

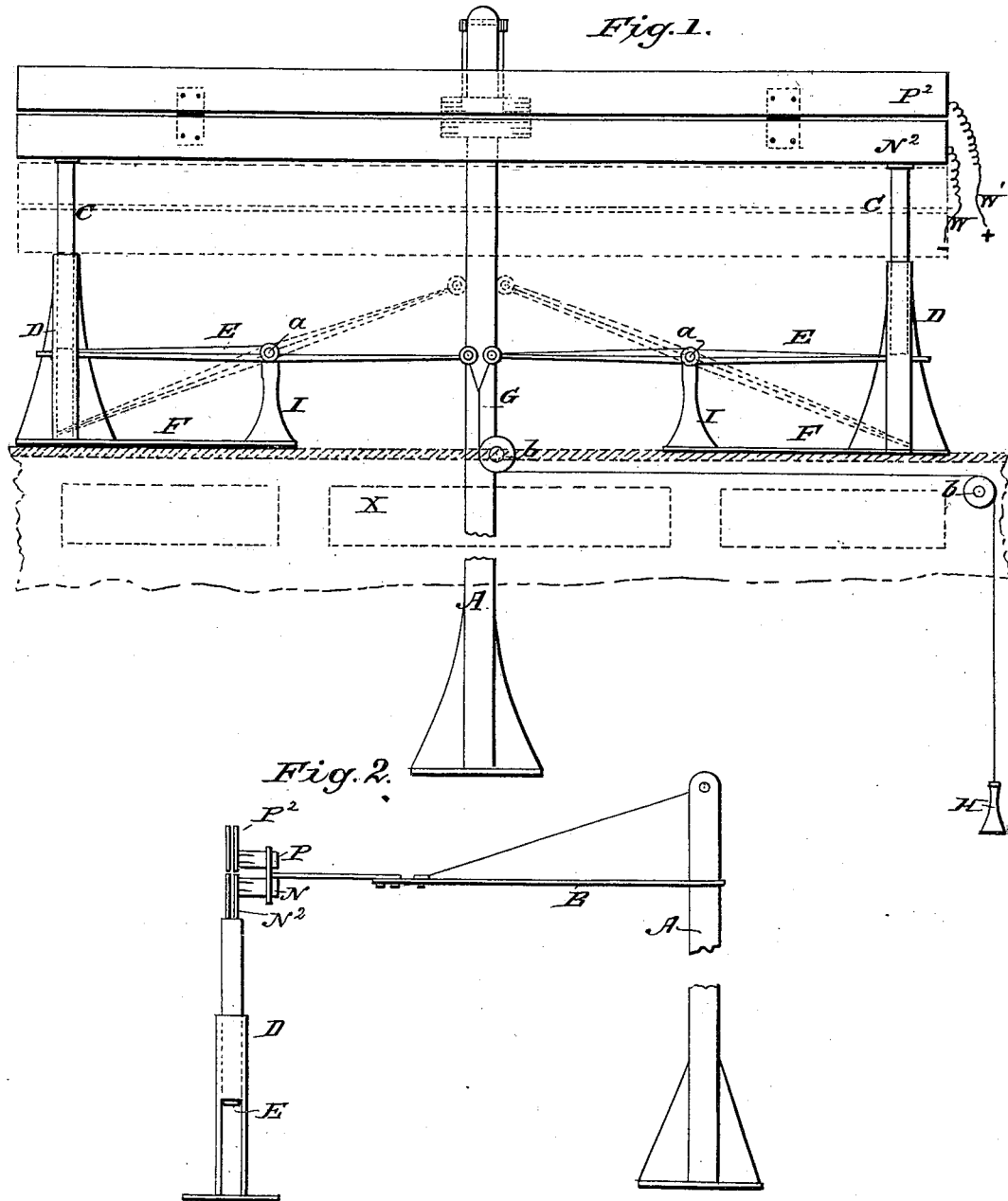
(No Model.)

J. A. ENOS.

CURRENT RECEIVER FOR ELECTRIC RAILWAY CARS.

No. 386,581.

Patented July 24, 1888.



WITNESSES:  
*Fred G. Dieterich*  
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INVENTOR:  
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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOHN A. ENOS, OF BOSTON, ASSIGNOR TO WILLIAM C. OTIS, OF NAHANT,  
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## CURRENT-RECEIVER FOR ELECTRIC-RAILWAY CARS.

SPECIFICATION forming part of Letters Patent No. 386,581, dated July 24, 1888.

Application filed February 13, 1888. Serial No. 263,833. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. ENOS, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Current-Receivers for Electric-Railway Cars, of which the following is a specification.

My invention relates to that class of electric-railway cars in which the car has its motor operated by storage-batteries charged at intervals along the line of travel by contact of terminals on the car with corresponding electrical terminals on posts or standards erected along the line of travel, which are connected to a main generator of electricity, and from which the car receives its installments of electricity from time to time as the electro-motive force of the battery becomes diminished.

The invention consists in combining with the car long conductors extending the full length of the car and adapted to be brought into rubbing contact with brushes on the posts, which conductors are made adjustable to be raised or lowered, as may be required in passing under bridges, &c.

Figure 1 is a side elevation of a stationary post and the conductors mounted on the top of the car and provided with means for raising and lowering the same. Fig. 2 is an end view of the same.

A represents one of the series of posts or standards which are erected at intervals along the line of travel, and which carry at the top a horizontal braced arm, B, provided at its outer extremity with positive and negative brushes P and N, which are connected with circuit wires or conductors running down the post and extending to a central generator of electricity.

On the roof of the car X, at each end, is mounted a plate, F, bearing a vertically-slotted standard, D, and a shorter standard, I. In the vertical standards D D are arranged

the two sliding bars C C, which at their upper ends support two metal plates, P<sup>2</sup> N<sup>2</sup>, insulated from each other. The two plates P<sup>2</sup> N<sup>2</sup> form conductors corresponding to the positive and negative brushes P and N and extend along the top of the car. These plates, when raised to the level of the brushes P N, take off the current from the brushes, and by circuit-wires W W' transmit it to the storage-battery, which is located on the car.

The plates N<sup>2</sup> P<sup>2</sup> are made vertically adjustable through their supporting-bars C, which are stepped upon the ends of levers E, extending through the slots in the standards D. These levers are fulcrumed upon the standards I, and their opposite ends are connected to a pull-cord, G, which passes around pulleys b b on the car, and extends to a handle, H, by which the levers are worked. When this cord is relaxed, the levers assume the dotted position and the plates P<sup>2</sup> N<sup>2</sup> descend, so as to pass under bridges. When the cord G is pulled, the plates P<sup>2</sup> N<sup>2</sup> are again raised to the level of contact with the brushes on the posts.

Having thus described my invention, what I claim as new is—

1. The combination, with a car, of two vertically-adjustable horizontal conductor-plates, P<sup>2</sup> N<sup>2</sup>, extending along the roof of the car, and corresponding stationary brushes arranged along the line of travel, substantially as and for the purpose described.

2. The combination, with a car, of two horizontal conductor-plates, P<sup>2</sup> N<sup>2</sup>, the supporting-bars C C, slotted standards D D, levers E E, and a pull-cord connected thereto, and stationary posts provided with electrical brushes, substantially as and for the purpose described.

JOHN A. ENOS.

Witnesses:

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