling in either direction.

The arm 9 instead of being rigid with the lower shoe 5, is pivoted thereto at 15 so that it can be raised vertically and thereby accommodate itself to the shock of delivering the mail bag. A leaf spring 16 tends to hold 65 the arm 9 downwardly. The arm 9 has an enlarged outer end 17 like the end 10. Pivoted to the arm 9 at 18 is a mail bag hook 19 which is normally held in line with the arm by the opposite leaf springs 20 and 21. 70

The mail bag is shown at 22, the rings at the ends thereof being adapted to be slipped over the oppositely curved ends of the hooks 12 and 19. The enlarged heads 10 and 17 permit suitable lateral play of the hooks 12 75 and 19 and yet form a secure bearing or abutment therefor thus obviating wrenching of the parts.

When a station is being approached to which a mail bag is to be delivered, the mail 80 bag is engaged with the hooks 12 and 19 inside the car in convenient reach of the clerk and the whole device is then slid outwardly to project the mail bag sufficiently far beyond the car so that it will be in position to 85 be delivered, a chain 23 serving to hold the device in proper position and also to take up

the shock.

The catcher is carried by a post 24 which may be suitably braced as at 25. Connected 90 by hinges 26 to post 24 is the catcher frame which consists of a horizontal bar or member 27 and a brace 28, the member 27 having a cross-head 29 to which is secured the double catcher hook 30, the crotches of which are 95 guarded by the leaf springs 31 and 32 so that as the middle part of the bag passes into the crotch, the spring (31 or 32) will retain it and hence the mail bag will be slipped off from the hooks 12 and 19 which will then move in 100 either direction against the actions of their springs, without injury to the mail bag holder. To prevent the shock from damaging the catcher and to enable it to properly yield and yet return to normal position after 105 the bag has been caught thereby, coil springs 33 and 34 are secured to the beam member $\overline{27}$ and are connected by rods 35 and 36 to a cross-piece 37 which is securely bolted to the post 24.

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Having thus described my invention what I claim as new, and desire to secure by Letters Petent, is:—

ters Patent, is:—

1. In a device for delivering mail bags from moving trains, the combination with separated mail bag holders each of which is adapted to move laterally and one of which is movable toward the other, of spring means coöperating with said holders to cushion their lateral movement and spring means cooperating with the holder which is movable toward the remaining holder.

2. In a device for delivering mail bags from moving trains, the combination of separated mail bag holders one of which is movable toward the other, of spring means coöperating with said movable holder.

3. In a device for delivering mail bags from moving trains, the combination with guides, of shoes whose movements are governed by the guides and which may be moved inwardly or outwardly in relation to the car door, and spring cushioned mail bag holders carried by the shoes.

4. In a device for delivering mail bags 25 from moving trains, the combination with guides, of shoes whose movements are governed by the guides and which may be moved inwardly or outwardly in relation to the door, mail bag holders pivoted to the 30 shoes, and leaf springs coöperating with said holders to cushion their movements in both directions.

5. In a device for delivering mail bags from moving trains, the combination with 35 guides, of shoes whose movements are governed by the guides and which may be moved inwardly or outwardly in relation to the door, a mail bag holder carried by one of the shoes and another mail bag holder piv- 40 oted to the other shoe and adapted for movement toward the first-named holder.

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

MICHAEL KLOS.

Witnesses:

AUGUST W. STOMMEL, HENRY F. KALVELAGE.