

F. M. STANLEY.  
STREET INDICATOR FOR CARS.  
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1,005,788.

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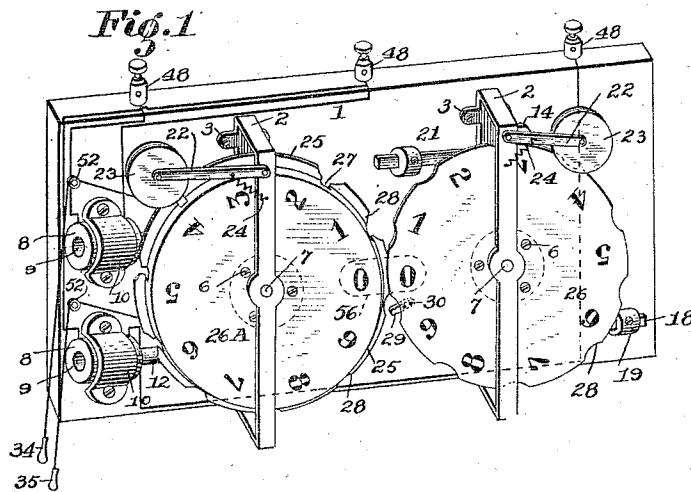


Fig. 2

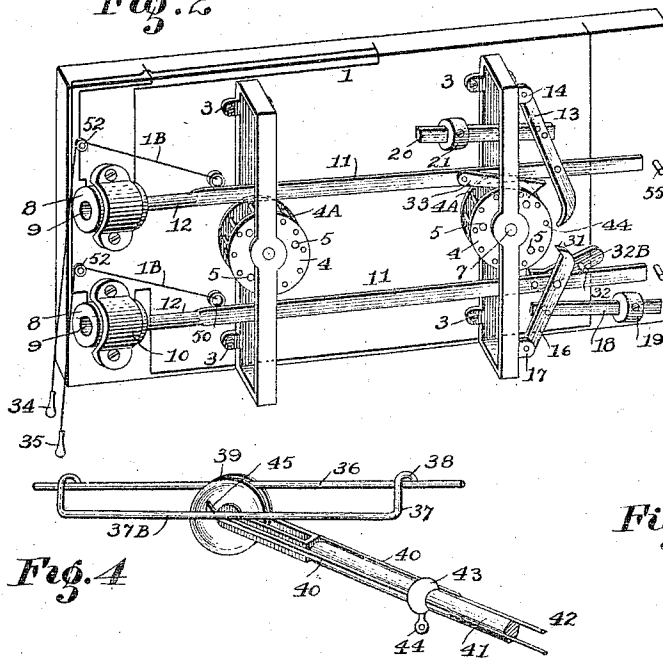


Fig. 4

|       |   |
|-------|---|
| Pine  | 1 |
| Glen  | 2 |
| Fern  | 3 |
| Grant | 4 |
| Ide   | 5 |

Fig. 6

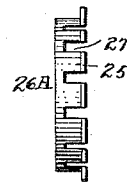
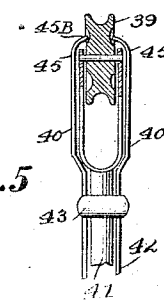


Fig. 3

Fig. 5



Witnesses:  
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# UNITED STATES PATENT OFFICE.

FRANK M. STANLEY, OF WICHITA, KANSAS.

## STREET-INDICATOR FOR CARS.

1,005,788.

Specification of Letters Patent.

Patented Oct. 10, 1911.

Application filed October 19, 1909. Serial No. 523,445.

*To all whom it may concern:*

Be it known that I, FRANK M. STANLEY, a resident of Wichita, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Street-Indicators for Cars; 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 street indicator for trolley cars, and has for its object 1st, the displaying of numbers designating the streets crossed, so that one not familiar with the streets (especially in the night) may know when to stop the car. In conjunction with my indicator I have placards adjacent the indicator bearing the names of the streets on the different car lines, and each street name has its own number, and the passenger knowing the names of the desired street can watch the indicator display the street number desired.

Another object of my invention is when the car reaches its destination or end of the line the indicator will reverse its action and will indicate the streets on its return trip, when said car reaches a central point the indicator can again be set at zero. A new placard is then displayed showing the names of the streets to be traversed and the indicator will display the numbers as before stated.

Another object is to produce a simple inexpensive and durable apparatus easily applied to a car.

I attain these objects by the mechanism illustrated in the accompanying drawings described in the specifications and succinctly defined in the appended claims.

Figure 1 is a perspective view of my indicator having the face-plate removed. Fig. 2 a view of Fig. 1 having the dial disks removed, showing the construction and assembling of the mechanism within. Fig. 3, a top plan view of the disk 26<sup>A</sup>. Fig. 4 the trolley wire and short circuit wire and the springs contacting said short circuit wire. Fig. 5 a sectional view of the trolley-wheel and the springs 40 with their free ends curved inward and positioned in the grooves of the trolley wheel. Fig. 6 a placard.

Similar numbers refer to similar parts throughout the specifications.

Referring to the drawings: 1 designates a rectangular block of wood on which are

affixed brackets 2, said brackets having lugs 3 to receive the fastening screws, these brackets are rectangular in form and are provided with lugs 14 and 17 to which are pivoted arms 13 and 16 these arms having hooked ends 15 and 31, to these arms are riveted lateral extensions 18 and 20. On said extensions are slidably mounted weights 19 and 21, which are affixed in the desired position by set screws.

To the arms 13 and 16 are pivoted horizontally flat metallic bars 11, to said bars are pivoted dogs 32<sup>B</sup>, and 33, a stop pin 32 is placed in dog 32<sup>B</sup> to contact the bar 11 to limit its downward movement. On one end of the bars 11 are round extensions turned off smooth which are to enter the tubes of the electromagnets 8. Said magnets are held in position on the block 1 by jackets 10. Wires 46 and 47 lead from the magnets to the thumb screws 48 and are suitably connected to wires 42 extending up the trolley-pole 41 and attached to flat springs 4 whose free ends are given an inward curve 45, and are positioned in the recesses 45<sup>B</sup> of the trolley-wheel 39. A band 43 (having a pierced lug 44 to receive the trolley-rope) encircles the trolley pole and wires 42.

A trolley-wire 36 has welded thereto at each street crossing a short circuit wire 37 which is given a bend 38 which positions the body portion 37<sup>B</sup> of the wire horizontally subjacent to the trolley wire 36.

Disks 4 are mounted upon arbors 7 and connected in pairs with iron rods which serve as cogs. These disks 4 are provided with holes 5 to receive bolts. The dial-disks are positioned against the disks 4 and are secured thereto by bolts 6 which pass through said disks and through the holes 5 in the disks 4. The dial disk 26 has 10 circular indents 28 in its perimeter. The dial disk 26<sup>A</sup> is of the form shown in Fig. 3 being approximately the shape of a car-wheel having 10 rectangular notches 27, and the rim 25 having circular indents 28 registering with the notches 27. The disk 26 has an arm 29 affixed to it with rivets 30 which engages the notches 27 when the disks are rotated.

To the brackets 2 are pivotally secured arms 22, which have pivoted on their free ends, grooved rollers 23. These grooved rollers are held in yielding contact with the perimeters of the dial disks by springs 24. Pins 55 are placed in the block 1 to limit

the movement of the bars 11. The dial disks are provided with figures adjacent their perimeters from 1 to 9 and one 0, denoting zero. The street numbers are shown through an opening of the form shown at 56, which is to be made in the face plate.

Having described the construction and assembling of my machine I will now describe its operation generally.

10 The machine is fastened to the inside end of the car, the machine being set at zero, as shown in Fig. 1 when the car is to start on its trip. A placard is displayed, showing the names and numbers of the streets when 15 the springs 40 contact the short circuit wires the magnets will jerk the round extension 12 of the bars 11 into the tube 9 and the dog 33 will engage one of the cogs 44 and impart to the dial disk 26 (which is units disk) an 20 intermittent rotative movement and bring the figure 1 down to the sight opening 56. Coincident therewith the hook 15 engages one of the cogs 44 and stops the rotation of the dial disk, and the grooved roller 23 25 drops into one of the circular indents 28 and brakes the recoil of said dial and insures the figure 1 to be properly displayed through the sight opening, when the next street is crossed figure 2 is displayed and so on until 30 9 is displayed through the sight opening at which turn the arm 29 enters one of the notches 27, in the dial 26<sup>A</sup> (the digits disk). The next move brings figure 1 of the dial 26<sup>A</sup> and the cipher on dial 26 both to the sight 35 opening designating street No. 10. When the spring 40 is out of contact with the short circuit wire 37, the magnetism ceases and the weighted arm 20 throws the bar 11 back against the stop pin 55. When the car 40 reaches its destination the trolley is reversed and the lower bar 11 is brought into operation which operates exactly in the same manner as the upper one, and rotates the dial in the opposite direction and thereby re- 45 traces to the starting point. If it is desired to run the car on another line the machine is again set at zero, a new placard displayed bearing the names and numbers of streets.

It will be seen that the machine will indicate the streets on any line in a city it only 50 being necessary to display a card bearing the names of the streets, each street having its own number.

From the foregoing it will be observed 55 that I have produced a simple compact and durable machine comprehending positively cooperating elements, but while the present embodiment of the invention is believed at this time, to be preferable, still I do not

desire to limit myself to the structural details defined; but reserve the right to effect such changes modifications and variations as may be comprehended within the scope of the protection prayed.

What I claim is:

1. In a street indicator for cars, disks spaced apart, pins uniting said disks, arbors in said disks, a block, brackets mounted on said block, said arbors being mounted in said brackets, units and digits disks provided 70 with peripheral indents rigidly affixed to the aforesaid disks, means cooperating with said pins for imparting to the units disk an intermittent rotative movement, means 75 for effecting a movement of the digits disk for each revolution of the units disk, means for abruptly terminating the rotative movement of the units disk, grooved rollers yieldingly positioned against the indented peripheries of the disks and cooperating with 80 said indents to control the recoil of said disks when abruptly stopped as aforesaid and to properly position the numerals at the sight opening, means for reversing the rotation of the disks, and means for placing 85 the disks as zero.

2. In a street indicator for cars, disks spaced apart, pins uniting said disks, arbors in said disks, a block, brackets mounted on said block, said arbors being mounted in said brackets, units and digits disks provided with peripheral indents rigidly affixed 90 to the disks aforesaid, rectangular transverse notches in the periphery of the digits disk, means on the units disk to engage the notches in the digits disk to effect a movement of said disk for each revolution of the units disk, longitudinally movable bars, electromagnets to operate said bars, said 100 magnets embracing one end of said bars and the other being pivotally suspended, dogs pivoted to said bars to engage the pins associated with the units disk and impart intermittent rotative movement to the said units disk, and means for abruptly terminating 105 said movement, spring pressed grooved rollers to engage the aforesaid indents to positively locate the numerals properly at the sight opening and means for intermittently energizing the electromagnets to actuate the indicating means. 110

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

FRANK M. STANLEY.

Witnesses:

M. BROWN,  
E. C. BROWN.