

(No Model.)

M. M. GREENWADE.

DEVICE FOR THROWING MISSIVES FROM MOVING TRAINS.

No. 468,801.

Patented Feb. 16, 1892.

Fig. I.

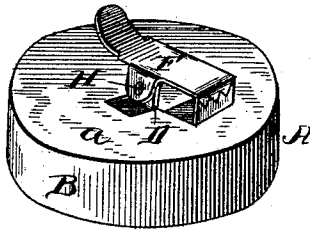


Fig. II.

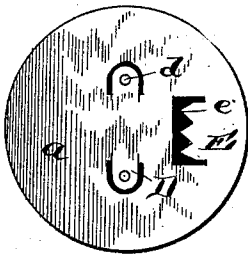


Fig. III.

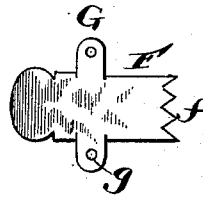


Fig. IV.

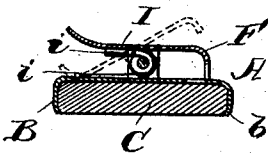
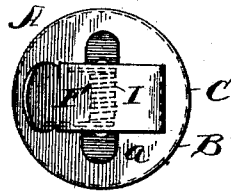


Fig. V.



Witnesses:

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UNITED STATES PATENT OFFICE.

MOSES MILLER GREENWADE, OF CINCINNATI, OHIO.

DEVICE FOR THROWING MISSIVES FROM MOVING TRAINS.

SPECIFICATION forming part of Letters Patent No. 468,801, dated February 16, 1892.

Application filed April 2, 1891. Serial No. 387,430. (No model.)

To all whom it may concern:

Be it known that I, MOSES MILLER GREENWADE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Devices for Throwing Missives from Moving Trains; and I 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 appertains to make and use the same.

My invention relates to a device for throwing messages or mail-matter from moving trains while passing a station along the route.

It is frequently necessary for road-masters and other officials of a railroad, as well as express-men and mail agents, to deliver messages or letters to persons along the route while the train is in motion, and when this is done according to the mode in common vogue it frequently happens that the message or letter is drawn underneath the train by the current of air due to its rapid motion. In many instances the messages are run over by the train and ruined, or carried some distance by the air-current and thus lost, and as the train is usually traveling at a high speed the person who delivered the message cannot ascertain whether the message has been received or not, thus causing a great deal of inconvenience, and in many cases, through imperfectly-delivered orders, imperiling the lives of passengers and train-men.

It is the object of my invention to provide a simple device, which can be carried around in the pocket, by the train-men and others, which is adapted to clasp the letter or message firmly, and to enable the device and its attached message to be thrown from the train with a considerable degree of certainty and precision to the station.

With these ends in view my invention consists of a weighted base constructed, preferably, of a shell stamped out of a piece of sheet metal and having the flat top and depending circular ring. This shell is filled with lead or other substance, and the bottom edge of the ring may be turned inwardly to hold the filler in place, or other desirable means may be employed. Two upright lugs or ears stamped or formed out of the top of the shell, form bear-

ings for the clamp, and in front of these bearings is struck up a lip, which has its upper edge toothed. In these bearings is pivoted a clasp, which has its forward-depending end toothed and engaging with the teeth on the upwardly-extending lip on the top of the cap, and between these lips the letter or message is to be inserted. On the axle or shaft of this clasp is secured a coiled spring, which has its two ends bearing against the top of the cap and the clasp, respectively, and the spring serves to hold the clasp in engagement with the missive when it is placed between the two lips of the throwing device.

To enable others to more readily understand my invention, I have illustrated the same in the accompanying drawings, in which—

Figure I is a perspective view of my improved device. Fig. II is a plan view of the cap before the bearings and lips have been turned up. Fig. III is a plan view of the clasp before its bearings have been turned down. Fig. IV is a side elevation, and Fig. V is a top plan view, of the complete device ready for use.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the weighted base of my device for throwing missives from a moving train. The base comprises a filler and a hollow shell, and the shell is preferably stamped out of one piece of sheet metal into the desired shape and provided with the necessary incisions in its surface. This shell has the flat circular top *a* and the depending flange or side B, extending entirely around its outer edge, and the shell thus formed is weighted with a filler of lead or other heavy substance C to increase the specific gravity of the device and enable it to be thrown to good advantage to the station along the route, or at any desired place, the device being of such weight as to overcome in its flight the current of air caused by the movement of the train. This filler may be held in its place by pins or otherwise; but I prefer to bend the lower edge *b* of the depending side B inward, and thus clasp the filler and hold it in place.

In the top of the shell A and on opposite sides of the center thereof are two bearings

D, which are formed by bending lips struck up from the top of the shell, and these bearings are provided with the openings *d* to receive the ends of the axle or shaft carrying the clasp. In front of these bearings is a lip E, which is also struck up from the top of the shell and turned to a vertical position, and its upper edge is provided with a series of serrations or teeth *e* to engage corresponding teeth on the depending lip of the clasp.

The clasp F is formed out of one piece of sheet metal, and it is provided with a depending toothed lip *f* on its front end, which teeth are adapted to engage the teeth on the upwardly-projecting lip E of the shell. The rear end of the clasp serves as a handle or presser-plate, and between the presser-plate and the depending lips the clasp has two lugs G, provided with openings *g*, which lugs are arranged to fit within the bearings struck up from the cap.

The shaft or axle H, on which the clasp is pivoted, is arranged beneath the center of the clasp, and its ends project through the openings *g* and are journaled in the bearings D. This is a very convenient and simple manner of securing the clasp on the axle, and as the depending lugs operate within the bearings D they serve to guide the clasp and secure it firmly in its proper position.

On the axle H is a coiled spring I, which has its ends *i i* free to bear against the bottom of the clasp and the top of the shell, respectively, thus exerting the pressure of the spring in opposite directions and holding the lip of the clasp normally in engagement with the lip of the base.

The device is so small and simple that quite a number can be carried around in the pocket without inconvenience, and when it is desired to use the same a message or letter is simply inserted between the lips of the clasp and the base and the letter and device are thrown by hand from the train. The spring presses the clasp tightly on the message and the weight of the cap and filler insures the correct throwing of the device to the desired point.

I am aware that changes in the form and proportion of parts and details of construction can be made without departing from the spirit or sacrificing the advantages of my invention, and I therefore reserve the right to make such changes as fall within the scope of my invention.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described device for throwing messages from a moving train, which consists of a shell, a filler therein, and a clamp mounted on the shell and adapted to confine a missive between itself and the shell, substantially as described.

2. A device for throwing missives from moving trains, which consists of a weighted base and a clasp pivotally secured in bearings on the base and adapted to confine a missive between itself and the base, substantially as described.

3. A device for throwing missives from moving trains, which consists of a weighted base having the bearings and toothed lip and the clasp pivoted in the bearings and having a lip adapted to engage with the lip on the base, substantially as described.

4. A device for throwing missives from moving trains, consisting of a weighted base having the bearings and the lips struck up from its shell, the clasp pivoted in said bearings and having a depending lip adapted to engage with the lip on the base, and the coiled spring acting on the clasp to hold the lip thereof normally in close engagement with the base-lip, substantially as described.

5. In a device for throwing missives from moving trains, a weighted base consisting of a shell formed of one piece of metal and a filler secured in said cap, combined with a clasp on the base, substantially as described.

6. In a device for throwing missives from moving trains, a weighted base having a shell formed of one piece of metal, the bearings, and the toothed lip struck up from said cap, and a filler secured in the cap, combined with a clamp carried by said base, substantially as described.

7. In a device for throwing missives from moving trains, a weighted base consisting of a shell having a depending flange around its periphery and formed of one piece of metal, and a filler inclosed within said shell and adapted to be held therein by an inwardly-projecting lip on the depending flange and a clasp, substantially as described.

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

MOSES MILLER GREENWADE.

Witnesses:

VINCENT SCHWAB,
WM. A. BURROUGHS.