

C. A. BLOMQUIST.  
Station-Indicator.

No. 163,844.

Patented June 1, 1875.

Fig. 1.

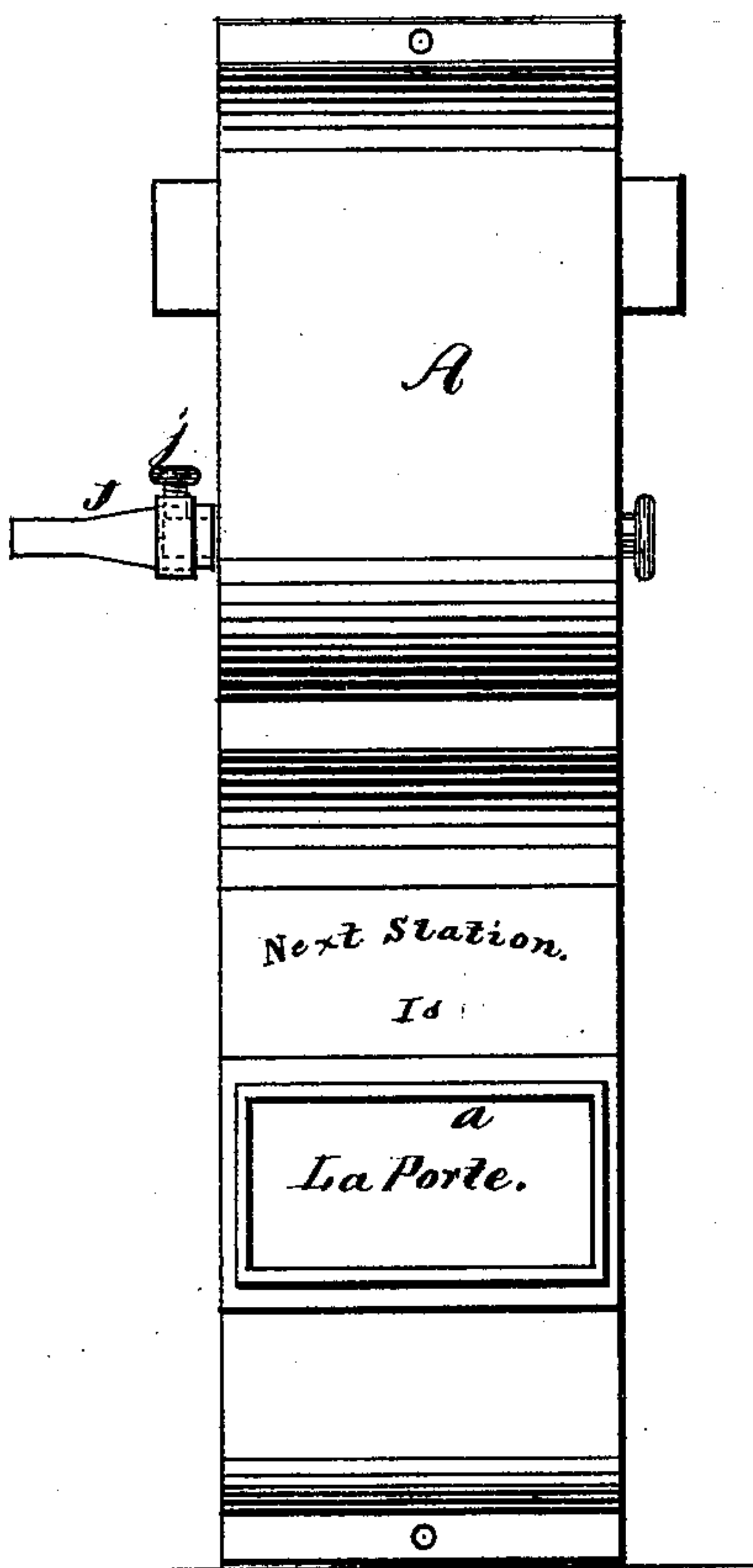
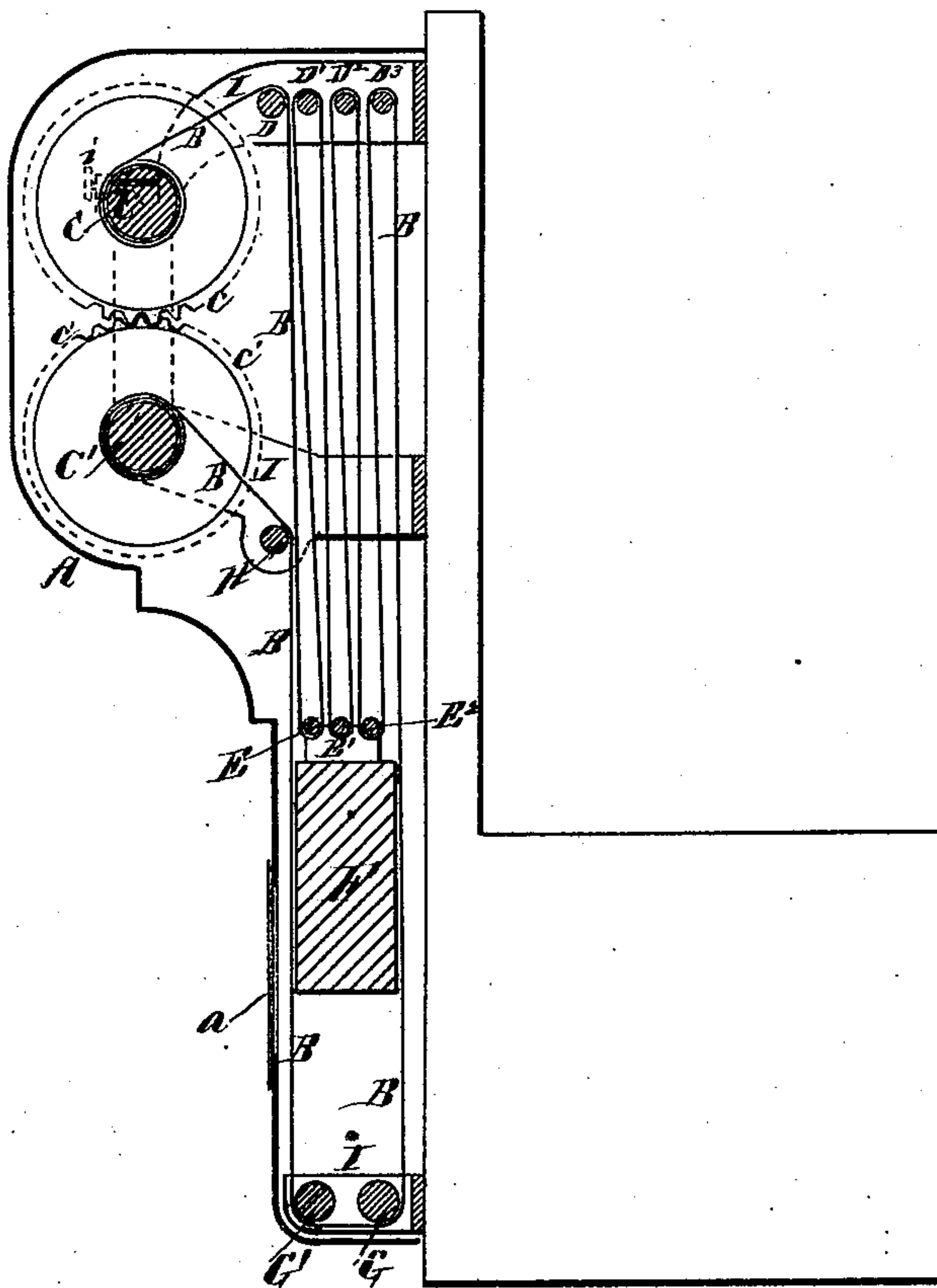


Fig. 2.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN STATION-INDICATORS.

Specification forming part of Letters Patent No. 163,844, dated June 1, 1875; application filed April 14, 1875.

*To all whom it may concern :*

Be it known that I, CARL AUGUST BLOMQUIST, of La Porte, in the county of La Porte and State of Indiana, have invented a new and useful Improvement in Station-Indicator; and I do hereby declare the following to be a full and clear description thereof, which will enable others to make and use my annunciators.

This invention relates to an improved annunciator for attachment to the passenger-cars of railroad-trains, for the purpose of informing the passengers of the incidents on the road in advance of the arrival at the places shown on the annunciator. This information may relate to the names of the stations only, or, in addition to this, information may also be given by this means as to stations for meals, the time of stoppage there, the hotels, crossings, &c., or such other like information of use to the traveler. As it is proposed to place one of these annunciators between each alternate pair of car-windows, the information given will be accessible to all in the car.

The construction and arrangement of the apparatus will be readily understood by reference to the accompanying drawings.

Figure I is a front elevation of the improved annunciator. Fig. II is a sectional elevation of the same.

The apparatus is inclosed in a case, A, which has a small window or opening, *a*, through which the names of stations or other matter of interest, printed upon an endless belt or ribbon, B, is visible to the passenger as the ribbon is moved along from station to station as the occasion requires. The ribbon or endless belt B runs over two drums or rollers, C C', both of which are placed above the opening *a*, so that between these rollers the said ribbon or belt is drawn straight, and in a line parallel with and close to the opening *a*. At one end of each of the rollers C C' is a cog-wheel, *c c'*, respectively, which gear into each other, so as to move the two in harmony. These cog-wheels have smooth faces toward the drums, which said faces act as disks to guide the ribbon in its place on the

rolls or drums. Similar sized disks on the other ends of the drums perform a like service there. From the top drum C the ribbon or belt runs up to the top or near the top of the case over a sheave or roller, D; thence down below to a sheave, E, which is pivoted in the top part of a weight, F; thence up to another sheave, D<sup>1</sup>, and down again to E<sup>1</sup>, then again to the top sheave D<sup>2</sup>, and down again to sheave E<sup>2</sup>; thence again to the top sheave D<sup>3</sup>, from which it passes down to and under two sheaves or rollers, G G', at or near the bottom of the case; and thence up to a guide-roller, H, from which it passes to the drum C'. The upper sheaves or rollers D D<sup>1</sup> D<sup>2</sup> D<sup>3</sup>, and the lower rollers G G', have their journal-bearings in certain fixed positions in the frame I, which also carries the bearings of the drums C C' and the roller H. The rollers or sheaves E E<sup>1</sup> E<sup>2</sup> have their axle-bearings in the weight F, which is placed there to keep the ribbon tight, the whole acting like a compound set of blocks and pulleys. The number of pulleys E D required will vary with the length of the necessary ribbon, which will be governed by the length of route and number of stations, the object of the number of sheaves being to accommodate a line of ribbon, on which shall be printed a long list of stations, &c.

The journals of the top drum C have their positions in the frame I, secured by means of the pins or stops *i*, which are screwed into the said frame, and are easily removable for repairs or adjustment.

A sleeve, J, fits on the axle of drum C, and is secured there by set-screw *j*, so as to turn the drum with the sleeve, or permit the said sleeve to be loosened, to turn that particular indicator independently from the sleeve. The sleeve is to be turned by a rod or shaft running the entire length of the car, which said shaft is to be operated as required by the brakeman.

Having thus described my invention, I desire to claim—

1. The indicator herein described, consisting of an endless belt, B, the length of which is taken up between a set of fixed pulleys, D



D<sup>1</sup> D<sup>2</sup> D<sup>3</sup>, and a set of movable pulleys, E E<sup>1</sup> E<sup>2</sup>, the said belt or ribbon being printed with the names of stations or other information, which printing or advertisement is disclosed to the passenger through the window *a*, as shown described.

2. The combination of the belt B, pulleys

D D<sup>1</sup> D<sup>2</sup> D<sup>3</sup>, weighted pulleys E E<sup>1</sup> E<sup>2</sup>, the rollers G G', and the drums C C', with the case A, substantially as described.

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