

T. HOUSTON.
MAIL BAG CATCHER AND DELIVERER.

No. 549,239.

Patented Nov. 5, 1895.

Fig 1

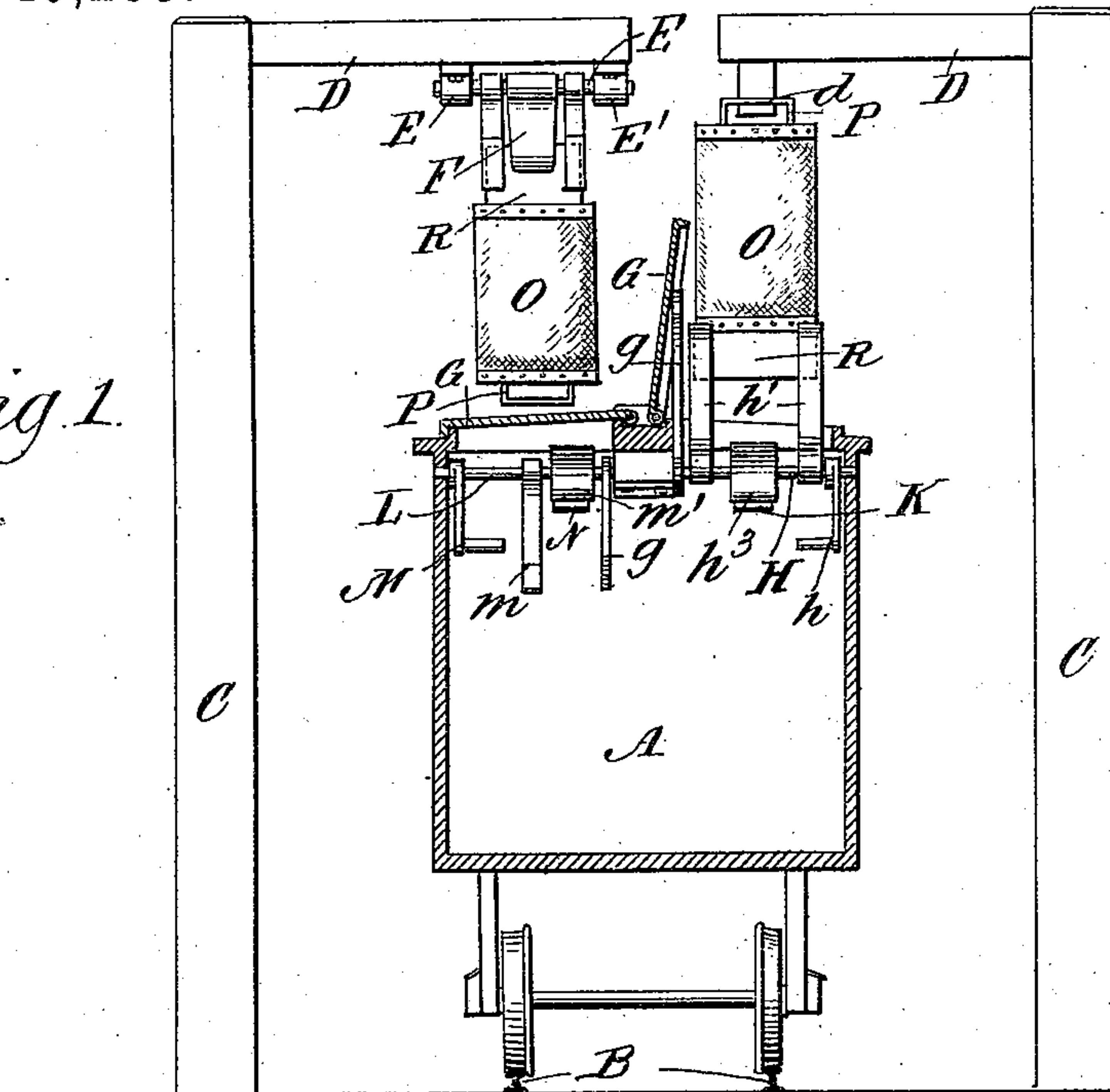
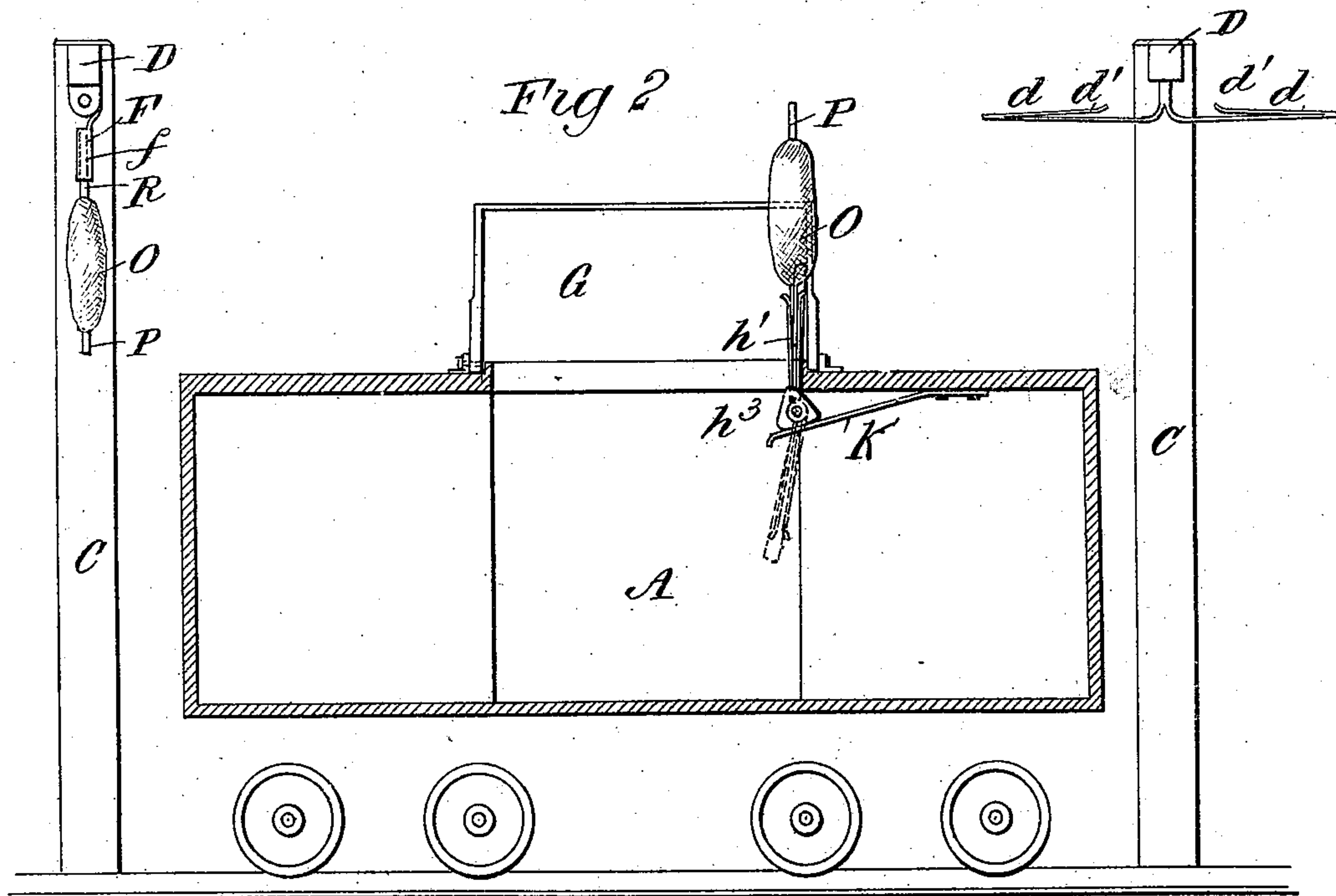


Fig 2



WITNESSES:

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B. McComb.

INVENTOR

Thomas Houston

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(No Model.)

2 Sheets—Sheet 2.

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Fig 3.

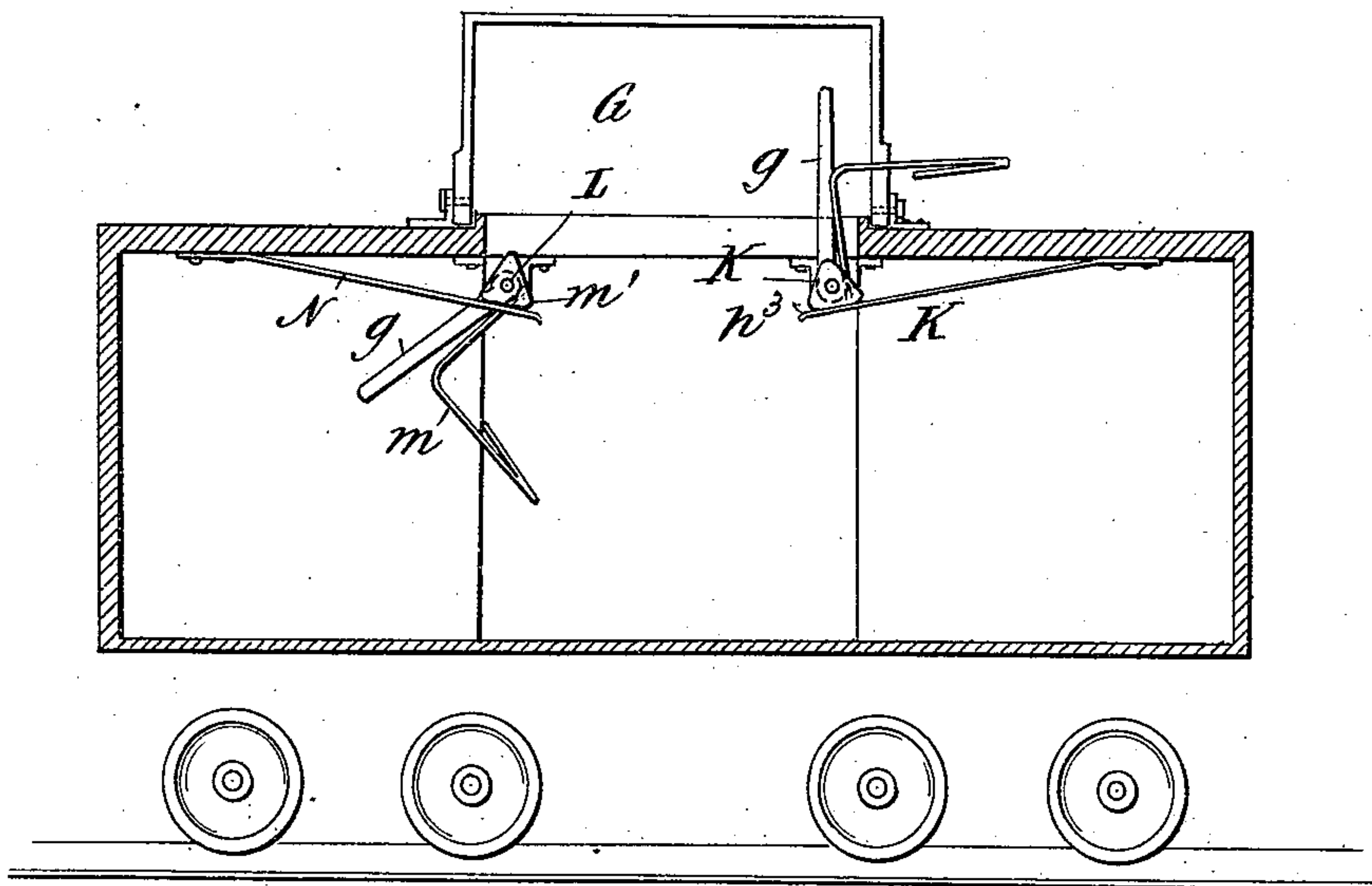


Fig 4.

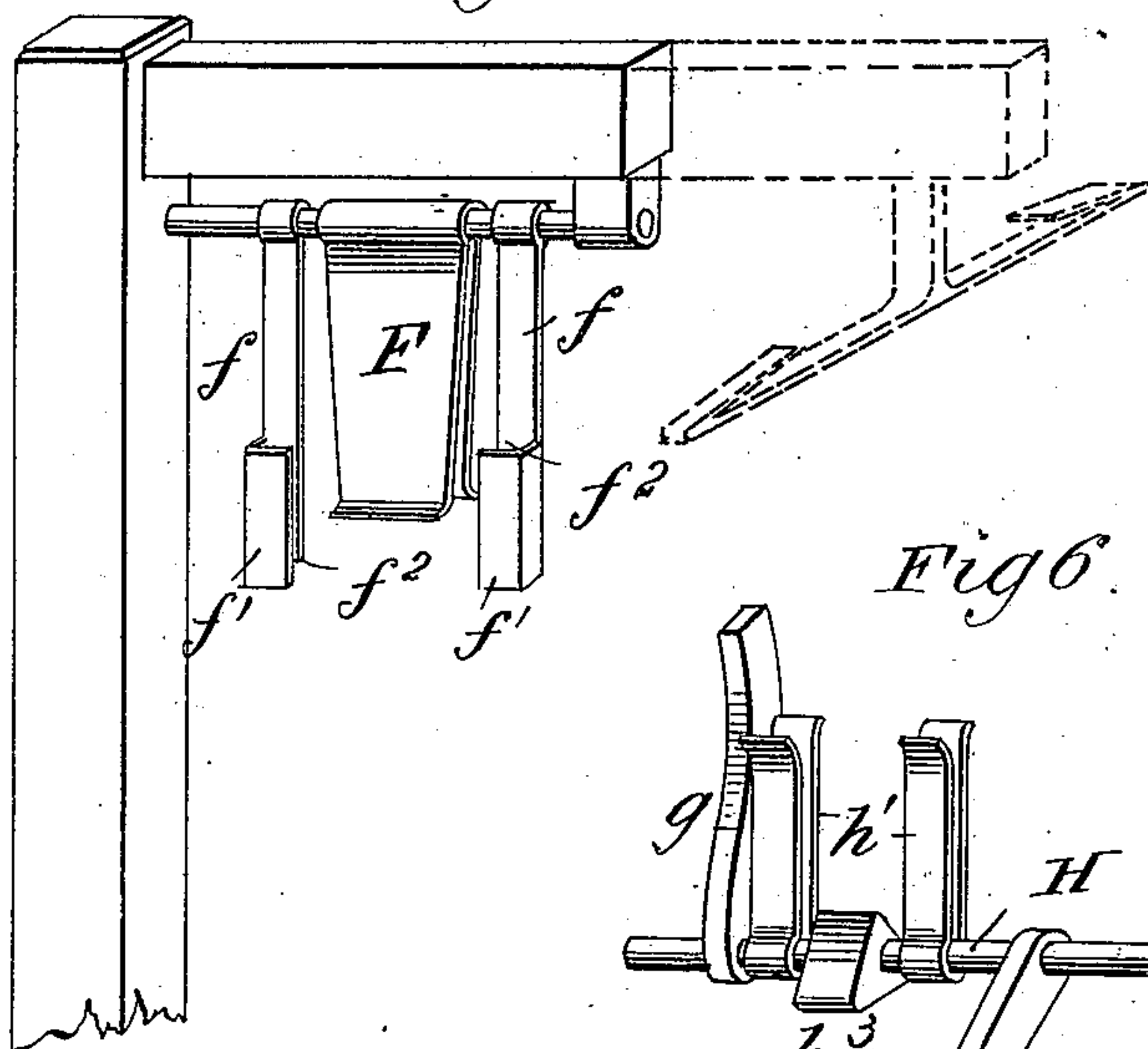


Fig 5.

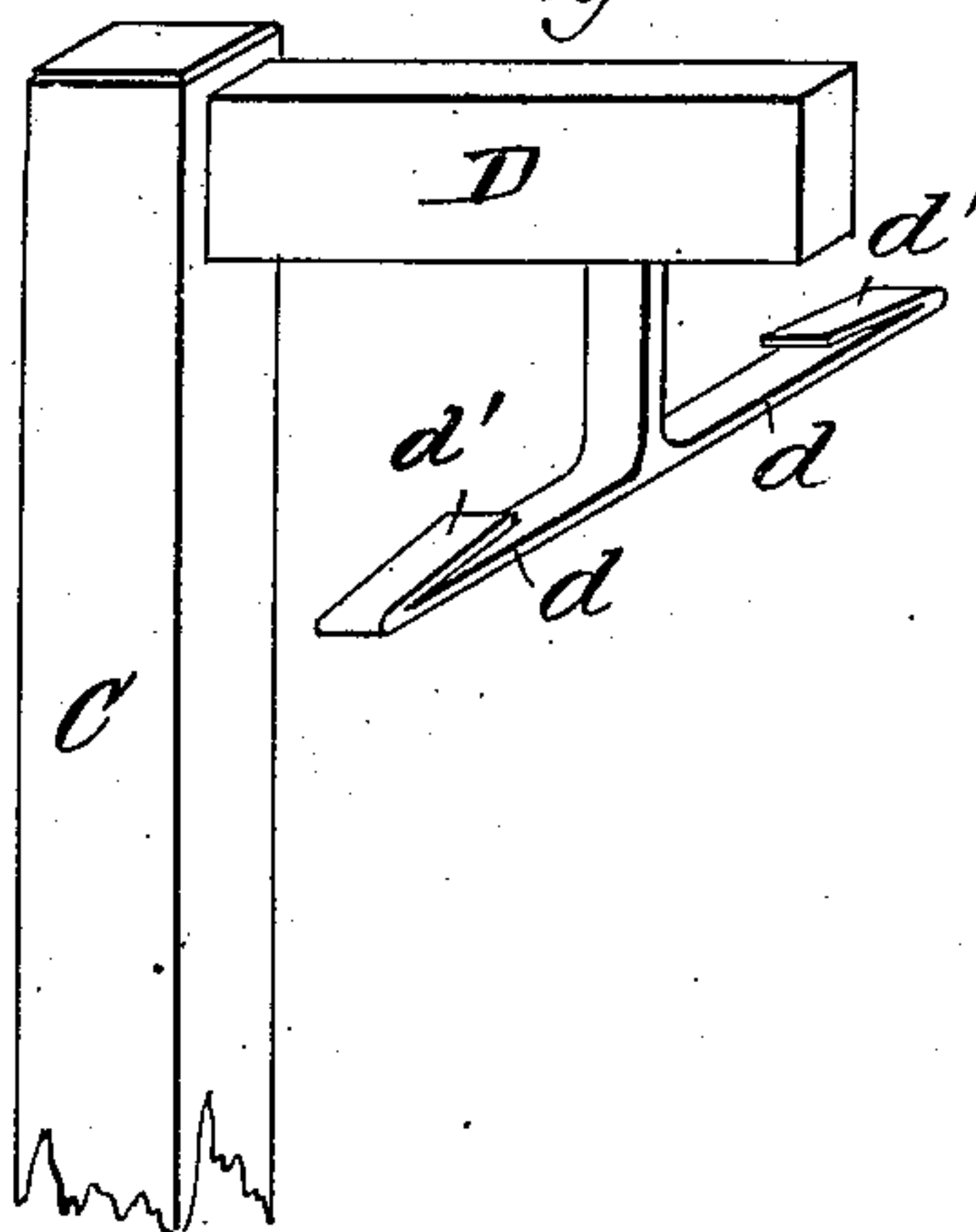
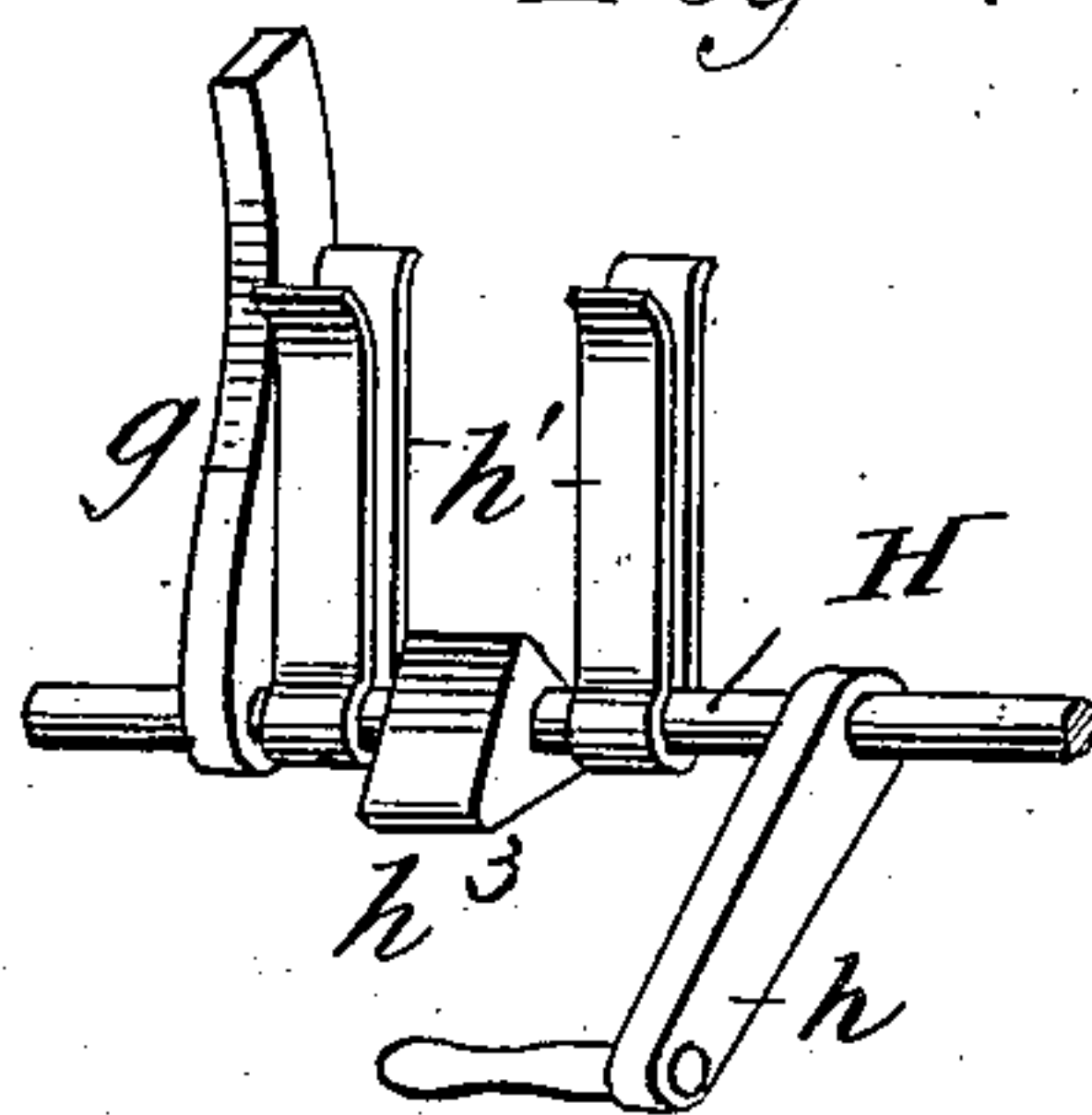


Fig 6.



WITNESSES:
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UNITED STATES PATENT OFFICE.

THOMAS HOUSTON, OF PITTSBURG, PENNSYLVANIA.

MAIL-BAG CATCHER AND DELIVERER.

SPECIFICATION forming part of Letters Patent No. 549,239, dated November 5, 1895.

Application filed August 22, 1895. Serial No. 560,107. (No model.)

To all whom it may concern:

Be it known that I, THOMAS HOUSTON, a citizen of the United States, and a resident of Pittsburg, county of Allegheny, and State of Pennsylvania, have invented certain new and useful Improvements in Mail-Bag Catchers or Deliverers, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to mail-bag catchers or deliverers; and the object thereof is to provide simple and efficient means for automatically catching mail-bags at stations from passing trains and automatically deliver bags from passing trains to the stations; and with this and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a sectional end elevation of a car provided with my improvement, also showing trains or supports at the side of the track with which are connected means for receiving a mail-bag from a passing train and also means for delivering a mail-bag to a passing train; Fig. 2, a sectional side elevation of a car provided with my improvement or one part thereof and also showing the trains or supports which are shown in Fig. 1; Fig. 3, a longitudinal vertical section of a car provided with my improvement and also showing a portion of the track and the wheels of the car; and Figs. 4, 5, and 6 represent perspective views of details of the construction.

In Figs. 1, 2, and 3 of the drawings I have shown a car A provided with my improvement, said car being placed upon a track B, and at the side or sides of which are placed supporting cranes or posts C, provided with arms D, which extend across the track and high enough for the car to pass thereunder. These supports may be of any preferred form or construction and may consist of brackets or projecting arms connected with a railway station or depot. With one of the arms D is

connected hooks *d*, which extend in opposite directions and are provided with return bends *d'* to prevent the mail-bag from falling therefrom when once caught thereby when being delivered from a car. The other arm D is provided with a short shaft E, journaled in hangers E', from which depends a clevis or yoke-shaped clamp F, at each side of which is a hanger or guide *f*, the lower ends of which are provided with angular jaws *f'*, by means of which are formed the vertical chambers or recesses *f''*, one in each hanger, which are adapted to receive the sides of a mail-bag and help to sustain the same in a proper position to be delivered to a car.

The car A is provided in its top with two hinged doors, each of which are arranged longitudinally and each of which is preferably hinged near the central part of the top of the car and adapted to open outwardly, and arranged within the car on each side is a lever *g*, by means of which the doors G may be opened.

Below one of the doors G is a shaft H, provided with a crank *h*, and on which is placed U-shaped clamps *h'*, which are designed to support a mail-bag in a position to be delivered to the hooks *d* on one of the arms D, and one of the levers *g* may also be mounted on the shaft H, if desired, as shown in Fig. 6, and mounted centrally of said shaft is a triangular head or block *h''*, upon which bears a plate-spring K, the object of which is to hold the shaft H in the desired position. Below the opposite door G is arranged a transverse shaft L, provided, also, with a crank, as shown at M, and on this shaft L one of the levers *g* may also be mounted.

Connected with the shaft M is a hook *m*, somewhat similar to the hooks *d* on one of the arms D, the object of this hook *m* being to receive a mail-bag when the latter is being delivered to the car from clevis or clamp F, and mounted also on the shaft L is a triangular head or block *m'*, upon which bears one end of a plate-spring N, the other end of which is secured to the top of the car, the object of this arrangement being to hold the shaft L in the proper position.

In Figs. 1 and 2 I have shown mail-bags at O, and these bags are provided with a loop

P at one end and each may be provided at the opposite end with an extension R, if desired.

The operation will be readily understood from the foregoing description, when taken in connection with the accompanying drawings.

When it is desired to deliver a mail-bag from the car to or at a station, the bag is placed in the U-shaped clamps *h'*, which are connected with the shaft H, and said shaft is turned into the position as shown in Fig. 1, and as the car passes the hooks *d'* attached to one of the posts, it receives the bag by passing through the loop P, as will be readily understood.

When it is desired to deliver a bag to a car, the bag is attached to the clevis or clamp F and the downwardly-depending loops or clamps *f*, and as the car passes beneath the bag the shaft L is operated to throw up the hook *m*, which receives the bag by passing through the loop P, as will be readily understood, and when the shaft L is again turned said bag will be deposited in the car.

It will be readily understood, of course, that the doors *g* in the top of the car must be open in both of these operations, and it will also be understood that my improved device may be made to operate in connection with ordinary mail-bags, or in connection with mail-bags especially constructed and adapted thereto.

Instead of employing two of the posts or standards C both of the attachments—namely, those for delivering and those for receiving mail-bags—may be connected with the single support extending across the track, as shown in Fig. 4, and it is also apparent that other changes in the modifications of the construction herein shown and described may be made without departing from the spirit of my invention, and I therefore reserve the right to make all such alterations therein as fairly come within the scope of the invention.

Having fully described my invention, I claim and desire to secure by Letters Patent—

1. The combination with a car, provided with hinged doors in the top thereof, of a shaft provided with clamps adapted to receive and support a mail bag and to project the same above the car, and another shaft, provided with a hook adapted to be extended above the car, said hook being adapted to re-

ceive a mail bag suspended from a support above the car and said clamp being adapted to support a mail bag so that it may be received by a hook or hooks suspended from a support above the car, substantially as shown and described.

2. The combination with a car of hinged doors in the top thereof, shafts hinged below said doors and transversely thereon, said shafts being provided with operating levers, and one of said shafts being provided with means for supporting a mail bag and projecting the same above the car, and the other of said shafts being provided with a hook or hooks for receiving a mail bag suspended from a support above the car, substantially as shown and described.

3. The combination with a car of hinged doors in the top thereof, shafts hinged below said doors and transversely thereon, said shafts being provided with operating levers, and one of said shafts being provided with means for supporting a mail bag and projecting the same above the car, and the other of said shafts being provided with a hook or hooks for receiving a mail bag suspended from a support above the car, and means for regulating the movement of said shafts and holding the same in the desired position, substantially as shown and described.

4. A railway car, provided with hinged doors in the top thereof, and transverse shafts arranged below said doors, one of said shafts being provided with clamps, for holding or supporting a mail bag above the car, and the other shaft being provided with a hook or hooks for receiving a mail bag suspended from a support above the car, said devices being adapted to operate in connection with a hook or hooks connected with a support above the car and adapted to receive the mail bag supported from within the car, and clamps or similar devices for suspending a mail bag from above the car so as to be received by the hook or hooks connected with one of the shafts within the car, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 19th day of August, 1895.

THOMAS HOUSTON.

Witnesses:

WILLIAM F. ROBB,
SIDNEY H. TOTTEN.