

(No Model.)

W. H. HOLLOWAY.
STATION INDICATOR.

No. 578,454.

Patented Mar. 9, 1897.

Fig. 1.

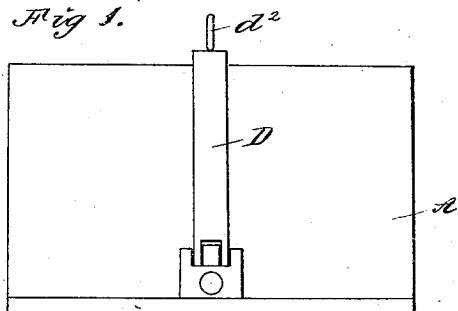


Fig. 2.

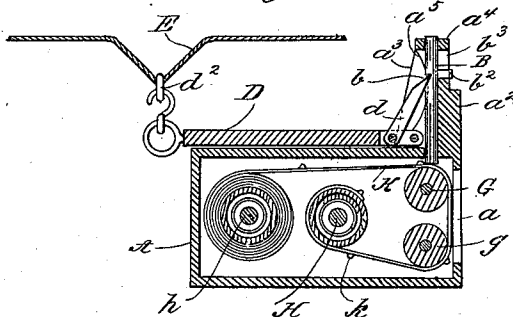


Fig. 3.

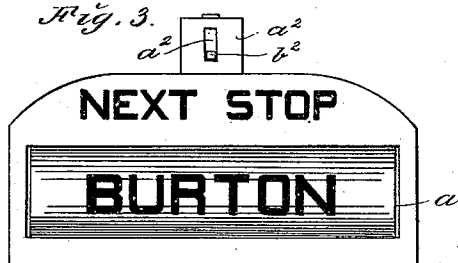


Fig. 4.

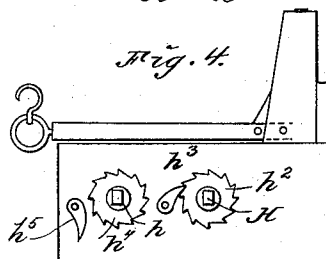


Fig. 5.

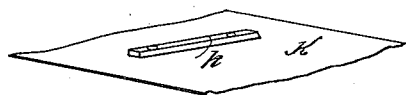


Fig. 6.

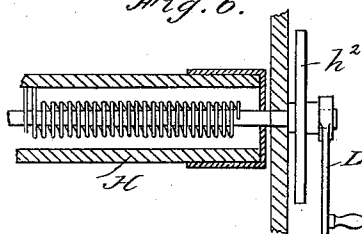
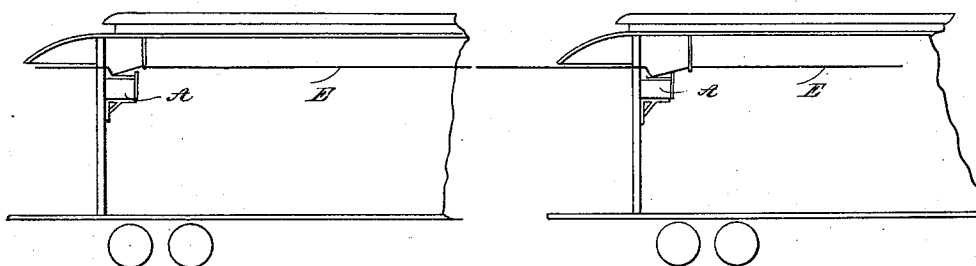


Fig. 7.



WITNESS:

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UNITED STATES PATENT OFFICE.

WILLIAM H. HOLLOWAY, OF BRAZIL, INDIANA.

STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 578,454, dated March 9, 1897. .

Application filed April 22, 1896. Serial No. 588,623. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HOLLOWAY, a citizen of the United States, and a resident of Brazil, in the county of Clay and State of Indiana, have invented certain new and useful Improvements in Mechanical Devices for Signaling, Calling, or Naming the Streets, Corners, or Stations on Railways, 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 mechanical devices for signaling, calling, or naming the streets, corners, or stations on tramway or other railways; and the object thereof is to provide a device of this class which is adapted to be connected with a car and to be operated by means of a cord which is under the control of the conductor, motorman, or driver, a further object being to provide a device of this class which is simple in construction and operation and which is also comparatively inexpensive; and with these and other objects in view the invention consists in the device 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 plan view of my improved street or station calling or naming device; Fig. 2, a central transverse section thereof; Fig. 3, a front view; Fig. 4, an end view; Fig. 5, a section of a strip of canvas or similar material which I employ; Fig. 6, a sectional detail of the construction; and Fig. 7, a side view of the ends of two cars, each of which is provided with my improvement.

In the practice of my invention I provide a box or casing A, one side of which is open, as shown at *a*, and the side which is provided with the opening *a* is continued upwardly to form a vertical extension *a*², and formed in the outer side of said vertical extension is a vertically-movable bolt B, having a notch or recess *b* in the side thereof, and at each side of the vertical extension *a*² are plates *a*³, and the vertically-movable bolt B passes through a top plate *a*⁴, which is mounted on said extension, and at each side of the groove in which said bolt is mounted and near the upper end thereof are outwardly-inclined shoulders

*a*⁵, and pivotally connected with the side plates *b*, at the bottom thereof, is a lever D, to which is secured a pivoted pawl *d*, which is adapted to rest against the bolt B and to operate in connection with the notch or recess *b*, formed therein, and connected with the outer end of the lever D is a ring *d*², through which passes a cord or rope E.

The vertically-movable bolt B is provided with a backwardly-directed shoulder or projection *b*², which passes through a slot *b*³ in the upwardly-directed extension *a*² of the side plate, and said bolt B is adapted to be raised by the lever D and the pawl *d*, as will be readily understood, and the operation of these parts will be hereinafter described.

Mounted longitudinally of the box or casing A and adjacent to the opening *a* and near the upper and lower sides thereof are two rollers G and *g*, and centrally of the box or casing and longitudinally thereof is a spring-roller H, and near the opposite side is a corresponding spring-roller *h*. The spring-rollers H and *h* are of a well-known construction and are similar to those employed for supporting or holding curtains, and mounted thereon is a strip or band K, of canvas or similar material, which may be of any desired length and which is provided at regular or predetermined intervals with transverse plates *k*, which are composed of wood or other material and secured thereto in any desired manner.

One end of the roller H is provided outside of the box or casing with a ratchet-wheel *h*², in connection with which a pivoted pawl *h*³ operates, and the roller *h* is provided with a similar ratchet-wheel *h*⁴, and a pivoted pawl *h*⁵ operates in connection therewith.

The strip K, of canvas or similar material, is provided with the names of the stations on the line on which the device is used, and these names are arranged midway between the strips or plates *k*, and printed above the opening *a* are the words "Next stop," or any similar words may be substituted therefor, and the operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

The construction shown in Fig. 6 represents a section of one of the rollers H or *h*, and said rollers are adapted, at the ends on which are

the ratchet-wheels h^2 and h^4 , to receive a crank L, and these rollers may be wound up by said crank in the usual manner, and it will be understood that either of the rollers H or h may have all of the strip or band K wound thereon, and in this event the other roller-spring will be wound up, so that said strip or band may be pulled thereby over the rollers G and g and wound thereon, as will be readily understood.

If the car be at one end of the line and all the strip or band be wound on the spring-roller h , as shown in Fig. 2, the other spring-roller H will be in position to pull said band off of the roller h over the rollers G and g, and in operation each time that the car approaches a station the cord E is pulled by the conductor, motorman, or driver, and the lever D is raised, thus raising the pawl d , which forces upwardly the bolt B, and thus disengaging the lower end of B from its normal contact with one of the strips or plates k , and the strip or band K will be pulled by the spring-roller H through one space, and the name of the station will show through the opening a . In this operation the end of the lever D forces the bolt B upwardly until the end of said pawl strikes the inclined shoulders a^5 , when it is disconnected from the notch or recess b in said bolt, and said bolt drops into the position shown in Fig. 2 and stops the movement of the strip K by striking the next succeeding plate or strip k , which is secured thereto. It will be understood that this operation is repeated at each stop or station, and when the car reaches the end of the line the strip or band K will all be rolled on the roller H, and the spring of the roller h is then wound up, and during the return trip of the car the operation will be the same as hereinbefore described, the stations or stops being called in the reverse order.

The operation of the ratchet-wheels h^2 and h^4 and the pawls h^3 and h^5 will be readily understood without further description, and it will be apparent that I thus accomplish the object of my invention by means of a device which is simple in construction and operation and one which is well adapted to produce the result for which it is intended.

In Fig. 7 I have shown two cars provided with my improved signal or station-calling device, and it will be understood that any number of cars in a train may thus be provided and that each may be operated by the same cord, all that is necessary being to connect the cord with each of the levers D, as hereinbefore described.

In practice these signal boxes or cases are secured to the ends of the car, so that the opening a in the side thereof may be plainly seen, and this connection with the car may be made in any desired manner, the only object being to so locate the signal-boxes that they will be above and out of reach of the occupants of the car or cars and so that the cord or line E will not be interfered with.

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

1. A station signaling or calling device, adapted for use in connection with tramway and other cars, said devices consisting of a box or casing which is adapted to be secured within a car, and being provided with an opening in the side thereof, and with a vertical extension through which passes a vertically-movable bolt, said box or casing being also provided with a pivoted lever which is provided with a pawl which is adapted to operate in connection with said bolt, and said lever being adapted to be operated by a cord which is connected therewith, said box or casing being also provided adjacent to said opening with two rollers, one of which is mounted above the other, and also with two spring-rollers which are suitably mounted therein, on which is placed a strip or belt, on which are placed at regular intervals, the names of the stations on the line, which belt is in connection with the vertically-fixed bolt hereinbefore mentioned and by means of which the said belt is released at predetermined intervals, substantially as shown and described.

2. A station signaling or calling device, adapted for use in connection with tramway and other cars, said device consisting of a box or casing which is adapted to be secured to the end of a car, and being provided with an opening in the side thereof, and with a vertical extension through which passes a vertically-movable bolt, said box or casing being also provided on its upper side with a pivoted lever which is provided with a pawl which is adapted to operate in connection with said bolt, and said lever being adapted to be operated by a cord which is connected therewith, said box or casing being also provided adjacent to said opening with two rollers, one of which is mounted above the other, and also with two spring-rollers which are suitably mounted therein, on which is placed a strip or belt, on which are placed at regular intervals, the names of the stations on the line, the strip or belt which is provided with the names of the stations, being also provided at regular intervals with transverse strips or plates which are secured thereto, which are adapted to operate in connection with said vertically-movable bolt, substantially as shown and described.

3. A station signaling or calling device, for use on tramway and other cars, comprising a box or casing having an opening in the front thereof, said box or casing being provided with two rollers which are mounted therein adjacent to said opening and at the upper and lower sides thereof, and with two spring-rollers on which is mounted a strip or belt on which the names of the stations on the line are placed, and means whereby the rollers are allowed to actuate, consisting of a vertically-movable bolt, which is adapted to operate in connection with transverse strips or

plates secured to said belt, substantially as shown and described.

4. A station signaling or calling device, for use on tramway and other cars, comprising a box or casing having an opening in the front thereof, said box or casing being provided with two rollers which are mounted therein adjacent to said opening and at the upper and lower sides thereof, and with two spring-rollers on which is mounted a strip or belt on which the names of the stations on the line are placed, and means whereby the rollers may be allowed to actuate, consisting of a vertically-movable bolt, which is adapted to operate in connection with transverse strips or plates secured to said belt, and means under the control of the conductor for operating said bolt, substantially as shown and described.

5. A station signaling or calling device, for use in tramway and other cars, comprising a box or casing having an opening in the front thereof, said box or casing being provided with two rollers which are mounted therein

adjacent to said opening and at the upper and lower sides thereof, and with two spring-rollers on which is mounted a strip or belt on which the names of the stations on the line are placed, and means whereby the rollers may be allowed to actuate, consisting of a vertically-movable bolt, which is adapted to operate in connection with transverse strips or plates secured to said belt, and means under the control of the conductor for operating said bolt, consisting of a lever which is pivotally supported and provided with a pawl which is adapted to operate in connection with a notch or recess formed in said bolt, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 16th day of April, 1896.

WILLIAM H. HOLLOWAY.

Witnesses:

MORTON E. DECKER,
CHAS. B. MAPES.