

J. J. EAGAN.

SYSTEM FOR TRANSMITTING ELECTRIC CURRENTS TO CARS.

APPLICATION FILED FEB. 2, 1905.

Fig. 1.

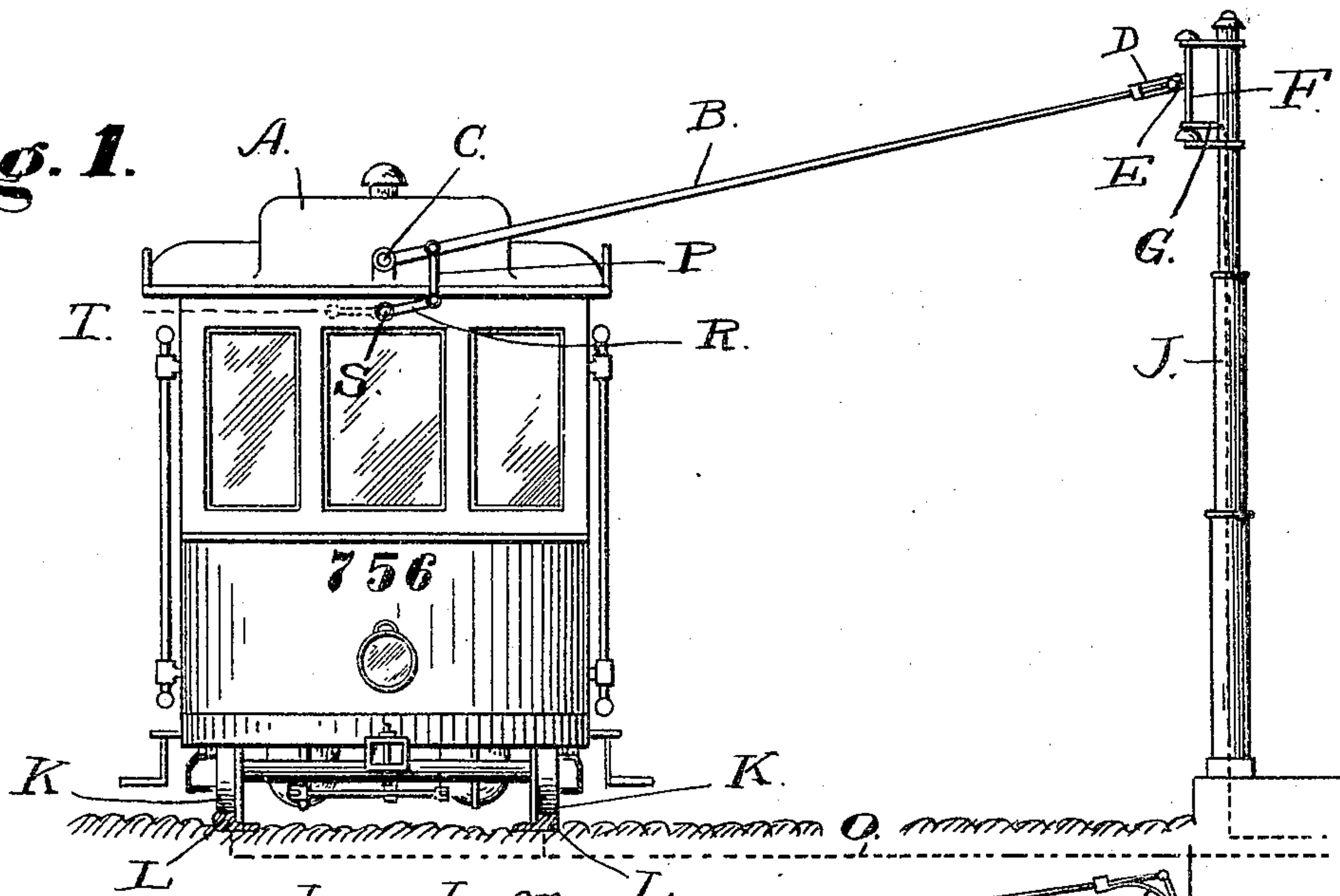
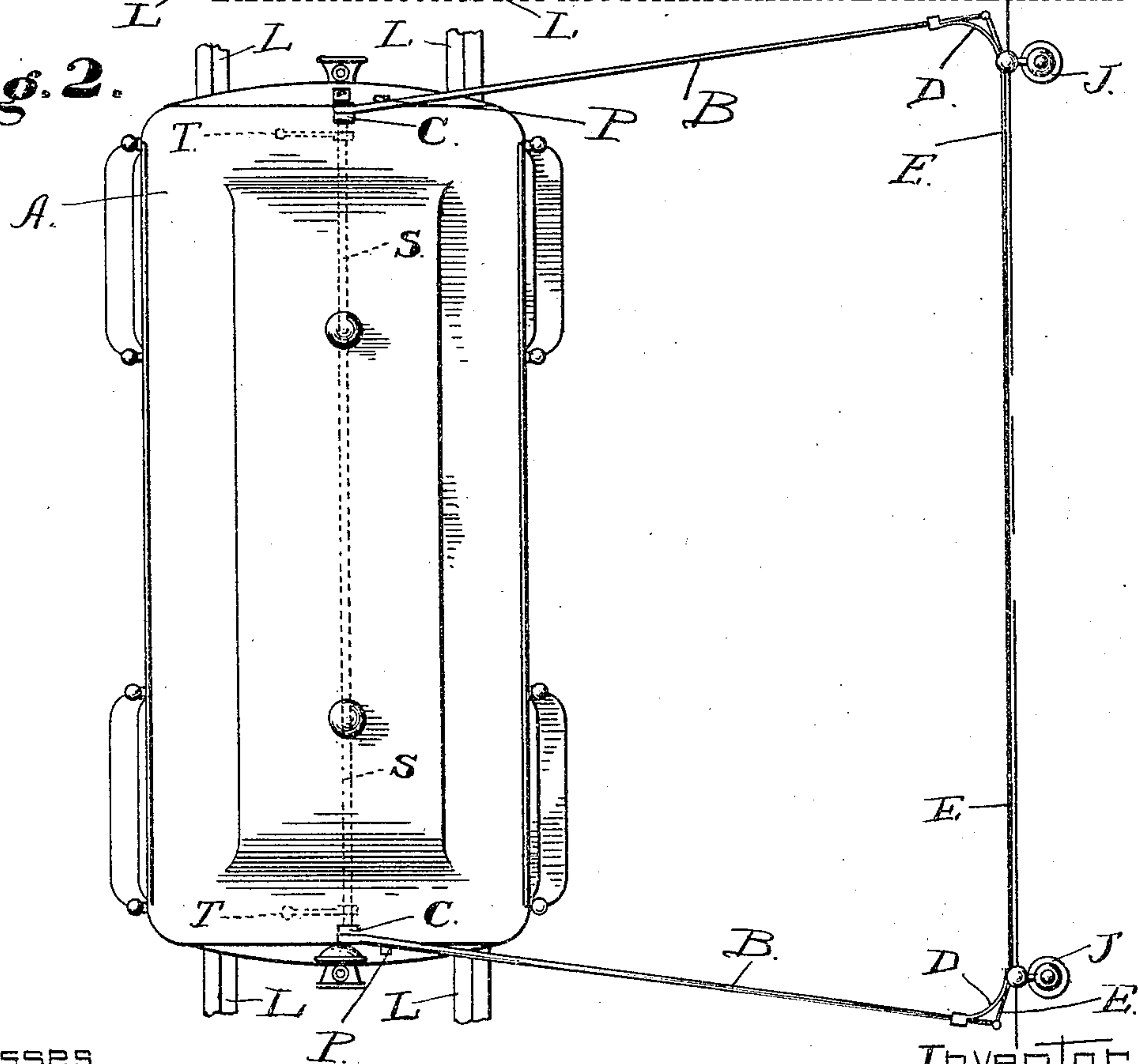


Fig. 2.



WITNESSES.

Arthur L. Slee
Edmer Ulrich

INVENTOR.

John J. Eagan
by Lincoln Polmear
attorney

UNITED STATES PATENT OFFICE.

JOHN J. EAGAN, OF SAN FRANCISCO, CALIFORNIA.

SYSTEM FOR TRANSMITTING ELECTRIC CURRENTS TO CARS.

SPECIFICATION forming part of Letters Patent No. 792,122, dated June 13, 1905.

Application filed February 2, 1905. Serial No. 243,898.

To all whom it may concern:

Be it known that I, JOHN J. EAGAN, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Systems for Transmitting Electric Currents to Cars, of which the following is a specification.

My invention relates to improvements in electric-railway systems.

The object of my invention is to provide a system for transmitting electric currents to cars, whereby the necessity for the suspension of a wire above the car for the transmission of the current, as heretofore used in an overhead system, as well as the necessity for the placing of poles on both sides of the road or street whereon the railway is operated, is overcome, thus effecting a considerable saving in labor and material in the construction of the system.

My invention consists in the novel arrangement and combination of parts described in the following specification, illustrated in the accompanying drawings, and claimed in the appended claims.

In the drawings, Figure 1 is a front view of an electric-trolley car, showing one of the poles of the system with the wire running therein designated by dotted lines. Fig. 2 is a plan view of the trolley-car looking down, with the trolleys shown in contact with the poles.

Referring to said figures, A represents an electric-trolley car having trolleys B, pivotally secured at C, the other extremity having supporting-springs D, which hold the trolley-wire E between trolley-poles B. The wire E is held in contact with a rod F, which is electrically connected to an electric source by means of the wire G through the street-poles J. A link or connecting-bar P connects with a crank R, which in turn is mounted on a rod or shaft S, extending longitudinally the length of the car. Mounted to the shaft S are handles at either end T T for throwing the poles B to the opposite side of the car. The electrical circuit for the operation of the car from the wire E through the intervening parts is

completed by any suitable means through the motors on the car, which may be of the usual type, as heretofore used in electric street-cars, to the axle of the wheels and through the wheels K, rail L, to ground or other connection O. In the operation of the car the wire E is always in contact with a rod F to receive the current, the poles J being placed at such distance apart to permit of such contact. Although shown on but one side of a street or road for the operation of said system, the poles described may be placed on both sides of such road or street, which poles so placed would be of great advantage to the service in the event of the destruction of a pole or any damage thereto rendering it ineffective. The shaft S, running longitudinally through said car, is pivotally secured at each end of the car, and the handles T T for shifting the trolleys are attached to said shaft, as described.

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

1. In a system for transmitting electric currents to cars a plurality of poles on one side of a street or road having a channel for wires therein, perpendicular rods affixed to the apex of said poles for connection with said wires, trolleys pivotally connected to the ends of an electric-railway car, said trolleys being provided with springs at their outer ends for grasping wire connecting the same, and wire connecting the ends of said trolleys, substantially as described.

2. In a system for transmitting electric currents to cars a plurality of equidistant poles on both sides of a street or road having a channel for wires therein, perpendicular rods affixed to the apex of said poles for connection with said wires, trolleys pivotally connected to the ends of an electric-railway car, said trolleys being provided with springs at their outer ends for grasping wire connecting the same, wire outwardly connecting said trolleys, bars pivotally connected to said trolleys, levers connected to said bars and to a shaft extending through said car, and handles for shifting said trolleys to the opposite side of the car, substantially as described.

3. In a system for transmitting electric currents to cars a plurality of equidistant hollow poles mounted on a road or street, rods at the apex of said poles, trolleys turnably mounted
5 at each end of an electric-railway car, springs grasping wire at the outer ends of said trolleys, wire outwardly connecting said trolleys, cranks connecting said trolleys to a shaft through said car, handles connected to said
10 shaft for shifting said trolleys, substantially as described.

4. In a system for transmitting electric currents to cars, a plurality of equidistant poles mounted on a road or street for conducting
15 wire from the base to the apex thereof, trolleys pivotally secured to an electric-railway car and adapted for holding wire at the ends thereof, wire connecting the ends of said trolleys and cranks connecting said trolleys to

handles for shifting said trolleys, substantially as described. 20

5. In a system for transmitting electric currents to cars a plurality of equidistant hollow poles mounted on a road or street, rods at the apex of said poles, trolleys turnably mounted
25 at each end of an electric-railway car, springs grasping wire at the outer ends of said trolleys, wire outwardly connecting said trolleys, cranks connecting said trolleys to a shaft through said car, handles connected to said
30 shaft for shifting said trolleys, substantially as described.

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

JOHN J. EAGAN.

Witnesses:

L. SONNTAG,
ELMER ULRICH.