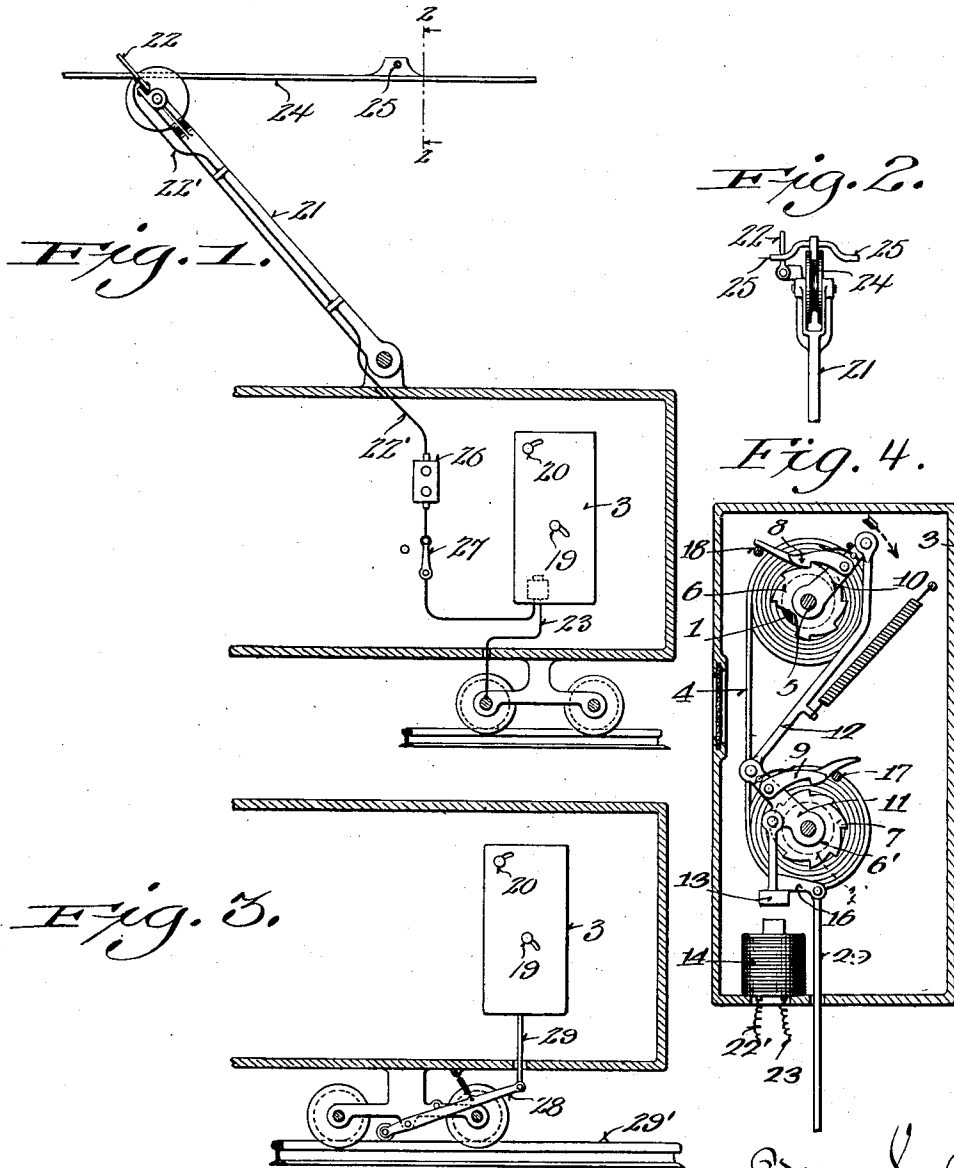


A. GERGELY.
STATION INDICATOR.
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1,189,441.

Patented July 4, 1916.



Witnessed:
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UNITED STATES PATENT OFFICE.

ALBERT GERGELY, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF TO ARTHUR J. WILSMAN, OF TWO RIVERS, WISCONSIN.

STATION-INDICATOR.

1,189,441.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALBERT GERGELY, a subject of the Emperor of Germany, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Station-Indicators; and I do hereby declare that the following is a full, clear, and exact description thereof.

The object of my invention is to provide a simple, economical and effective station indicator for public conveyances, the same being utilized in connection with indicating street crossings and it is especially designed for use in connection with either overhead or surface railways and is also especially adapted for use in connection with electrically propelled vehicles of the above character.

With the above object in view the invention consists in certain peculiarities of construction and combination of parts as set forth hereinafter with reference to the accompanying drawings and subsequently claimed.

In the drawings Figure 1 represents a diagrammatic view of a street or station indicator embodying the features of my invention, the same being shown applicable to an electrically propelled car having an overhead feed-wire; Fig. 2 represents a cross-section of the feed-wire illustrating one of a series of contact members with which the feed-wire is provided; Fig. 3, another diagrammatic view of a car equipped with an indicator having actuating means that is adapted to be engaged by a series of tappet-plates or members, which members are disposed at fixed distances paralleling the track of the vehicle, the said diagram illustrating mechanical means for effecting the desired shifting movement of the indicator; Fig. 4, a sectional elevation of a form of indicator together with means for actuating the same.

Referring to Fig. 4 of the drawings, 1 and 2 represent rolls which are journaled in a casing 3 having a front opening therein through which street names carried by a tape 4 may be observed. The opposite ends of the tape 4 are connected to the rolls 1 and 2, which rolls are loosely mounted upon their respective shafts 5, 6', the said rolls carrying toothed ratchet wheels 6 and 7 that are engaged by pawls 8, 9, respectively.

These pawls are mounted upon rocker arms 10, 11, which extend in opposite directions from the alined shafts 5 and 6', respectively and are connected by a spring-controlled link 12. The lower rocker-arm 11 has suspended therefrom an armature 13 which is controlled by a magnet 14, the armature being also provided with an apertured ear 16 for connection to means whereby the actuating mechanism of the rolls can be mechanically controlled.

As clearly shown in Fig. 4 the nose of the pawl 9 is engaged by a pin 17, whereby said pawl is held out of engagement with its ratchet-wheel 7, there being a similar pin 18 that is adapted to be moved into or out of the path of travel of the nose of pawl 8, the said pin in this instance being shown moved clear of said pawl.

From the foregoing description it is apparent that when the rocker arm 11 is actuated by downward pull, its pawl 9 will travel idly, while the pawl 8 will engage the ratchet 6 and thus rotate the upper roll in the direction indicated by the arrow whereby the tape 4 which constitutes the indicating means is moved a predetermined distance to display the name of a street or station opposite the casing aperture. Thus said movement can be effected intermittently as the case may require.

When the vehicle containing the indicator has reached the end of its road the pin 17 is shifted so as to clear the nose of the pawl 9 and the pin 18 moved to a position where it will engage the nose of pawl 8, this shift being effected by means of buttons 19 and 20 respectively, which project through slots in the casing wall, as best shown in the diagram view Fig. 1. Hence it is apparent that after such shift, with each downward movement of the rocker arm 9, the direction of travel of the tape or strip 4 will be reversed for the purpose of indicating the streets along the line in their respective order upon the return trip of the car. Hence it is apparent that by utilizing individual buttons which are shifted into the path of travel of the pawls, either or both of said pawls can be thrown out of engagement whereby the feed of the tape is reversed or entirely stopped. The particular advantage of this construction is the provision whereby the indicator mechanism may be manually thrown out of commission in

instances where the car is shifted from its ordinary route in emergencies.

As best shown in the diagram view, Fig. 1, when it is desired to operate the device electrically the trolley 21 of the car has attached thereto a tappet member 22, which member is insulated from said pole and connected by a wire 22' of the magnet 14, there being a ground wire 23 that is also connected to the magnet and to any metallic convenient point of the car mechanism, whereby a ground is effected. The overhead feed-wire 24 in this instance is provided with a series of tappet-lugs 25 which are disposed at arbitrary selected points adjacent to the cross streets of the system and hence when the car passes under one of said tappet-lugs it is apparent that an electric connection between the said lug and tappet member 22 will be effected to close an electrical circuit, whereby the magnet is energized, actuating the indicator as previously mentioned. As shown in the diagram I may also provide a resistance 26, through which the current from the feed-wire will travel, and a switch 27, whereby the current may be entirely cut off under certain conditions.

When it is desired to operate the indicator mechanism mechanically as shown in the diagram view Fig. 3, I provide a tappet member in the form of a spring-controlled lever 28, which lever is fulcrumed at any convenient point upon the car or its truck. The lower end of the lever 28 carries a roller which is adapted to engage a series of tappet lugs 29' that are extended upwardly from the road-bed in the path of travel of the roller. The opposite end of

the arm of the lever 28 is connected by a link 29 to the ear 16 of the indicator armature 13. Hence it is apparent that as the car travels in either direction the tappet member or lever 28 will engage successively the series of lugs 29' that are disposed in its path and thus mechanically actuate the indicator mechanism in a similar manner to that when the device is under electrical control. It should also be understood that I may utilize various mechanical equivalents in connection with actuating the indicator strip, whereby the same is intermittently moved in synchronism with the street crossings.

I claim:

An indicating mechanism comprising a casing, a pair of spool shafts journaled in the casing, a tape wound on said shafts, arms extended from the shafts, means adapted for rocking one of the arms in one direction only, a link connecting the arms, oppositely toothed ratchet wheels carried on the shafts, coacting pawls carried by the arms and shiftable stop members engageable with the pawls to hold either or both from engagement with their respective ratchet wheels whereby successive actuations of the rocking means may operate to move the tape in either direction.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee in the county of Milwaukee and State of Wisconsin in the presence of two witnesses.

ALBERT GERGELY.

Witnesses:

GEO. W. YOUNG,
M. E. DOWNEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."