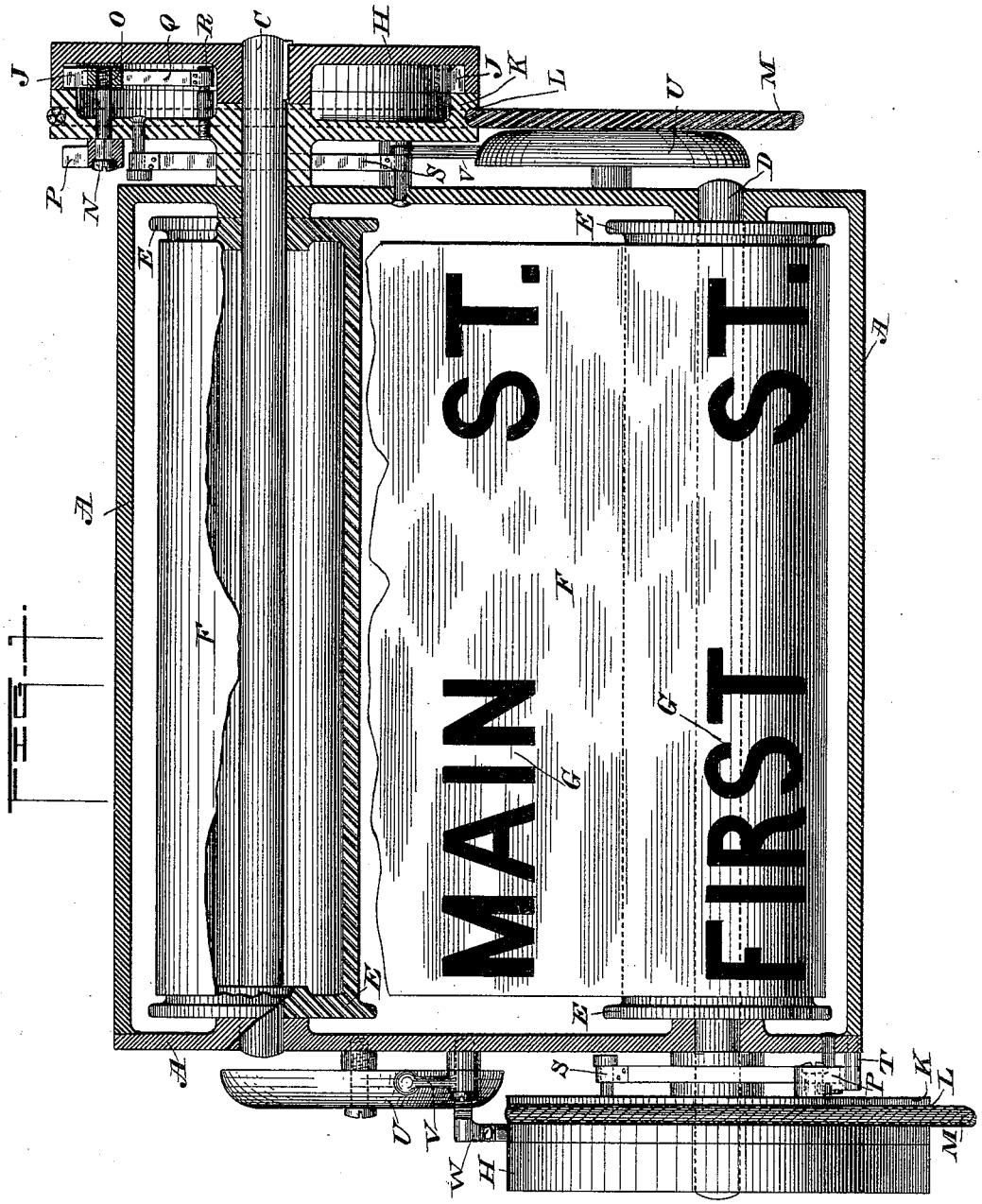
(No Model.)

2 Sheets—Sheet 1.

E. MILLER, Jr.

STATION INDICATOR.

No. 526,111. Patented Sept. 18, 1894.



EDWARD MILLER, Jr.,

Inventor

by Wm. F. Moore,

Attorney

Witnesses
Frank Blair Rives.
May E. Moore.

(No Model.)

2 Sheets—Sheet 2.

E. MILLER, Jr.

STATION INDICATOR.

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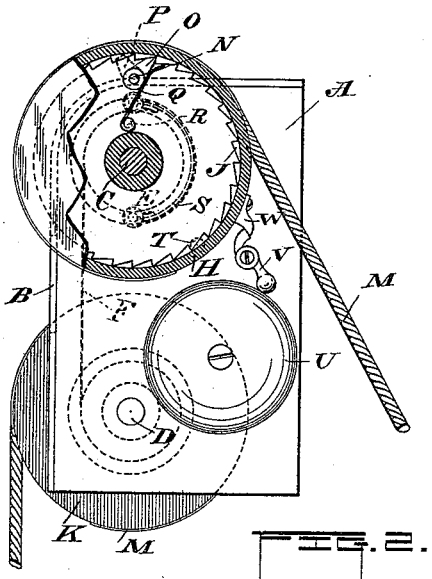


FIG. 2.

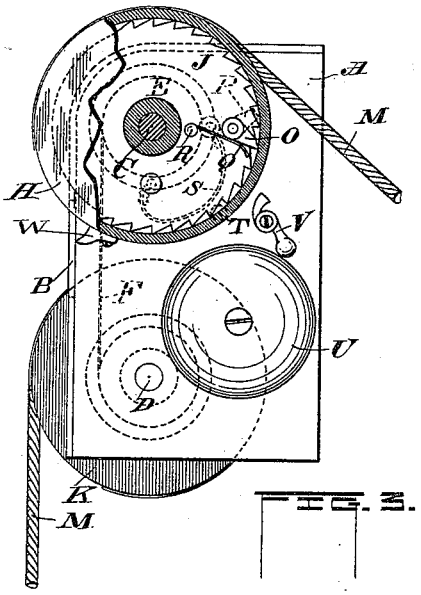


FIG. 3.

FIG. 4.

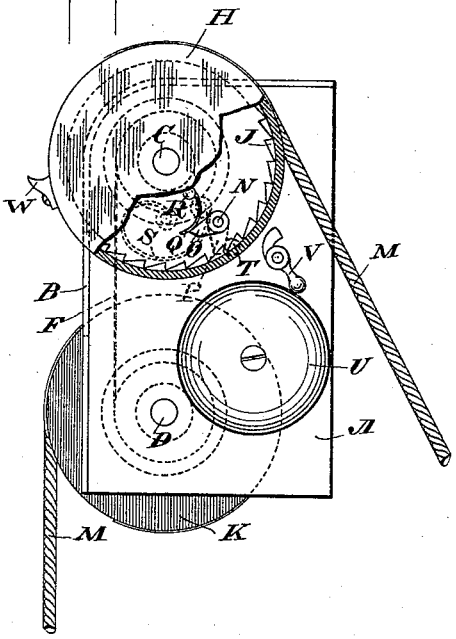
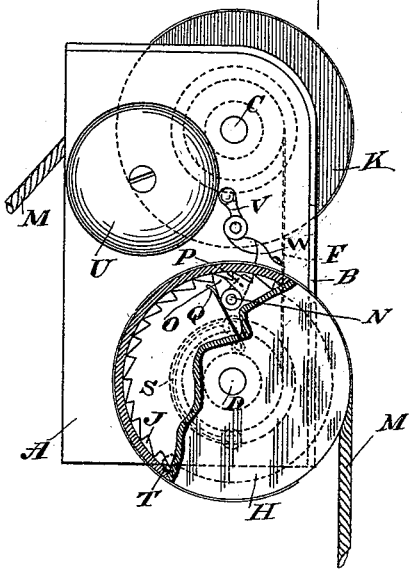


FIG. 5.



EDWARD MILLER, Jr.,

Inventor

Witnesses
Frank Blair Rives.
May E. Moore.

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Attorney

UNITED STATES PATENT OFFICE.

EDWARD MILLER, JR., OF EVANSVILLE, INDIANA.

STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 526,111, dated September 18, 1894.

Application filed June 1, 1894. Serial No. 513,189. (No model.)

To all whom it may concern:

Be it known that I, EDWARD MILLER, Jr., a citizen of the United States of America, residing at Evansville, in the county of Vanderburg and State of Indiana, have invented certain new and useful Improvements in Station-Indicators, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in station indicators, that is to say a device for indicating to passengers the stations or streets, and the object of my invention is the provision of a compact indicator which will occupy but very little space in the car and which will be of ornamental appearance; which will be composed of very few parts rendering the device of simple, durable and inexpensive construction and not likely to get out of order in consequence of hard usage and which will be entirely efficient in operation thus providing a station indicator which will commend itself as practical and economical.

The invention consists of a station indicator embodying novel features of construction and combination of parts substantially as disclosed herein.

In order that the details of construction of my indicator may be clearly understood and the operation and advantages arising therefrom be appreciated I have illustrated in the accompanying drawings an indicator embodying my improvements.

Figure 1 represents a front elevation of my indicator with parts shown in section or broken away to clearly and fully show the details of construction and arrangement of parts, and Figs. 2, 3, 4, and 5 represent side or edge elevations with parts in section, these views being designed to show the operation of the indicator.

In the drawings, the letter A designates the casing or housing which is provided with the sight opening B, and this casing is preferably made of cast metal and of the proper size.

In the upper and lower portion of the casing are mounted the shafts C and D which are arranged parallel and each having one end projected or extended beyond the opposite side of the casing, as clearly shown. On the shafts are secured the drums or spools E, upon which is placed and adapted to be wound the belt or band F, having thereon the street or station indications G, which when the drums revolve are brought before the sight opening of the casing and exhibited to the view of passengers.

On each of the extended ends of the shafts are rigidly secured the dished wheels H, having on the inner face of the rim thereof the ratchet teeth J, and adjacent to said wheels on the same shafts are placed the loose wheels K, to the grooved peripheries L, of which are attached the ropes or operating cords M.

Passing through the loose wheels is the stud N, carrying at one end the pawl O, which normally engages the ratchet teeth of the fast wheels and at the other end the oppositely arranged pawl P, and the ratchet engaging pawls O, are retained normally in engagement with the ratchet teeth by the flat springs Q, one end of which is secured to the stud or pin R and the free end bears against the face of the pawls O, as clearly shown.

Attached to the casing at one end and to the loose wheels or pulleys at the other end are the flat springs S, the purpose of which springs is to return the loose pulleys to the proper position ready to be moved when it is desired to show the next stop or station. To the casing are also secured or formed thereon the lugs T, which are adapted to form stops or abutments against which the pawl P, contacts at the proper time and releases the loose wheel from the connection with fast wheel and allows the loose wheel to return ready to be moved again to exhibit the next station.

To give an alarm to the passengers of the next station I provide the bells U, which are secured to the casing, and are struck by the gravity striker V, which is engaged by the lug W, secured to the periphery of the loose wheels.

The operation of my improved station indicator will be readily understood from the foregoing description taken in connection with the accompanying drawings and I will simply say that normally the ratchet engaging pawls are in engagement with the ratchets of the fast wheels and when the operating cords are drawn upon the loose pulley moves and by reason of its connection with the fast pulley or wheel it moves the fast pulley and

the band and displays the next station and when the proper movement of the fast wheel has been made the free pawl engages the abutment of the casing which releases the ratchet engaging pawl and the spring returns the loose wheel ready for the next station and after the band has been unwound and the stations going in one direction have all been exhibited the operating cord of the other set of pulleys is similarly acted upon and the band is moved back and the stations on the return trip are shown. In other words the upper set of pulleys moves the band in one direction to show the stations along the road and the lower set moves the band in the opposite direction to show the stations on the return trip.

I claim—

1. The combination of the casing, having the sight opening, the parallel shafts mounted in the casing, the indicating band adapted to be wound first upon one shaft and then upon the other, the fast and loose wheels arranged upon one end of each shaft, the springs for returning the loose wheels, a suitable connection between the fast and loose wheels to make them turn simultaneously and devices for permitting the springs to return the loose wheels after each station has been shown.

2. The combination of the casing having the sight opening, the parallel shafts mounted in the casing and carrying the drums or spools, the band having the ends connected to the drums and adapted to wind first upon one and then the other drum, the fast wheels connected to the end of the shafts, the loose wheels adjacent to the fast wheels, the pivoted pin or stud carried by the loose wheels and carrying the pawls which engage the fast wheels and also the tripping pawl, means for turning the fast and loose wheels and a stop for engaging the tripping pawl to allow the return of the loose wheel.

3. The combination of the casing having the sight opening, the shafts mounted therein and carrying the belt or band, the fast wheels secured to the extended ends of the shafts and having the internal ratchet teeth, the loose wheels on the shafts adjacent to the fast wheels, the pivoted pins carrying the pawls engaging the internal ratchets and the tripping pawls, the stops or abutments for tripping said pawls, the springs for returning the loose wheels, and an alarm adapted to be sounded at each station.

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

EDWARD MILLER, JR.

Witnesses:
WILLIAM KOCH,
ELI D. MILLER.