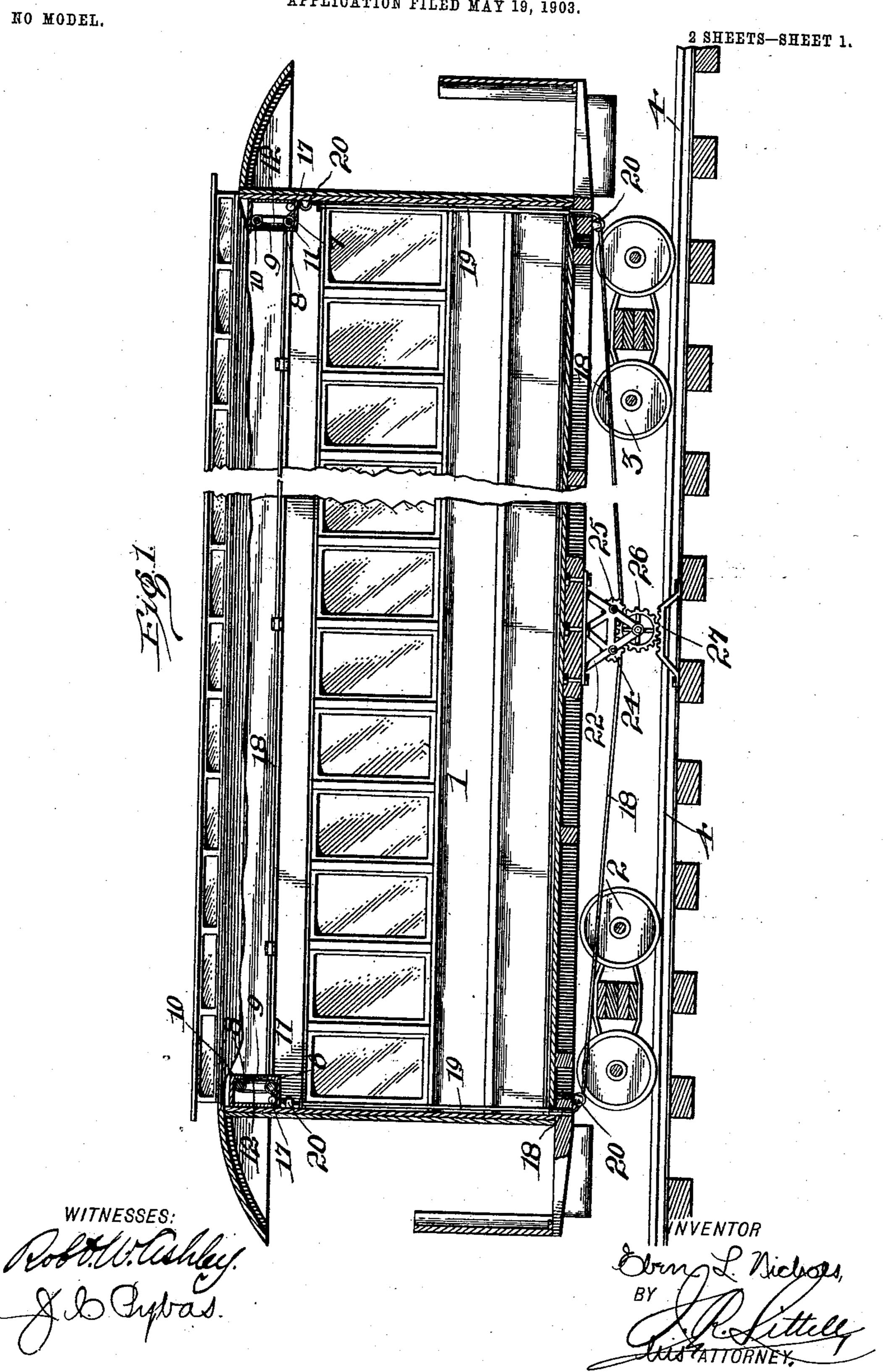
## E. L. NICHOLS.

# STREET INDICATING MECHANISM FOR VEHICLES.

APPLICATION FILED MAY 19, 1903.



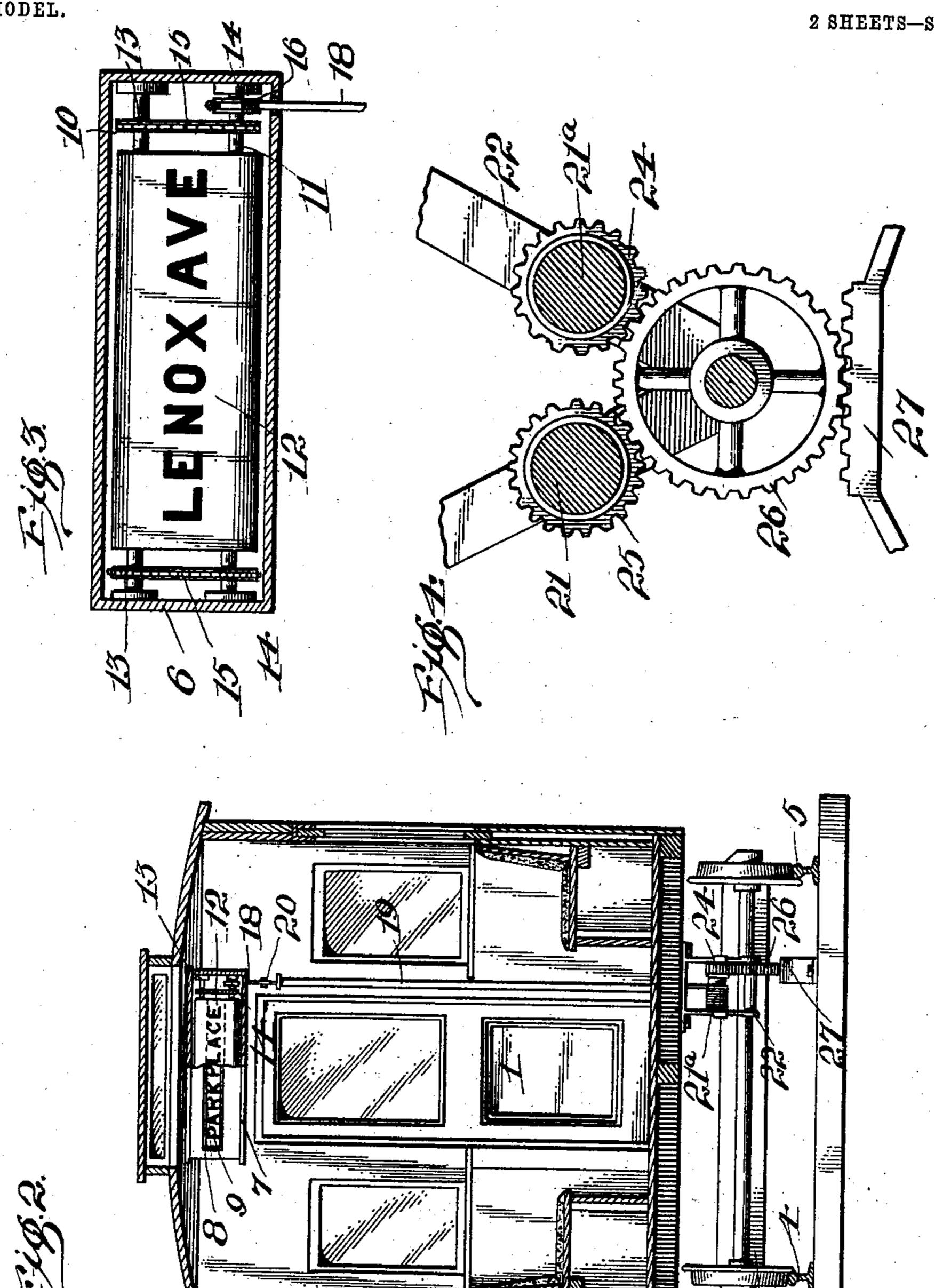
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## STREET INDICATING MECHANISM FOR VEHICLES.

APPLICATION FILED MAY 19, 1903.

NO MODEL.

2 SHEETS-SHEET 2.



WITNESSES: Additional

INVENTOR

# United States Patent Office.

EBEN L. NICHOLS, OF CINCINNATI, OHIO.

#### STREET-INDICATING MECHANISM FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 756,136, dated March 29, 1904.

Application filed May 19, 1903. Serial No. 157,749. (No model.)

To all whom it may concern:

Be it known that I, EBEN L. NICHOLS, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State 5 of Ohio, have invented certain new and useful Improvements in Street-Indicating Mechanism for Vehicles, of which the following is a specification.

My invention relates to street-indicating 10 mechanism for vehicles.

The object of my invention is to provide street-indicating mechanism mounted on the vehicle and adapted to be reversely and automatically operated by means of stationary 15 abutments located in the line of travel of said vehicle.

My invention consists in the construction, combination, and arrangement of parts for 20 described and claimed.

In the drawings, Figure 1 is a longitudinal vertical sectional view of a car having my street-indicating mechanism mounted thereon and showing the means for operating it located 25 between the rails. Fig. 2 is a transverse vertical sectional view of a car, showing my streetindicating mechanism mounted thereon and the means for operating it located between the rails. Fig. 3 is an enlarged detail sectional 30 view of the cabinet and mechanism contained therein. Fig. 4 is an enlarged detail view of the mechanism for operating the apron having the street designations thereon.

Corresponding parts in all the figures are 35 denoted by the same reference characters.

Referring to the drawings, 1 represents a car mounted on wheeled trucks 2 and 3, running on rails 4 and 5. On the inside of the car near the top and at each end, so as to be 40 easily and readily observed by the passengers, are located cabinets 6 and 7, having observation-openings 8, covered by glass 9. Each of these cabinets comprises rolls 10 and 11, journaled therein and having an endless apron 45 12 running over them provided with the street designation of the route of travel thereon, sprocket-wheels 13 and 14, secured to the journals of the rolls and having an endless sprocketchain 15 running over them, pulley 16, also 5° secured to the journal of the roll 11, and a

loose pulley 17 adjacent thereto. A chain or belt 18 runs over the pulley-wheels 16 in each cabinet under the loose pulleys 17, over pulleys 18, through a casing or pipe 19, then out of the car and under pulleys 20, and the ends 55 are connected to drums 21 and 21<sup>a</sup>, journaled in frames 22 and 23, secured to the under side of the car. On the outer ends of the journals are secured gears 24 and 25 in engagement with a larger gear 26, also journaled in the 60 frames 22 and 23, which is adapted to engage a rack 27, secured to the sleepers at a point intermediate the streets at which the car will stop and in the line of travel of said gear.

The operation is as follows: By the travel 65 of the car over the rails the gear 26 is brought into engagement with and turned by the rack 27 at a point intermediate the streets at which accomplishing the above object, as hereinafter | the car will stop, which in turn turns the gears 24 and 25 and the drums on the journals of 7° which they are secured, thereby winding the chain or belt onto one drum and off the other drum, and as the belt runs over the pulleys 16 the endless aprons having the street designations thereon are moved so as to bring the 75 designation of the next street opposite the observation-opening in the cabinets before that street is reached, thus furnishing the passengers with reliable information as to the streets along the route of travel of the car.

It will of course be understood that when the car makes its return trip the operation of the street-indicating mechanism will be reversed by the reverse movement of the gear 26, caused by its engagement with the rack 27 from the 85 opposite direction, and consequently the movement of the aprons having the street designations will also be reversed.

I do not desire to be understood as limiting myself to the details of construction and ar- 90 rangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of construction and arrangement in the adaptation of the device to various conditions of use without de- 95 parting from the spirit and scope of my invention and improvements. I therefore reserve the right to all such variation and modification as properly fall within the scope of my invention and the terms of the following claims.

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

1. The combination of a vehicle, a plurality of indicating means carried thereby, a band 5 for operating said indicating means, drums with which the ends of the band are connected, and means supported independently of the ve-

hicle for actuating said drums.

2. The combination of a vehicle, a plurality 10 of indicating means carried thereby, a band for operating the indicating means, drums to which the ends of the band are connected, gears upon the respective drums, a gear for operating the other gears, and a rack supported in-15 dependently of the vehicle for actuating the

operating-gear.

3. The combination of a vehicle, indicating means within the same located near the top at the opposite ends thereof, a band extending 20 along the top of the vehicle, down the opposite ends, and under the vehicle, said band serving to operate the indicating means simultaneously, drums to which the ends of said band are connected, under the vehicle, and 25 means supported independently of the vehicle for operating said drums.

4. In street-indicating mechanism for vehicles, cabinets located at opposite ends of the vehicle, rolls journaled in said cabinets, a continuous belt connecting said rolls and having 3° the street designations thereon, sprockets secured on the journals of said rolls, a sprocketchain connecting said sprockets, a pulley on one of said journals, drums journaled in a frame secured to the under side of said vehicle, 35 gears secured on the journals of said drums, a belt running over the pulleys on the journals of the rolls and having its ends connected to said drums, a gear also journaled in said frame and engaging said other gear-wheels, 40 and a rack mounted independently of the vehicle arranged to engage said last-mentioned gear for the purpose of operating the streetindicating mechanism, substantially as described.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

EBEN L. NICHOLS.

Witnesses:

J. C. Pybas,

J. M. Hoctor.