No. 878,036. PATENTED FEB. 4, 1908.

T. G. BROWN.

MAIL BOX SIGNAL.

APPLICATION FILED MAY 18, 1907.

*Fig. 1.*

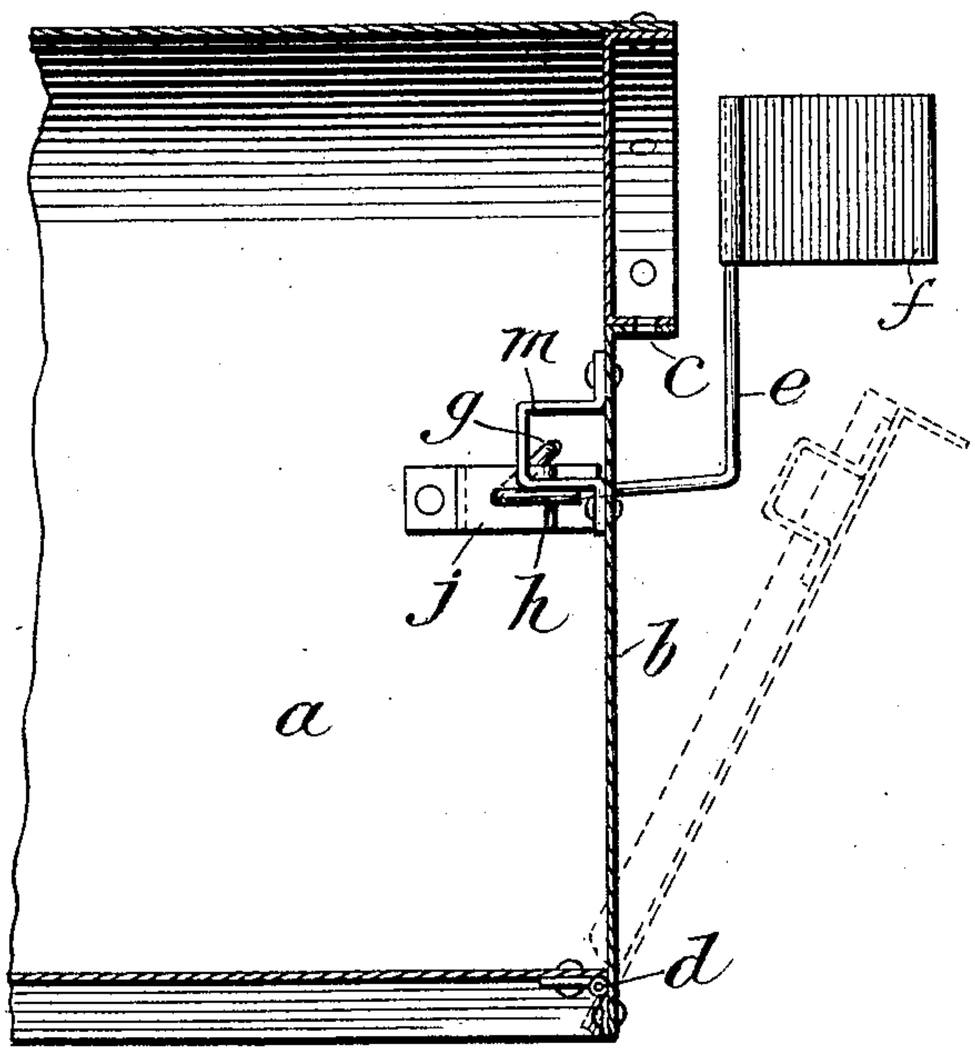



*Fig. 2.*

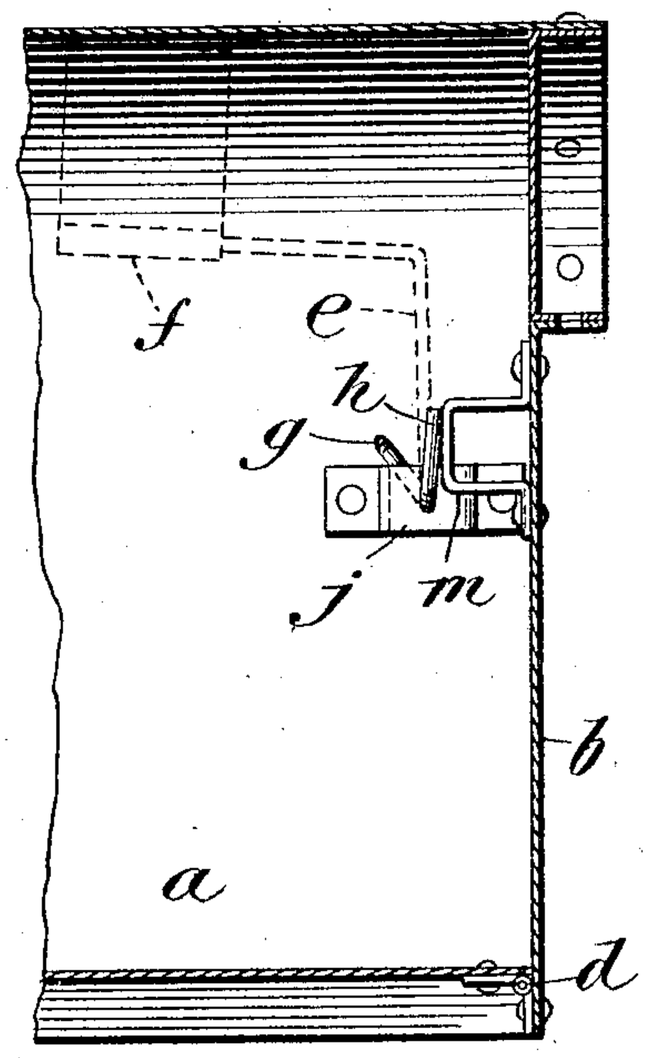



*Fig. 3.*

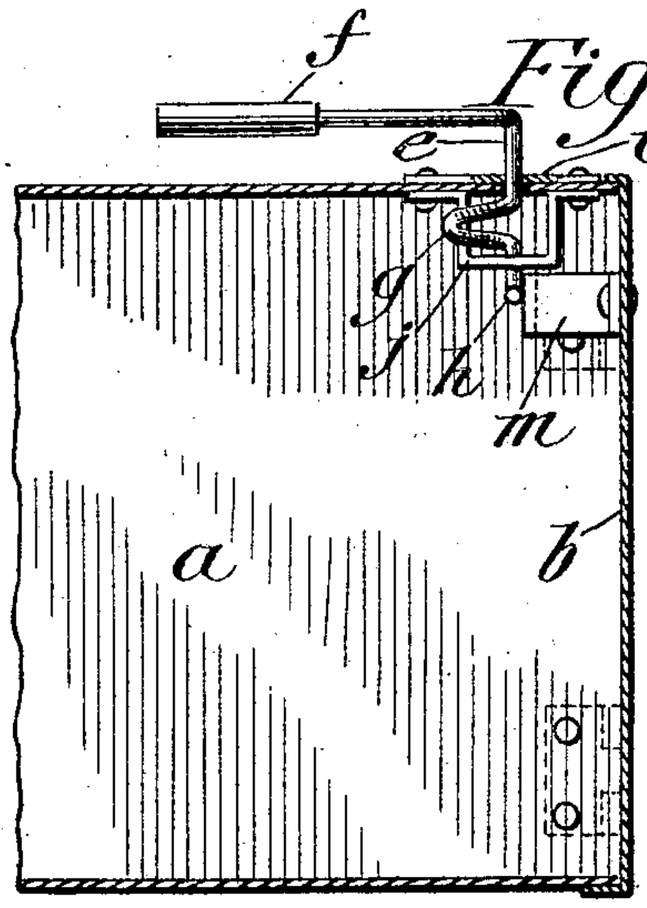
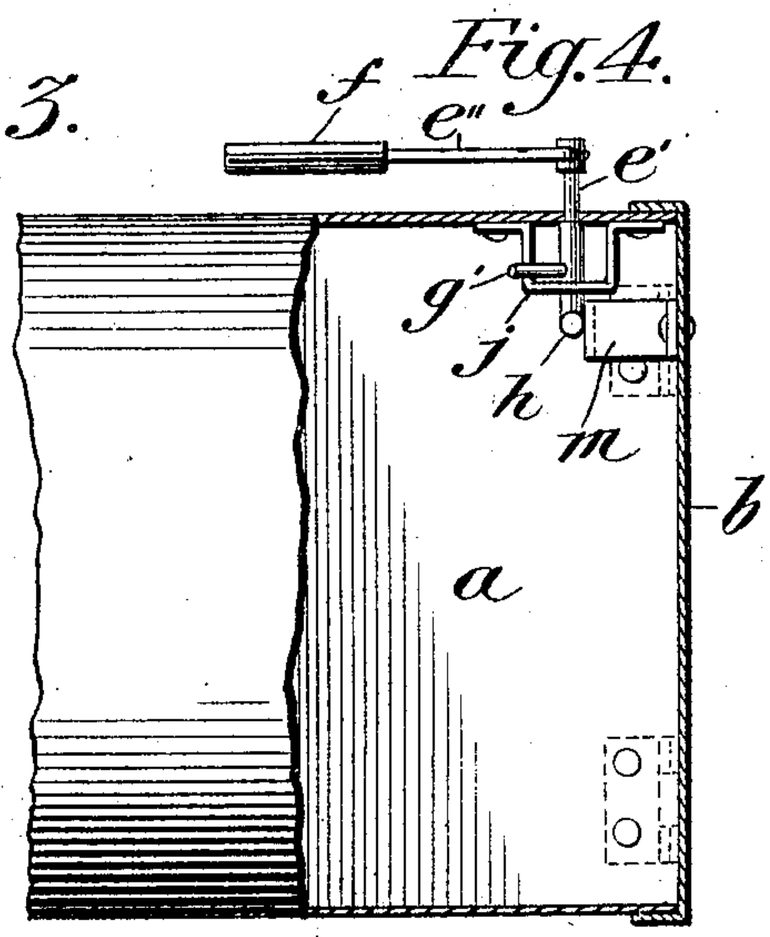



*Fig. 4.*




Witnesses

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# UNITED STATES PATENT OFFICE.

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## MAIL-BOX SIGNAL.

No. 878,036. Specification of Letters Patent. Patented Feb. 4, 1908.

Application filed May 18, 1907. Serial No. 374,472.

*To all whom it may concern:*

Be it known that I, THURSTON G. BROWN, a citizen of the United States, residing at Buckland, county of Prince William, State of Virginia, have invented certain new and useful Improvements in Mail-Box Signals; 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.

The invention relates to signals for mail boxes and the like and more particularly to semaphore signals of a character usually employed upon rural delivery mail boxes, to indicate to both the owner and the carrier whether the box contains mail or whether it is empty, the signal being displayed when the box contains mail and being retracted when the box is empty.

The government requires that each rural delivery mail box be provided with a signal adapted to be moved into exposed position by any person, either the carrier or the owner, who deposits mail in the box to indicate to a person authorized to take the deposited mail from the box, that the mail is present therein.

It has been common heretofore to use various forms of pivoted semaphore or flag-like signals capable of being moved manually from retracted to exposed position or vice versa, but with signals of this type much trouble and annoyance has arisen owing to unauthorized persons operating the signal either to indicate the presence of mail in the box or the absence of mail therefrom. When the signal is displayed and no mail is in the box the carrier or the owner is put to the inconvenience of unlocking and examining the box, unnecessarily, and, on the other hand, should there be mail in the box and the signal be maliciously withdrawn, the mail frequently remains for a long period of time in the box, whether said mail be ingoing or outgoing, for the reason that neither the carrier nor owner would inspect the box to ascertain the presence of mail if the signal were not exposed.

It has been suggested that the signal be provided with means for locking it in exposed position to prevent it being tampered with when the box contained mail, but it is obvious that this proposition does not meet the contingency arising from malicious persons moving the signal from retracted to exposed position when no mail is in the box. Furthermore, the locking means, as heretofore proposed, have been complicated and expensive, and, therefore, have not met with popular favor.

It is the purpose of the present invention to provide a simple, cheap and efficient arrangement for locking the signal in both its retracted and exposed positions by the mere operation of moving the box closure to closed position, and, inasmuch as the signal and its appurtenances are capable of application to any of the well known types of mail boxes, it is believed that the invention will supply an urgent need.

In the accompanying drawings Figure 1 is a sectional view of the closure end of a mail box having the invention applied thereto and showing the signal locked in exposed position; Fig. 2 is a corresponding view showing the signal locked in retracted position; Fig. 3 is a horizontal plan view showing the signal locked in retracted position; Fig. 4 is a corresponding view showing a slightly modified form of signal arm.

Referring to the drawings *a* indicates the mail box, which may be of any desired or convenient form to meet the requirements of the Government with respect to rural delivery boxes. In the particular box illustrated, there is provided at one end a hinged door *b* adapted to swing outwardly and downwardly to open the box, and provided with edge flanges on its sides and top, the former engaging the sides of the box, and the latter coöperating with a horizontal flange in the gable of the box and provided with an orifice *c* registering with the corresponding orifice in the gable flange to receive a suitable lock to secure the door in closed position.

Pivotally mounted in the side of the box is a signal arm *e*, which may be conveniently constructed with a rectangular bend on its outer portion to the end of which is secured a semaphore or flag *f*. The inner end of the arm *e* is likewise provided with a cranked arm *h*, and between the two cranked portions the rod or arm *e* is provided with a bend *g* which constitutes a stop to limit the movement of the arm in both directions. The outboard bearing of the arm or rod *e* is conveniently formed by a strap *i* adapted to be secured by rivets or other suitable fastening means to the outside of the box, and the inboard bearing of said arm or rod is formed by a yoke *j* generally U-shaped and secured to the inside of the box, preferably by the

same rivets which hold the strap *i* in position. In applying the semaphore arm the side of the box is pierced, at an appropriate point, with a hole somewhat larger than the diameter of the rod *e*. The plate *i* is threaded over the end of the rod, after which the latter is passed through the hole in the box, and the yoke *j* is then passed over the cranked end *h*. The rivets are then passed through the registering orifices in the strap *i*, the box, and the feet of the yoke *j*, and secured in position, as clearly indicated in the several figures. By this means the semaphore or signal is pivotally secured to the box and is limited in its movement in either direction by the bend or stop *g*, which engages the sides of the yoke alternately.

Mounted upon the inside of the door or closure *b* is a second yoke *m*, which is preferably of U form, having a rear face and a bottom face substantially at right angles to each other, the former of which faces engages the side of the cranked end *h* of the signal arm when the signal is retracted and locks the same rigidly in such retracted position, said arm being held between the stop *g*, which engages the side of yoke *j* on the box, and the cranked arm *h*, which engages the vertical face of yoke *m*, when the door is closed. When mail has been deposited in the box the signal or semaphore is moved to exposed position, as indicated in Fig. 1. When the door is closed the signal is rigidly locked in this position between the lower face of the yoke *m*, which engages the side of the cranked arm *h*, and the stop *g*, which engages the forward inner edge of the yoke *j*. It will be observed, therefore, that the signal is positively locked by the mere act of closing the door, whether said signal be in exposed or retracted position, and when the door has been secured by the usual locking means, the signal cannot be again moved until the door is opened by a person having a proper key to open the box closure.

Fig. 4 illustrates a slight modification of the invention, which differs from that heretofore described merely in the details of construction of the signal or semaphore arm. In the modification the arm is preferably made of separable sections, consisting of a shaft or pintle *e'* having an outer portion of reduced diameter, which forms, with the inner portion, a shoulder to provide a stop to limit the outward movement of said pintle when it is inserted in the opening in the box. The lock or stop *g'*, which coöperates with yoke *j* to limit the movement of the signal in either direction is conveniently formed as a pin or lug, which may be either formed integrally with the shaft *e'* or attached thereto in any convenient manner. Upon the outer end of the shaft *e'* there is secured an angularly disposed arm *e''*, to which the flag or semaphore is attached. The inner end of shaft or pintle *e'* is provided with a cranked arm *h*, of the same general character as that hereinbefore described, which coöperates with yoke *m* on the box closure *b*.

Although the signal has been particularly described with reference to a box having an end closure or door, it will be understood that it is not limited in its application to a box of this character, but is capable of being employed with boxes having any type of movable closure, whether the latter be hinged or sliding, and whether it be located on the top, bottom or side of the box. It is also to be observed that the signal and its locking means are not limited to the particular construction and arrangement hereinbefore described, as I regard it as broadly new to provide a signal for mail boxes and the like which is adapted to be locked in either exposed or retracted position by suitable means associated with the box closure.

What I claim is:

1. A signal for mail boxes and the like, comprising a semaphore pivotally mounted on the box and means operated by the closing of the box closure to lock said signal in exposed and retracted positions, respectively.

2. A signal for mail boxes and the like, comprising a semaphore carrying member adapted to be pivotally mounted on the box, and means to be associated with the box closure for locking said arm in both the exposed and retracted positions of the semaphore.

3. A signal for mail boxes and the like, comprising a semaphore carrying member adapted to be pivotally mounted on the box having an angularly disposed portion, and a detent to be associated with the box closure to coöperate with the said angular portion to lock the said arm in both the exposed and retracted positions of the semaphore.

4. A signal for mail boxes and the like, comprising a semaphore carrying rod having an angularly disposed arm and an intermediate stop, a yoke adapted to be secured to the box in which the arm is journaled and with which the stop coöperates to limit the movement of the semaphore in both directions, and a detent adapted to be secured to the box closure to engage the angular arm to lock the semaphore in both exposed and retracted positions.

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

THURSTON G. BROWN.

Witnesses:

M. CAVE,

J. R. SWEENEY.