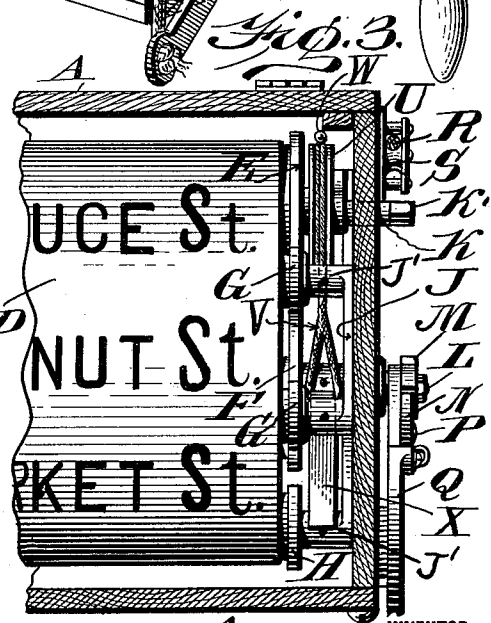
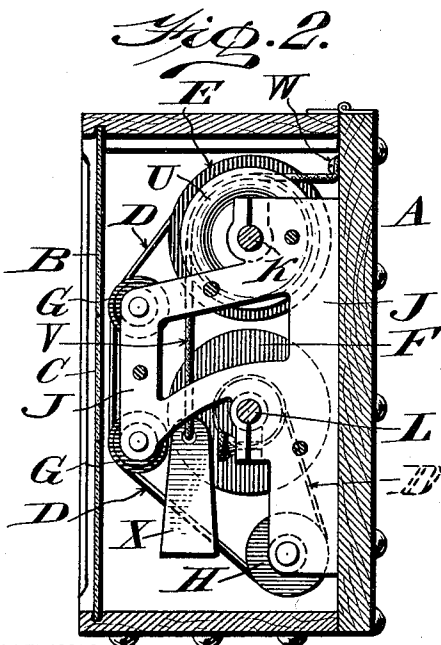
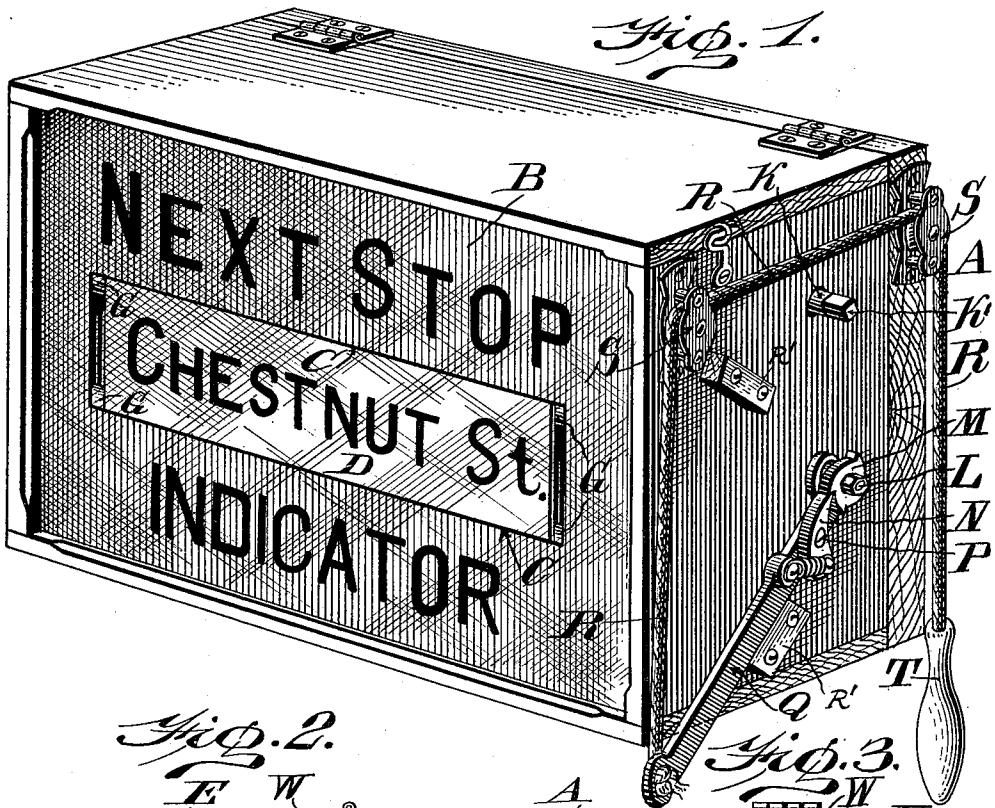


A. H. CARROLL.
STREET AND STATION INDICATOR.
APPLICATION FILED NOV. 19, 1909.

1,008,696.

Patented Nov. 14, 1911.



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ALEXANDER H. CARROLL, OF PHILADELPHIA, PENNSYLVANIA.

STREET AND STATION INDICATOR.

1,008,696.

Specification of Letters Patent. Patented Nov. 14, 1911.

Application filed November 19, 1909. Serial No. 528,931.

To all whom it may concern:

Be it known that I, ALEXANDER H. CARROLL, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Street and Station Indicator, of which the following is a specification.

My invention consists of a station or street indicator applicable to a car or other vehicle, embodying an apron on which the names of stations or streets occur consecutively, rollers on which the same may be wound and from which it may be unwound, mechanism for operating the winding roller, means for limiting the extent of winding and unwinding or playing-out of the apron, and means for preventing the apron from being torn as it is subjected to greater draft as the thickness or diameter of the wound material of the apron increases on one roller and decreases on the other, as will be hereinafter described, the novel features being pointed out in the claim.

For the purpose of explaining the invention, the accompanying drawings illustrate a satisfactory reduction of the same to practice, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific arrangement and organization shown and described except as set forth in the appended claim.

Figure 1 represents a perspective view of a station or street indicator embodying my invention. Fig. 2 represents a transverse vertical section of the casing of the device and an end view of the interior thereof. Fig. 3 represents a longitudinal section of a portion of the casing of the device and a front view of a portion of the interior thereof.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings:—A designates a box or casing having in front the covering plate B, of which at least the portion C is transparent, so as to expose the name of a street or station, which is printed or otherwise marked on the apron D, whose ends are connected respectively with the rollers E, F, within the box, said apron passing around the guide and sustaining rollers G, G, H., the axles of the rollers E, F being mounted on the brackets J which are located on the inner sides of the casing and firmly secured thereto. The rollers G, H,

are mounted on the arms J' which extend laterally inwardly from said brackets J and are formed thereunto, the ends of the rollers being separated from said brackets as will be hereinafter further explained. One of the gudgeons or journals K of the roller E is passed through a side of the casing A and appears on the exterior thereof, where it is squared as at K', so that it may have a crank handle applied thereto in order to rotate the roller for reversing the motion of the apron—say at the end of a route. One of the gudgeons or journals L of the roller F is passed through the side of the casing A and appears on the exterior thereof, where it has connected with it the ratchet M, whose teeth may be engaged by the spring-pressed pawl N, which latter is pivotally mounted as at P on the lever Q, whose axis is on the journal L. On the side of the casing are stop pieces R', which are so spaced apart in opposite places of the lever Q that the latter will receive exact motions and communicate the same to the ratchet M and the roller F in order to advance the apron D and wind it upon said roller F the required extent to place the name of a street or station true in position, while being read off through the transparent portion C or window of the box.

Connected with the free end of the lever Q is the strap or cord R, which is adapted to be passed over the guide pulleys S on the casing A, the free end of said strap or cord having a handle T thereon, the same being within reach of a motorman or car attendant, so that it may be drawn down to raise said lever for operation of the ratchet N, as hereinbefore stated. When said strap or cord is let-go, the lever returns to its normal position by gravity, the pawl N then riding freely over the ratchet M without imparting motion to the roller F and apron D. Firmly connected with the journal K within the casing A is the pulley U, whose periphery is grooved to receive the cord or strap V which is wound around the same and has its upper end secured as at W within the casing A, and its lower end provided with a weight X, which occasions tension on said cord and consequently friction with the pulley U. By this provision, the apron is prevented from improper playing-out or lagging, while if the draft of the apron is of greater extent due to the increasing thickness or diameter of the apron

as it is wound on either of the rollers E, F, the pulley U slips on the cord or strap V a varying distance, while the latter exerts friction on said pulley, whereby the material of the apron is prevented from being torn or severed.

The bracket J has laterally extending arms J', in which the axles of the rollers G, G, are mounted. The axles K and L of the rollers E and F are mounted on said bracket and extend therefrom through the side of the casing and outside of the same, the axle K being squared as at K', while the axle L has connected with it the ratchet M, both as hereinafter described. Owing to the laterally extending arms J', the ends of the rollers are separated from the brackets so as to form a chamber in which is disposed the pulley U on the axle K, the straps or cords V and the weight X so that said members, U, V, X, may operate without interference of or interfering with the free movements of the several axles as most plainly shown in Fig. 2.

Having thus described my invention, what

I claim as new and desire to secure by Letters Patent, is:—

In an indicator of the character stated, a casing, a pair of main rollers therein, an apron adapted to be wound on and unwound from said rollers, a bracket in said casing, the axles of said rollers being mounted on said bracket, means for rotating said axles, guide rollers in said casing, arms extending laterally inward from said bracket, the axles of said guide rollers being mounted on said arms, the ends of the rollers being separated from said bracket by said arms forming a chamber between said rollers and the end of the casing, a pulley mounted on one of the axles of one of said main rollers, a cord held at its upper end and frictionally resting on said pulley, and a weight pendant from said cord, said pulley, the vertical portion of said cord and said weight occupying said chamber.

ALEXANDER H. CARROLL.

Witnesses:

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