(No Model.)

# J. M. KENNEDY.

## ELECTRIC MOTOR CAR TROLLEY.

No. 548,997. Patented Oct. 29, 1895.

Fig. 1.

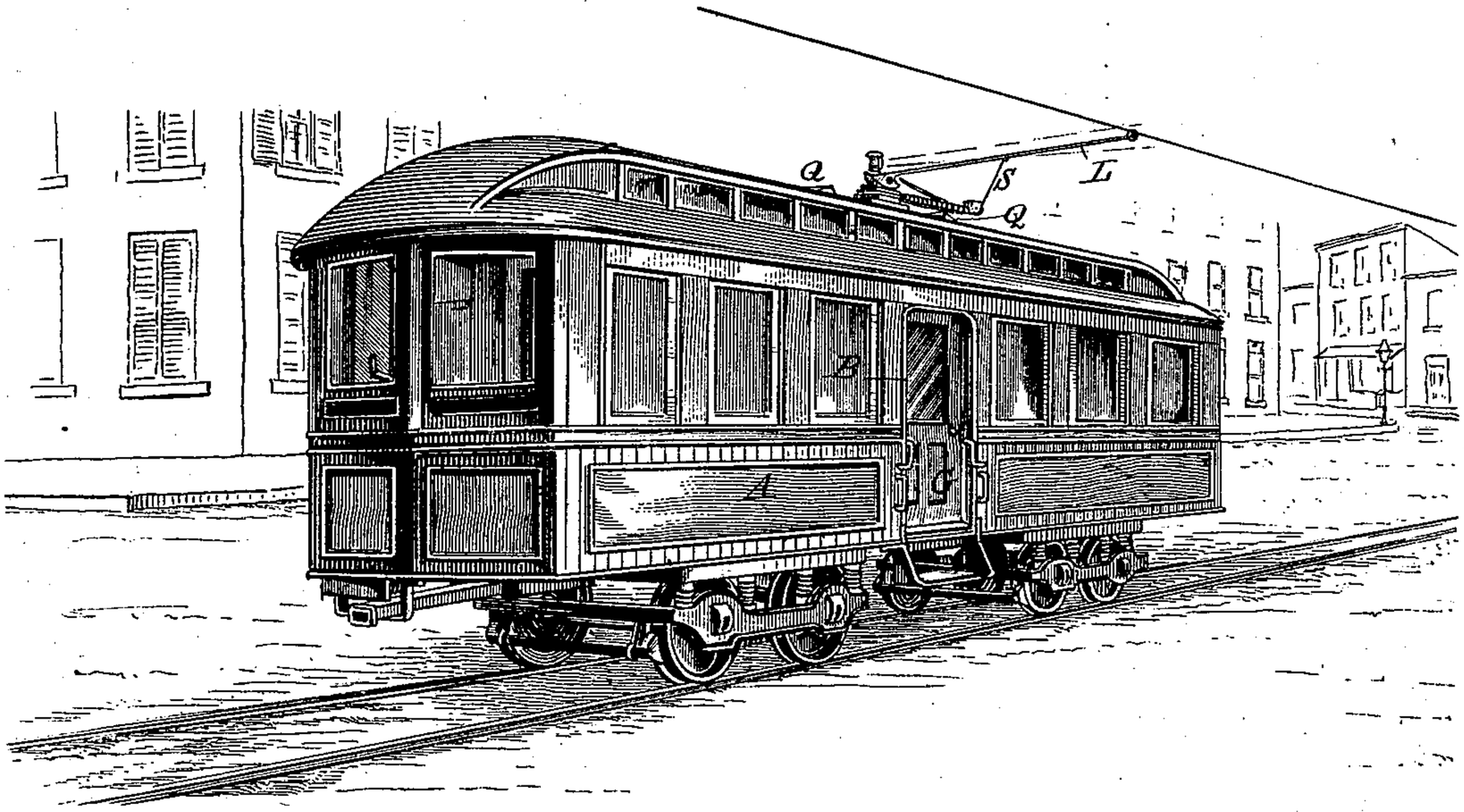
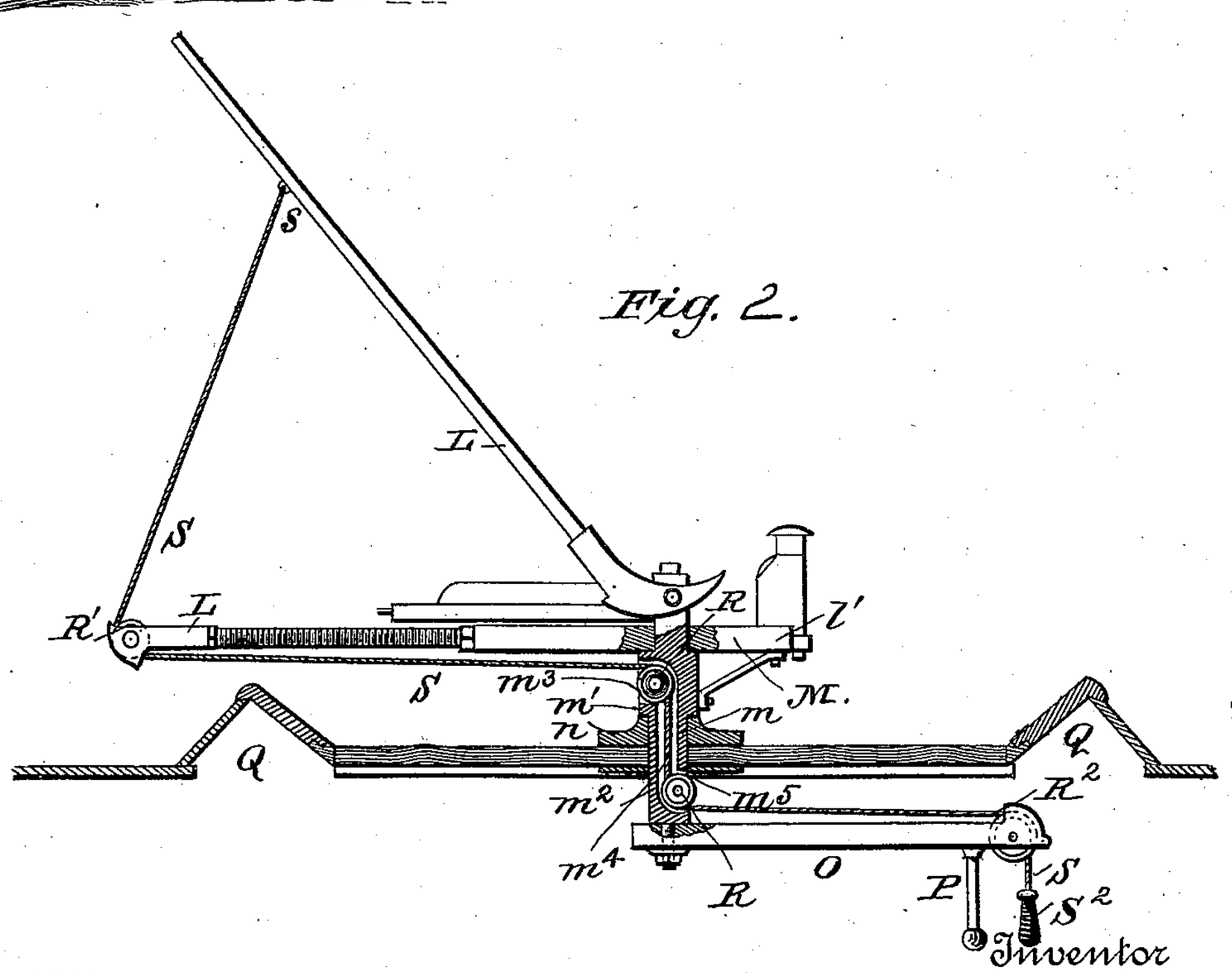



Fig. 2.

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# UNITED STATES PATENT OFFICE.

JAMES M. KENNEDY, OF HOLLIDAYSBURG, PENNSYLVANIA, ASSIGNOR OF THREE-FOURTHS TO THOMAS F. JOHNSTON, OF SAME PLACE, AND WILLIAM F. GABLE AND GALEN HEMPERLY, OF ALTOONA, PENNSYLVANIA.

## ELECTRIC-MOTOR-CAR TROLLEY.

SPECIFICATION forming part of Letters Patent No. 548,997, dated October 29, 1895.

Application filed May 31, 1895. Serial No. 551,116. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES M. KENNEDY, residing at Hollidaysburg, in the county of Blair and State of Pennsylvania, have invented a new and Improved Electric Motor-Car, of which the following is a specification.

My invention is in the nature of an improved electric motor-car having overhead trolley equipments; and it primarily has for its object to provide a car of this kind having the trolley adjusting or swinging devices simply and compactly arranged and disposed in such a manner that the trolley can be adjusted from within to engage or disengage the wire.

My invention also has among other objects for its purpose to provide a street-car having closed ends and side doors, whereby to facilitate the ingress or egress of passengers, and also a central conductor's vestibule or space provided, which will enable the conductor at all times to have easy access to the trolley mechanism to adjust the same and to have a free view of the passengers at both ends of the car and an uninterrupted street view.

With other minor objects in view, which will hereinafter be referred to, the invention consists in the peculiar combination and novel arrangement of parts, such as will be first described in detail, and then be specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved motor-car. Fig. 2 is a detail view illustrating the trolley-shifting mechanism hereinafter particularly referred to.

My improved trolley-car is a platformless one, and provided with doors at the sides, whereby passengers can step direct from the street into the car, and thereby save much time in the stops of the car for taking on or letting off passengers.

In connection with a side-entrance car-body I arrange peculiarly-constructed trolley-operating means manipulated from the inside of the car at the center thereof. For this purpose the car-body A, which in practice is of the length of an ordinary motor-car, has the side openings B B disposed centrally of the car.

As before indicated, the conductor's position on my improved car is at the center thereof, and as it is the duty of a conductor to swing about or take charge of the trolley I provide a simple, easily manipulated, and effective trolley-controlling mechanism adapted to be conveniently handled by the conductor from his central stand in the car. To this end I provide the trolley mechanism most clearly shown in Fig. 2, by reference to which it will be seen the trolley-arm L is mounted on a turn-table M, the shaft $m$ of which has a head portion $m'$, which seats on the bearing-plate $n$ on the car-top N, while the shank portion $m^2$ passes down through the car-top and the bearing-plate and has secured thereto a horizontal crank arm or lever O, which has a pendent handle P near its outer end. The head portion $m'$ of the shaft has a socket $m^3$, which communicates through the medium of the channel $m^4$ with a socket $m^5$ in the lower end of the shaft. In the sockets $m^3$ and $m^5$ are journaled pulleys R R, over which passes a cord or cable S, the outer end of which passes over a guide-pulley R', journaled on the outer end of the extension $l$ of the turn-table L', from whence it passes up and connects with the trolley-arm, as shown at $s$. The inner end of this cable passes over a pulley and guide $R^2$ on the outer end of the arm O and carries a weighted handle $S^2$, the weight of which is sufficient to take up the slack of the cable or cord.

Q Q are lookouts formed on the top of the car over the central or conductor's space and arranged in such a manner that the conductor can, by looking up through such lookouts, ascertain the condition of the trolley.

To provide a simple and effective means for aiding the conductor to place the trolley on the wire at night in case it slips the wire and leaves the car in darkness, I form the turn-table with an extension $l'$, on which is held a bull's-eye or lens so arranged as to throw the light-rays directly onto the wire and the trolley.

From the foregoing it will be readily apparent that as the conductor is stationed in the center of the car he can quickly and easily turn the trolley by swinging the lever O around and pulling on the handle $S^2$ to re-

lease the trolley from the wire, and in case the trolley should slip from the wire he can, owing to the lookouts, by pulling on the handle $S^3$ soon reset the same in a proper position on the wire.

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

1. An improved street car, having side entrances, a central vestibule connecting such entrances and forming a conductor's space, lookouts in the top of the car over the said space, a turn table held to rotate between the lookouts, having an operating lever, connected therewith, held inside the car top over the conductor's space, and the trolley mechanism mounted on the turn table all arranged substantially as shown and for the purposes described.

2. As an improvement in electric overhead trolley cars, the combination with a car body having closed ends, and side entrances a central conductor's space, and look outs in the top over such space, of a turn table held on the top of the car, the trolley arm carried thereon, a lantern held on the table to throw the rays on the trolley and wire and a lever mechanism operated from within the car, connected with the turn table all arranged substantially as shown and for the purposes described.

3. The combination with the car having a central or conductor's space, and look outs in the top over such space, of the rotary trolley table having its shaft projected through the car top and provided with an operating lever on the lower end having a guide pulley said shaft having socket portions having each a guide pulley therein, and a channel way connecting such sockets, said turn table having an arm provided with a guide pulley, and a cord or cable passed over the aforesaid guide pulleys connected with the trolley at one end and having a weighted handle member at the other all arranged substantially as shown and described.

4. A street car having an overhead trolley and means within the car for shifting said trolley, lookouts in the top of said car, and a light giving appliance carried upon the trolley mechanism without the car, for throwing light upon said trolley and the wire substantially as shown and described.

5. In a street car, a reversible overhead trolley and means for shifting the same, and a light giving appliance carried by said trolley adapted to throw the light upon said trolley substantially as shown and described.

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