

C. CHRISTIANSEN.
ANNUNCIATOR.
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1,038,724.

Patented Sept. 17, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

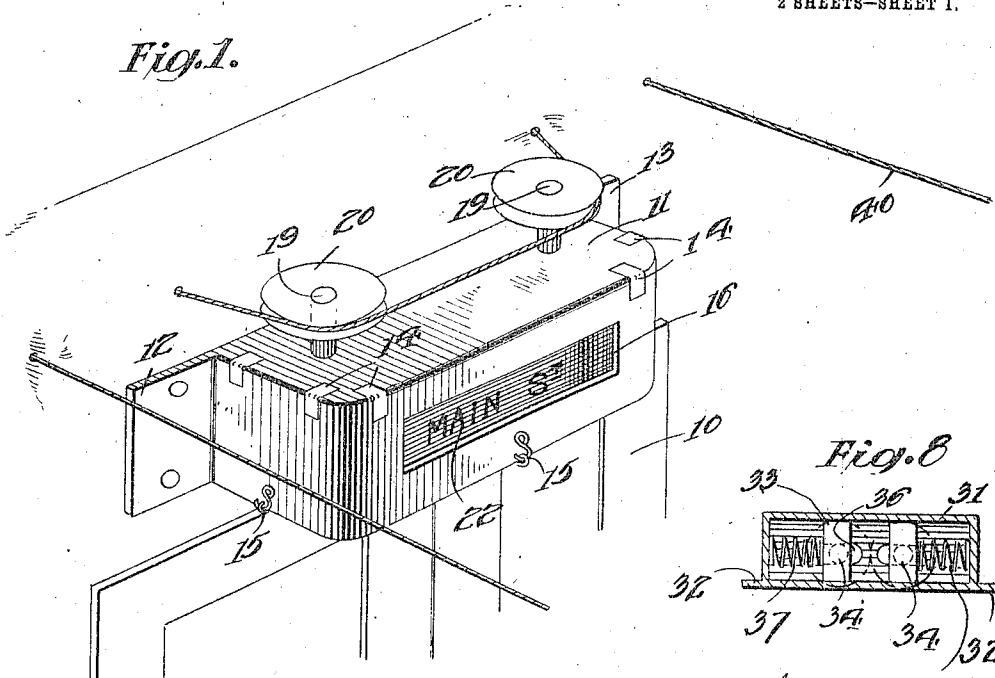


Fig. 8.

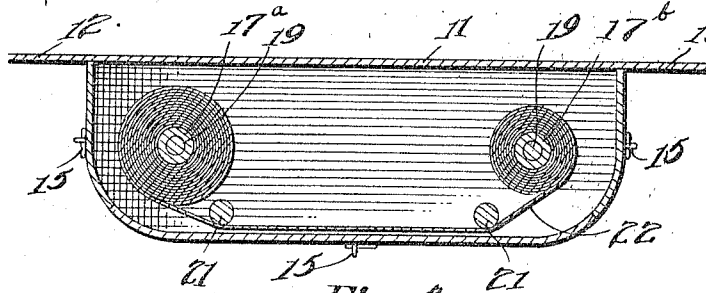
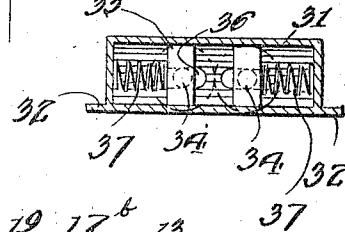


Fig. 3.

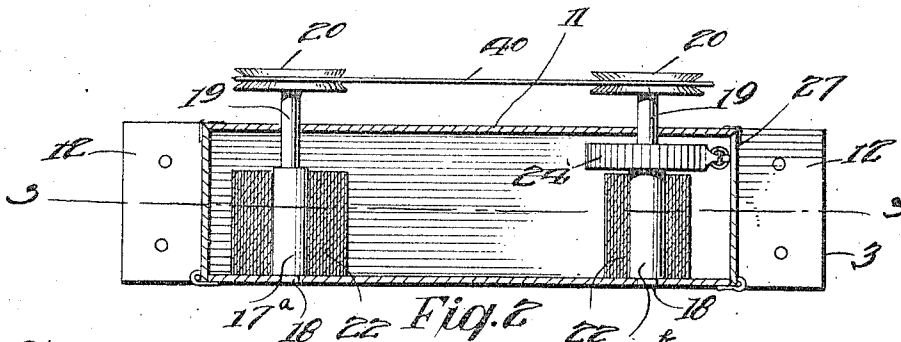


Fig. 6.

Witnesses

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2 SHEETS—SHEET 2.

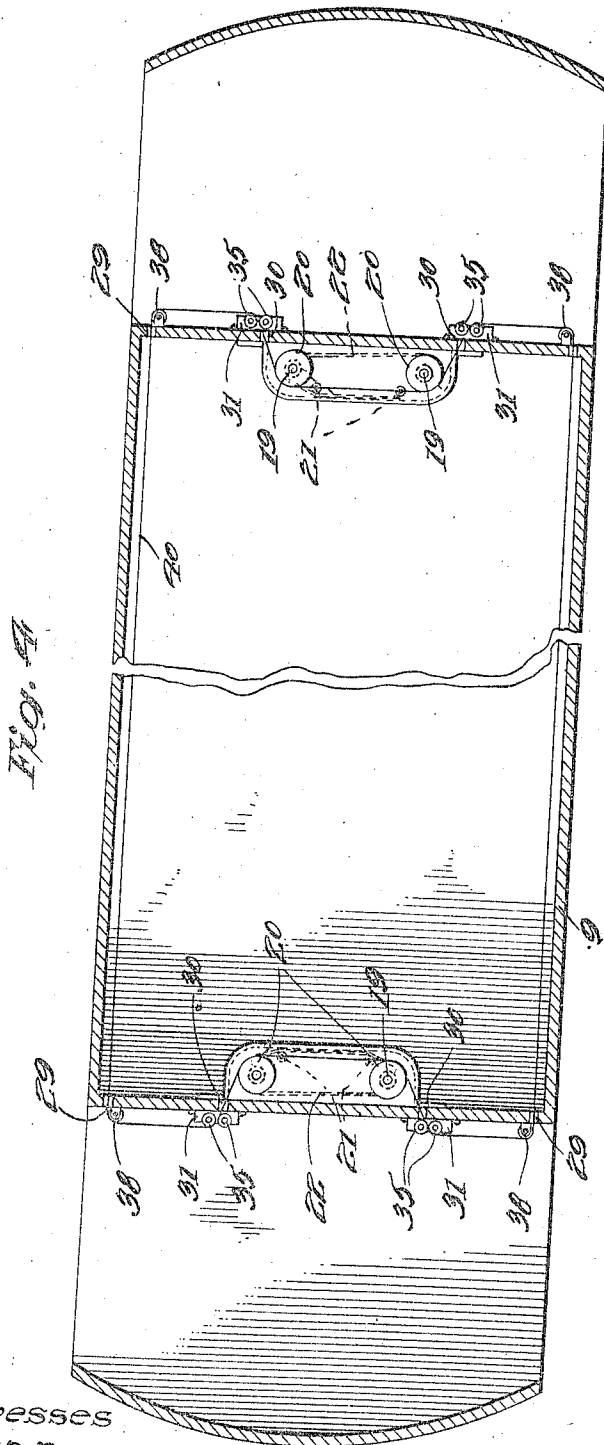


Fig. 4

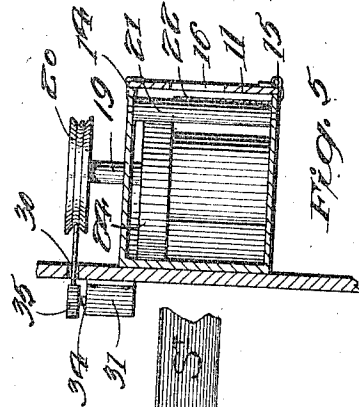


Fig. 5

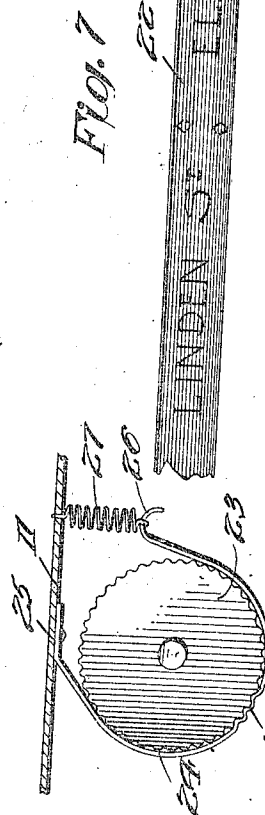


Fig. 6

Fig. 7

Witnesses
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UNITED STATES PATENT OFFICE.

CARL CHRISTIANSEN, OF VANCOUVER, BRITISH COLUMBIA, CANADA.

ANNUNCIATOR.

Specification of Letters Patent.

Patented Sept. 17, 1912.

1,038,724.

Application filed August 22, 1911. Serial No. 645,457.

To all whom it may concern:

Be it known that I, CARL CHRISTIANSEN, a subject of the King of Great Britain, residing at Vancouver, in the Province of British Columbia and Dominion of Canada, have invented certain new and useful Improvements in Annunciators, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an improvement in annunciators for street cars and has for its principal object to provide means whereby the passengers within the car may be readily informed as to the name of the next stopping place. This object is attained by the provision of a casing at each end of the inside of the car and mounted above the door way. A tape with the names of different streets is carried within the casing and means are carried by said casing for manually operating the tape to indicate the name of the street.

In carrying out the objects of the invention generally stated above, it will be understood, of course, that the essential features thereof are susceptible to changes in details and structural arrangements, one preferred and practical embodiment of the invention being shown in the accompanying drawings, wherein:—

Figure 1 is a perspective view of the casing mounted above the door way of a car and constructed in accordance with this invention. Fig. 2 is a vertical longitudinal sectional view of the casing. Fig. 3 is a sectional view taken on the line 3—3 in Fig. 2. Fig. 4 is a top plan view of the invention the car body being shown in section. Fig. 5 is a transverse vertical sectional view of the casing attached to the car. Fig. 6 is a plan view of means for holding the tape in position after the same has been turned. Fig. 7 is a fragmentary view of the tape. Fig. 8 is a longitudinal sectional view of the casing attached to the outside of the car and provided with means for guiding the rope for operating the tape.

Referring more particularly to the drawings by numerals it will be seen that the invention is attached to the inside of a car 9 above each door way 10. The tape holding casing 11 is preferably made of sheet metal and is provided with laterally extending flanges 12 and 13 at the rear thereof for attaching the casing to the car body. The front and sides of the casing are hinged at

14 and are provided with books 15 at the bottom thereof for locking the sides when it is desired to have the casing closed. The front of the casing is provided with a longitudinally extending opening 16 through which a passenger in the car can see the name of the street. Vertically journaled in the casing are a pair of tape carrying drums 17^a and 17^b which are provided with stub axles 18 at one end thereof which fit into openings in the bottom of the casing.

Extending from each of the drums 17^a and 17^b is a pulley shaft 19 which is smaller in diameter than the drum. On the outer ends of the shafts 19 are journaled pulleys 20. A pair of guide rollers 21 are vertically journaled in the casing adjacent the front thereof and between said drums 17. These rollers 21 are adapted to guide the tape 22 when the same is wound about the drum. A ratchet wheel 23 is mounted on one of the shafts 19 intermediate the tape 22 and the top of the casing. A curved bar 24 is attached to one side of the casing 11 at 25 and is adapted to engage the periphery of the ratchet wheel 23. At the free end of the bar 24 there is provided a hook 26 to which one end of a spring 27 is attached, the other end of the spring being secured to the casing 11 and thereby holding the bar 24 in continued engagement with the ratchet wheel 23. Intermediate the ends of said bar the same is crimped as at 28, this crimped portion being adapted to engage with the teeth of the ratchet wheel and thereby prevent the same from rotating too freely and is also adapted to hold the tape in an adjusted position. The ends of the car 9 are provided with transverse openings 29 adjacent the sides of said car and openings 30 on each side of said casing.

On the outside of the ends of the car and adjacent each opening 30 there is secured a small casing 31 which is attached to the end of the car by the laterally projecting flanges 32. Each casing is provided with a pair of blocks 33 which are longitudinally slidable within said casing. Extending vertically from each of said blocks is a shaft 34 which carries a guide roller 35 on the end thereof. Each shaft 34 extends through a longitudinal slot 36 which limits the longitudinal movement of said shaft. Springs 37 are provided which abut against the ends of the casing and also against the blocks 33 and normally tend to force the same together.

Adjacent the openings 29 are mounted pulleys 38. An endless belt or line 40 runs longitudinally of the car, passes through openings 29, over the pulleys 38, then between the guide rollers 35 and then over the pulleys 20 which are mounted in the main casing 11.

When it is desired to show a certain street, the conductor grasps the line 40 and pulls the same causing the pulleys 20 to turn the shafts 19 which in turn rotate the drums 17^a and 17^b in both casings 11, causing the tape 22 to unroll from drums 17^a to 17^b and run longitudinally of the openings 16 in the casings and when the name of the desired street is exposed through said opening then the conductor releases the line 40 and any passenger within the car may readily see the name of the next stopping place. Thus names are shown through opening from first name at start to last at end of route in both casings. On the return trip the conductor pulls line 40 in the opposite direction causing the tape to unroll from drums 17^b back to 17^a showing the names from the end of route back to the start. It is obvious that the rollers 35 act as an effectual guide for the line 40 when the same is pulled and the fact that the springs tend to force the pulleys together keeps the line 40 from becoming worn when passing through the openings 30 in the end of the car.

It will be seen from the foregoing that a device has been supplied which is simple in construction, durable, effective and easily operated.

Having thus described the invention, what I claim is:—

An annunciator for street cars comprising a casing, annunciating means carried by said casing, said annunciating means comprising a strip of material having characters formed thereon, spools on which said strip is wound, shafts carrying said spools; a second casing adjacent the first mentioned casing, and provided with a pair of longitudinally extending openings, blocks longitudinally slidable in said casing, a shaft projecting from each of said blocks and extending through one of said openings, guide rollers carried by said last mentioned shafts, springs mounted between the ends of said casing and said blocks, and means for operating said annunciating means, said means comprising pulleys on said shafts, and a cord trained over said pulleys and passing between said guide rollers.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

CARL CHRISTIANSEN.

Witnesses:

G. C. WOODWARD,
A. E. GALPIN.