

H. BRAUCHLER & J. F. SINDORF.
Mail-Bag Dropper.

No. 215,873.

Patented May 27, 1879.

Fig. 1.

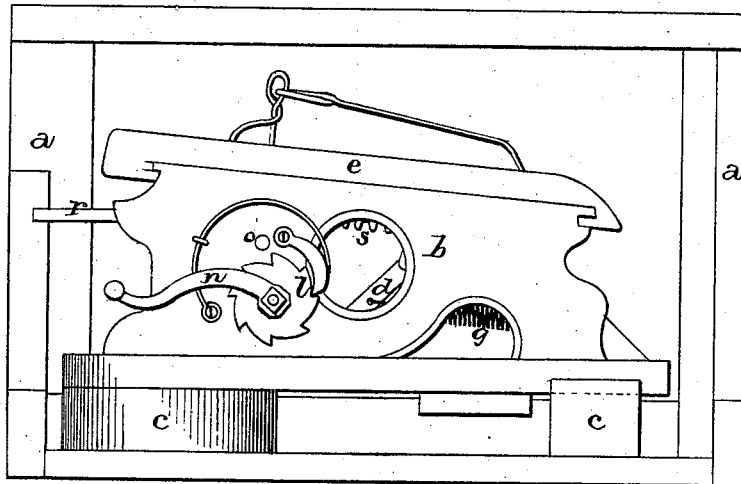


Fig. 2.

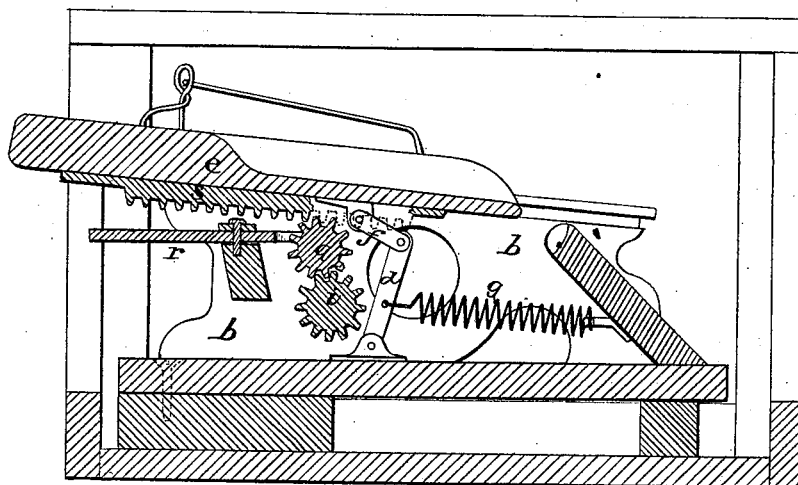
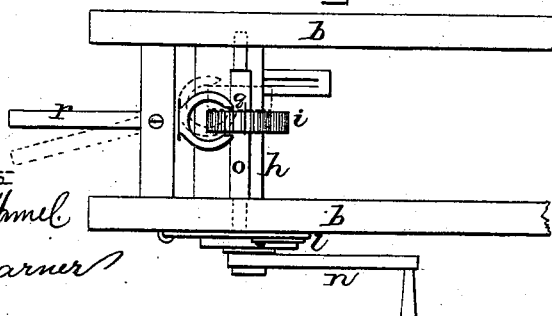


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY BRAUCHLER AND JOHN F. SINDORF, OF GREENSBURG, PA.

IMPROVEMENT IN MAIL-BAG DROPPERS.

Specification forming part of Letters Patent No. **215,873**, dated May 27, 1879; application filed April 12, 1879.

To all whom it may concern:

Be it known that we, HENRY BRAUCHLER and JNO. F. SINDORF, of Greensburg, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Mail-Pouch Distributors or Droppers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in mail-pouch distributors or droppers; and it consists in the arrangement and combination of parts that will be more fully described hereinafter, whereby the mail-pouch can be thrown or discharged backward from the car while in motion from a spring-actuated chute at the same speed the car is moving forward.

Figure 1 is a side elevation of our invention complete. Fig. 2 is a vertical longitudinal section of the same, and Fig. 3 is a detail view.

a represents the frame of a car, having an opening or door in its side, by which the dropper *b* is pivoted at its front end in such a manner that the rear end can be swung around so as to extend out beyond the side of the car. Inside of the car, on the floor, are secured the two sills *c*, the rear one being provided with a stop to limit the inward movement of the dropper, and the dropper having a stop secured to its under side to limit the distance its rear end shall project beyond the side of the car.

To the bottom of the inside of the dropper is pivoted the lever *d*, which is fastened to the under side of the top or chute *e* by the link *f*, so as to allow the chute to move freely back and forth in the grooves or guides made in the tops of the inside edges of the dropper.

Secured to the inside of the dropper and to this lever *d* is a suitable spring, *g*, by means of which the lever and the chute are suddenly drawn back into position again after having been drawn forward, and by this sudden backward movement are made to throw the mail-pouch, lying in the hollow in the top of the

chute, backward off from the side of the car at about the same speed the car is moving.

Passing through the dropper toward its front end is the winding-shaft *h*, having a cog-wheel, *i*, upon its center, and provided with a pawl and ratchet, *l*, and crank *n* on its inside end.

Passing through the dropper just above this shaft is a second shaft, *o*, which is also provided with a cog-wheel, *q*, and has an endwise movement by means of the hand-lever *r*, for moving the wheel *q* in and out of gear with the wheel *i*.

On the under side of the chute *e* is the rack *s*, with which the wheel *q* meshes at the same time that it is in gear with the wheel *i*, for the purpose of moving the chute forward and stretching the spring. The distance the chute shall be moved is determined by the speed of the car, and after having been moved the desired distance will be held in position by the ratchet and pawl *l*.

Upon the top of the chute, around the front end of the hollow in which the pouch is placed, is a suitable guard, which, catching against the pouch, causes it to move with the chute when it suddenly springs back into place.

When it is desired to drop a pouch while the car is in motion, the chute is drawn forward by turning the winding-shaft *h* backward while the wheel *q* is in gear with both the wheel *i* and rack *s*. The pouch is placed in the hollow on top of the chute, and then the rear end of the dropper is turned outward beyond the side of the car.

When opposite the place where the pouch is to be dropped, the shaft *o* is suddenly moved endwise by means of the lever *r*, thereby throwing the wheel *q* out of gear with both the rack *s* and wheel *i*, thereby leaving the chute free to be suddenly drawn backward by the spring and lever, and causing the bag to be thrown outward from the side of the car at about the same speed the car is moving.

By thus throwing the bag backward as the car moves forward, the bag will fall squarely upon the ground, and remain where it falls, instead of being caused to roll and tumble about by the motion of the car.

We are aware that a support for the mail-bag has been rigidly secured to a post that is fixed by the side of the track, and this we disclaim.

Having thus described our invention, we claim—

The combination of a frame, *b*, pivoted at one end inside of the door of a car, with a movable chute, *e*, provided with a rack, *s*, wheels *i* *q*, levers *d* *r*, and spring *g*, the parts being arranged to operate substantially as shown.

In testimony that we claim the foregoing we have hereunto set our hands this 7th day of April, 1879.

HENRY BRAUCHLER.
JOHN FRY SINDORF.

Witnesses:

ABM. L. AKINS,
THOMAS PATTERSON.