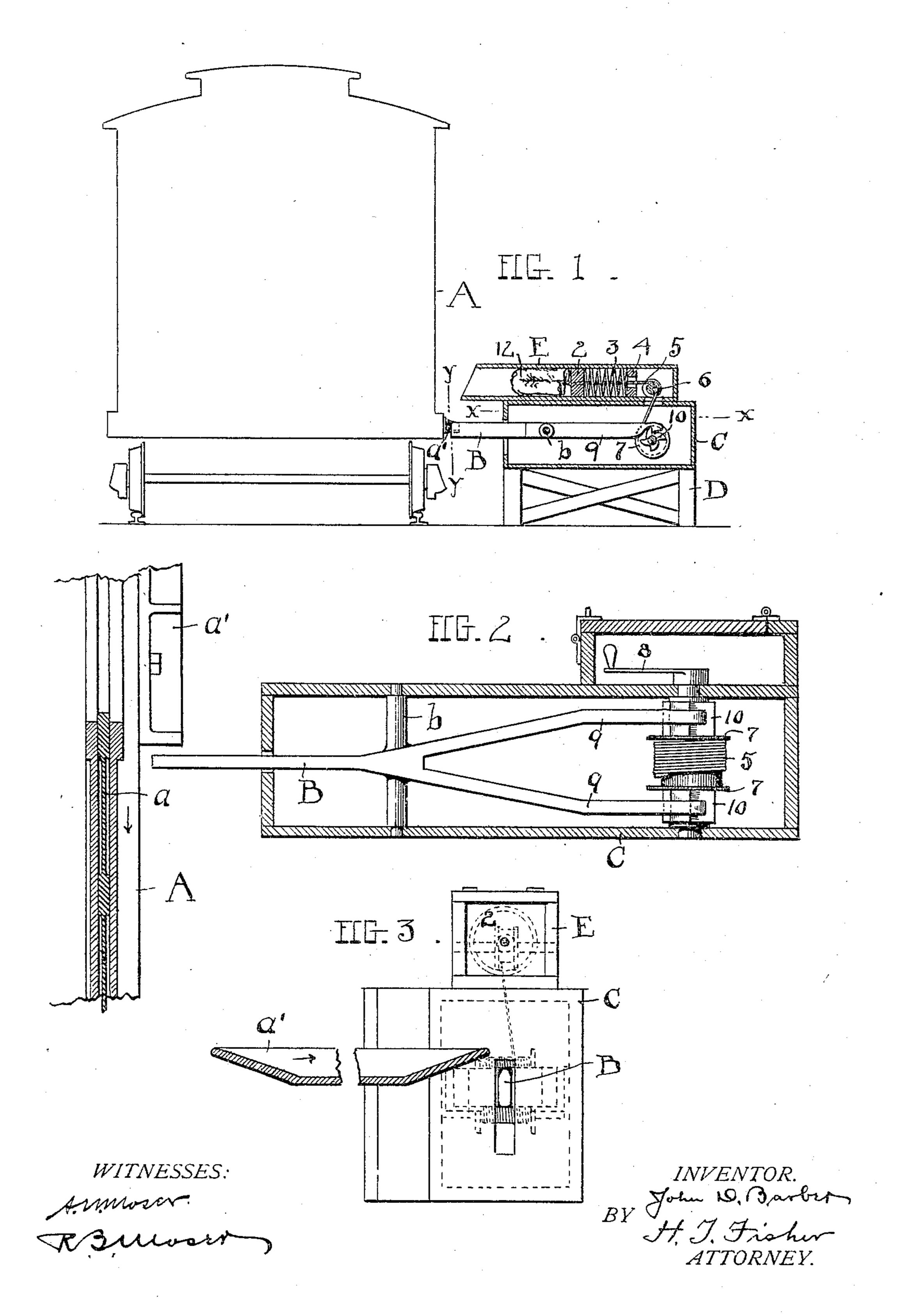
J. D. BARBER.

MAIL POUCH PROJECTOR.

APPLICATION FILED FEB. 18, 1905.



United States Patent Office.

JOHN D. BARBER, OF CLEVELAND, OHIO.

MAIL-POUCH PROJECTOR.

SPECIFICATION forming part of Letters Patent No. 792,108, dated June 13, 1905.

Application filed February 18, 1905. Serial No. 246,224.

To all whom it may concern:

Be it known that I, John D. Barber, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, 5 have invented certain new and useful Improvements in Mail-Pouch Projectors; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it ap-10 pertains to make and use the same.

My invention relates to mail-pouch projectors; and the object of the invention is to provide a device or apparatus which will deliver a mail-pouch, express-parcel, or package 15 to a passing car under more or less speed and which is adapted to be initially actuated from the car, all substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical sectional elevation of my improved apparatus shown in connection with a car or a track. Fig. 2 is an enlarged plan view of the apparatus on line xx, Fig. 1, showing the 25 casing therefor in section and a horizontal section of a car. Fig. 3 is an end elevation of the apparatus and a cross-section of the shoe, which is fixed upon the car, as seen in Fig. 1, said figure being taken on line y y, Fig. 1.

As thus shown, A represents a car-body, presumably a mail or express car, with the usual slide-doors a and provided with a shoe a' or other rigid projection fixed thereon at its bottom and side and presumably in such 35 relation to the door of the car that when the shoe contacts with the said apparatus or means to operate the same the open door of the car will receive the mail-pouch or other parcel projected thereinto from the apparatus.

40 B represents a bifurcated or forked actuating-lever pivotally supported on a cross roller or bearing between its ends in the sides of the casing C, and said casing is fixed and rests upon a suitable base D at such elevation as 45 will bring the pouch or parcel to be delivered substantially on a level or plane with the floor of the car or somewhat above the floor.

E represents a chute or tube fixed upon the casing C and containing a piston 2, under 5° pressure by a spring 3 behind the same and 1

resting back against a fixed abutment or diaphragm 4. A cord or rope 5 extends from the piston through spring 3 and diaphragm 4 over a rounded cross piece or roller and thence over a drum or windlass 7, adapted to 55

be rotated by a crank-lever 8.

The bifurcations or arms 9 of lever B are constructed at their extremities to engage upon spur-wheels 10 on the windlass-shaft at each side of drum 7, and when the rope 60 or cord 5 has been wound up by means of crank 8 and spring 3 has been compressed to its maximum the said arms engage the said ratchet-wheels and hold the entire device under tension in fixed position. Then as a car 65 passes and the shoe a' strikes lever B and forcibly depresses it, raising the other end thereof or the arms 9 out of engagement with wheels 10, the windlass-drum is immediately released, and spring 3 instantly acts and projects or 7° shoots the pouch or parcel 12 into the car. The shoe a' has an inclined engaging surface where it strikes lever or arm B, so as not to make the engagement too violent and that a glancing stroke may sufficiently raise the op- 75 posite end or ends of the lever to trip the projecting mechanism and throw the pouch or parcel into the car. Then said lever resumes its engaging position again, and the device is wound up by means of crank 8 for another op-80 eration. Only enough vibration of lever B on its pivot to release drum 7 is required.

Tube E for the pouch may be square or circular in cross-section, and obviously the details described may be varied more or less and 85 be equivalent in function to those shown, and hence not depart from the spirit of the invention.

What I claim is—

1. In mail-pouch-projecting devices, a suit- 90 able casing, a vibratory lever pivoted therein and having its engaging end projecting out beyond said casing, a rotatable drum and means operatively connected therewith operatively engaged by the inner end of said lever, a tube 95 over said casing and a piston therein, a cable engaged with said piston and over said drum and a spring behind said piston, substantially as described.

2. In mail-pouch-projecting devices, a suit- 100

able casing and an actuating-lever pivoted therein, a drum operatively engaged by said lever, a spring-pressed piston for projecting the parcel and a cable connected therewith and wound upon said drum, substantially as described.

3. In devices for projecting mail-pouches and other parcels into moving cars, a suitable casing, and a parcel-receiving tube thereon, a spring-pressed piston in said tube, a drum and a cable engaged with said piston and wound upon said drum, and a lever constructed at one end to hold said drum in wound position and projecting at the other end beyond said casing, substantially as described.

4. In devices for projecting mail-pouches and other parcels into moving cars, a drum and a lever arranged to be tripped by a passing car operatively engaged with said drum, in combination with a casing adapted to receive a package, a piston to project the package and a spring to actuate the piston, and a flexible connection from the piston engaged over said drum, substantially as described.

In testimony whereof I sign this specifica- 25 tion in the presence of two witnesses.

JOHN D. BARBER.

Witnesses:

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C. A. Sell, R. B. Moser.