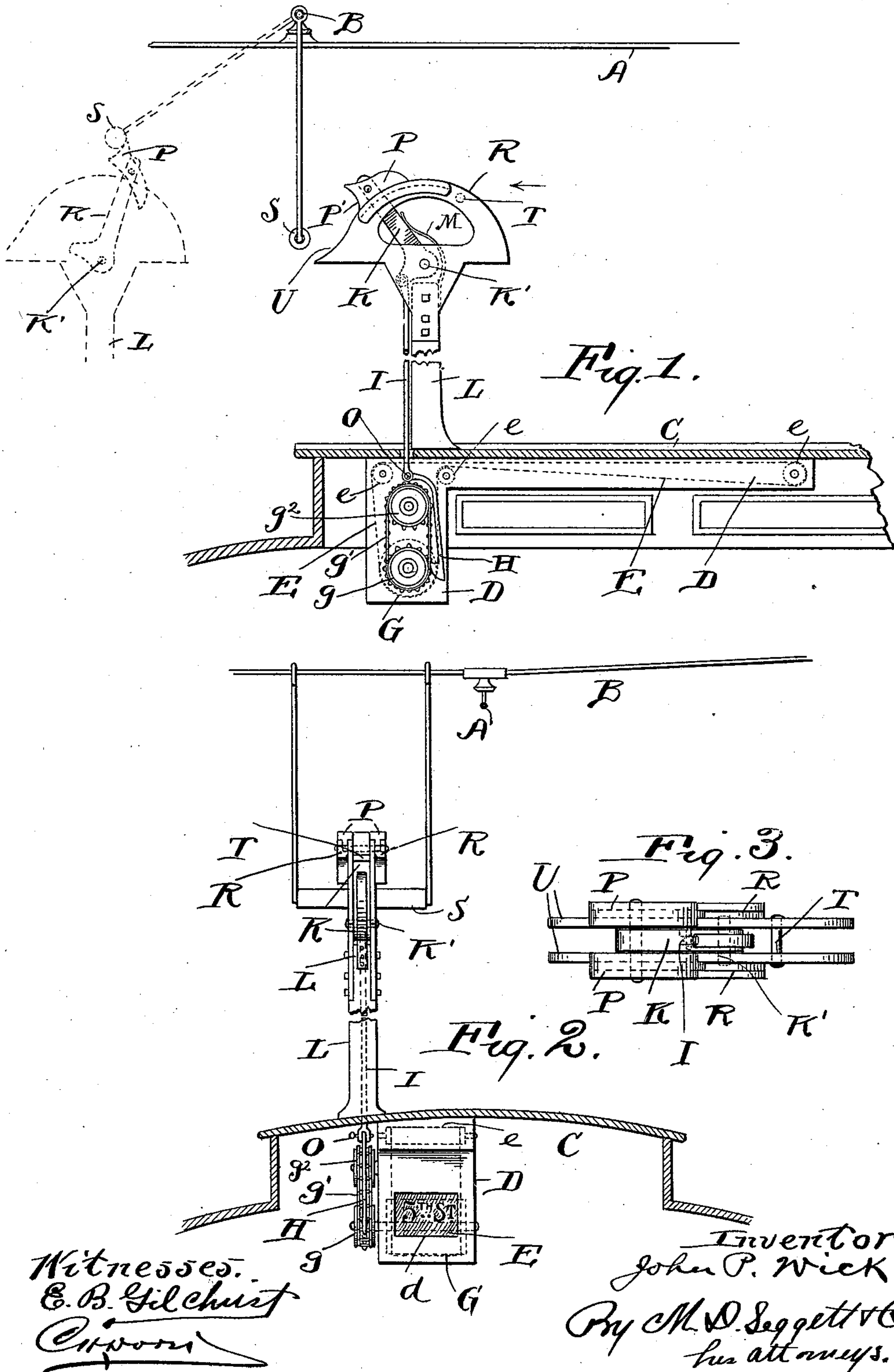


(No Model.)

J. P. WICK.
STREET INDICATOR.

No. 540,476.

Patented June 4, 1895.



UNITED STATES PATENT OFFICE.

JOHN P. WICK, OF PARMA, ASSIGNOR OF ONE-FOURTH TO CLARA S. LEAR,
OF CLEVELAND, OHIO.

STREET-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 540,476, dated June 4, 1895.

Application filed September 29, 1894. Serial No. 524,432. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. WICK, of Parma, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Street-Indicators for Street-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 pertains to make and use the same.

My invention relates to improvements in street-indicators for street-cars, more especially designed for electric street-railways wherein the overhead trolley-wire is employed, and wherein said trolley-wire is supported from cross-wires traversing the street or highway at suitable intervals.

In the accompanying drawings, Figure 1 is a side elevation of a street-indicator embodying my invention, the top of the street-car and a trolley-wire supporting cross-wire overhead being shown in section. Fig. 2 is a transverse elevation relative to Fig. 1, the top of the car and trolley-wire being in section. Fig. 3 is a top plan of a portion of the means employed for operating the street-indicator belt of the street-indicator.

Referring to the drawings, A designates the trolley-wire or power-conductor of an electric railway wherein the overhead trolley-wire or conductor is employed.

B represents one of the cross-wires from which the trolley-wire is suspended.

C designates a street-car and D represents a box or case suitably supported within the car preferably next to the ceiling and at or near the front end of the car.

A traveling-belt E, that engages a roller G suitably supported within the lower portion of box or case D, leads over any suitable number of guide rollers *e* and has printed or otherwise marked thereon the names of the streets to be indicated, said belt being adapted to move by the inner side of a window *d* with which box or case D is provided, and at which window the name of the street to be indicated is exhibited.

A sprocket-wheel *g* is operatively connected with roller G and is also operatively connected, by means of a chain *g'*, with another sprocket-wheel *g*² suitably supported from

box or case D a suitable distance above sprocket-wheel *g*.

Chain *g'*, and consequently the street-indicating-belt E, is actuated by a pawl or dog H, said dog or pawl being adapted to engage the links of the chain and actuate the chain as required to propel the street-indicating belt.

Pawl or dog H, at its upper end, is operatively connected with the lower end of an upwardly-extending rod or link I, that, at its upper end, is operatively connected with the short arm of a bell-crank-lever K that is fulcrumed at K', to any suitable support, such, for instance as a post or standard L on top of the car.

By the construction just described, it will be observed that the street-indicating-belt will be actuated to indicate the next cross street by actuating lever K in the one direction, and in the case illustrated this actuation of the belt takes place by moving the lever in a direction to lift or elevate the actuating dog or pawl. After the actuation of the belt to indicate the next street the gravity of dog or pawl H and link I will return said parts to their lower or normal position, and a spring M, engaging the long arm of the bell-crank-lever and acting in a direction to retain said lever and connected parts in their normal position, is preferably provided.

Dog or pawl H is preferably removably secured to link I by means of a removable pin O, as required, in order to enable the reversal of the pawl or dog when the car is propelled in the opposite direction upon reaching either terminus of the electric-railway.

One or more blocks P are pivotally secured to and at or near the outer end of the long arm of lever K. In the case illustrated two blocks P are employed, the same being located at opposite sides of the lever, respectively, and on their under or lower side engage segmental ways or guides R rigid with post or standard L, said under sides of blocks P being shaped to conform to the ways or guides upon which the blocks are adapted to move during the operation of the street-indicating-belt. Blocks P, at their forward sides, are concave, as at P', and said concave surfaces of the blocks are adapted to be engaged by a roller S suitably suspended from the cross-

wire overhead, the arrangement of parts being such that the concave surfaces of blocks P, during the forward propulsion of the car, shall come into engagement with the suspended roller S, and by said roller be actuated rearwardly as indicated by dotted lines in Fig. 1, resulting in the actuation of lever K to effect the operation of the street-indicating-belt. A stop P for limiting the rearward actuation of lever K is preferably provided and consists preferably of a pin T rigid with guides R. Guides or ways R, at their forward ends, preferably terminate in inclines U the trend whereof is downwardly and forwardly, and rollers S suspended from the cross-wires (wires that support the trolley-wire) are preferably arranged in line with the path of inclines U, so that in case rollers S are swayed to and fro, during a severe wind or storm, said movement of the rollers shall be arrested by inclines U before coming into engagement with members P.

What I claim is—

1. In a street-indicator for street-cars, the combination with the car, a traveling-belt suitably supported within the car and bearing the names of the streets to be indicated, of a segmental way or guide located outside of and suitably supported from the car, a block movable upon said way or guide and operatively connected with the aforesaid belt, said block being provided with a concavity upon its forward side, and any suitable object or device suspended a suitable distance above the street and adapted to be engaged by the aforesaid block during the forward propulsion of the car, substantially as set forth.

2. In a street-indicator for street-cars, the combination with the car, a traveling-belt suitably supported within the car and bearing the names of the streets to be indicated, of a post or standard on top of the car, a segmental way or guide borne by said post or standard, a block engaging said way or guide and operatively connecting with the aforesaid belt, said block being provided with a concavity upon its forward side, and a roller suspended overhead and adapted to be engaged by the concavity in the aforesaid block, the arrangement of parts being substantially as indicated, whereby the concave block is actuated rearwardly upon its engagement with the suspended roller during the forward movement of the car, substantially as set forth.

3. In a street-indicator for street-cars, the combination of the car, a box or case suitably supported in the car and provided with a window, a roller supported within said case or box, a sprocket-wheel operatively connected with said roller, another sprocket-wheel supported a suitable distance from the roller, a chain operatively connecting the sprocket-wheels with each other, a traveling-belt bearing the names of the streets to be indicated, and operatively connected with the aforesaid roller, a pawl or dog adapted to engage the aforesaid chain and thereby operate the street-indicating-belt, and post or standard on top of the car, a bell-crank-lever suitably supported at the upper end of said post and having a long arm and a short arm, a link operatively connecting the belt-actuating dog or pawl with the short arm of the lever, a block pivoted to and at or near the outer end of the long arm of the lever and provided with a concavity at its forward side, a segmental way or guide for said block, the under side of the block being shaped to conform to said guide or way, a wire crossing the street a suitable distance overhead, a bar suitably suspended from said wire and adapted to be engaged by the concave side of the aforesaid block during the forward movement of the car, and a stop or limiting the rearward movement of the aforesaid lever, all arranged as shown, for the purpose specified.

4. In a street-indicator for street-cars, the combination with the car, a traveling-belt suitably supported within the car and bearing the names of the streets to be indicated, a segmental way or guide R borne by and above the car, said guide or way terminating at its forward end in an incline U, a block engaging and movable upon said guide or way and operatively connected with the aforesaid belt, and any suitable object or device suspended a suitable distance above the street in the line of the path of the aforesaid incline and adapted to be engaged by the aforesaid block during the forward propulsion of the car, substantially as and for the purpose set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 21st day of August, 1894.

JOHN P. WICK.

Witnesses:

C. H. DORER,

L. WARD HOOVER.