

(No Model.)

W. S. SCHULTZ.

STATION INDICATOR.

No. 341,949.

Patented May 18, 1886.

Fig. 1

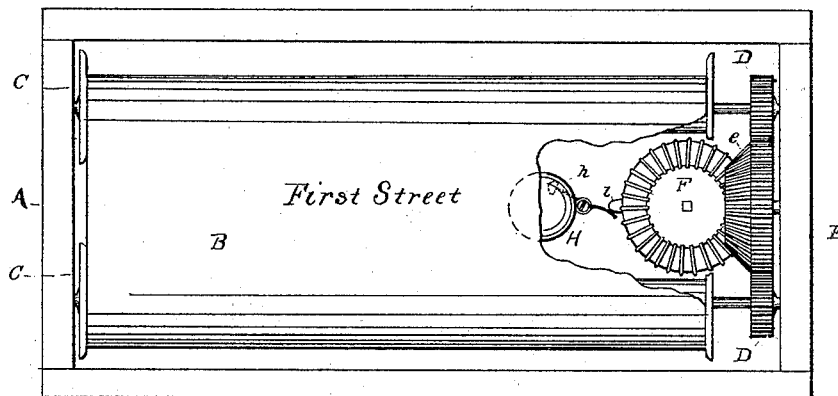
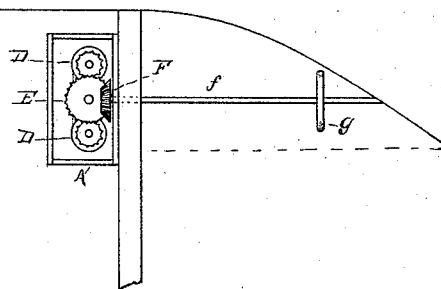


Fig. 2



Witnesses:

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STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 341,949, dated May 18, 1886.

Application filed April 10, 1885. Serial No. 161,777. (No model.)

To all whom it may concern:

Be it known that I, WARNER S. SCHULTZ, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented a certain new and useful Improvement in Station-Indicators, of which the following is a specification.

My invention relates to that class of station-indicators in which a ribbon is wound and unwound from a pair of rollers operated by gearing.

The invention is illustrated in the accompanying drawings, in which Figure 1 is a front view of the device with the face of the case and a portion of the ribbon removed, and Fig. 2 shows the arrangement of the device in connection with a street-car.

In the drawings, A represents the box or other suitable case for containing the indicator mechanism, and it should have a glass-covered opening in its face for displaying the names of the stations as they are presented on the ribbon.

B is the ribbon upon which, at proper intervals, are the names of the successive stations or streets.

C C are a pair of rollers, upon which the ribbon is wound, and they have bearings in the ends of the case A.

D D are cog-wheels, of equal diameter, on the rollers at the same end of the case, and E is a cog-wheel, of twice their diameter, interposed between and in mesh with the wheels D, so that a half-turn of the larger wheel will cause a full rotation of the two smaller wheels and of the rollers which bear them.

F is a miter-wheel meshing with the bevel-gearing *e* on the wheel E, and is set close to the back of the case A. The wheel F is on a shaft or rod, *f*, which extends through the back of the case and through the frame of the car to which the case is attached, and on the rod *f* is the fast wheel *g*, by the turning of which wheel the mechanism is operated. A

half-turn of this wheel causes a half-turn of the miter-wheels and a full rotation of the rollers, and shifts the ribbon sufficiently to present the station-names to the opening in the case-front.

H is a bell, which is rung by a spring-actuated hammer, *h*, operated by lugs *i* on opposite sides of the miter-wheel F. These lugs are on the back of the wheel and project beyond the periphery. Each half-turn of the wheel causes one of the lugs to engage the hammer-spring and ring the bell.

It is apparent that the mechanism may be operated backward as well as forward, so that the ribbon may be wound from either roller onto the other.

In Fig. 2 is illustrated a convenient mode of arranging the device on a street-car. The back of the case is secured to the forward end of the car above the door, and the rod *f* is extended and fastened to the projecting car-roof. The wheel *g* is placed in position to be easily reached by the driver for operating the mechanism to exhibit the successive streets or stations on the indicator.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

In a station-indicator, in combination with a suitable case, a ribbon inscribed with the names of stations, a pair of rollers for winding and unwinding said ribbon, the spur-wheels D on said rollers, the miter-wheel E, engaging said spur-wheels, and the miter-wheel F, meshing with said wheel E, and provided with lugs *i*, the bell H, and spring-hammer *h*, operated by said lugs *i*, the rod *f*, and hand-wheel *g*, for turning said wheel F to operate said mechanism, substantially as and for the purpose set forth.

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Witnesses:

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