

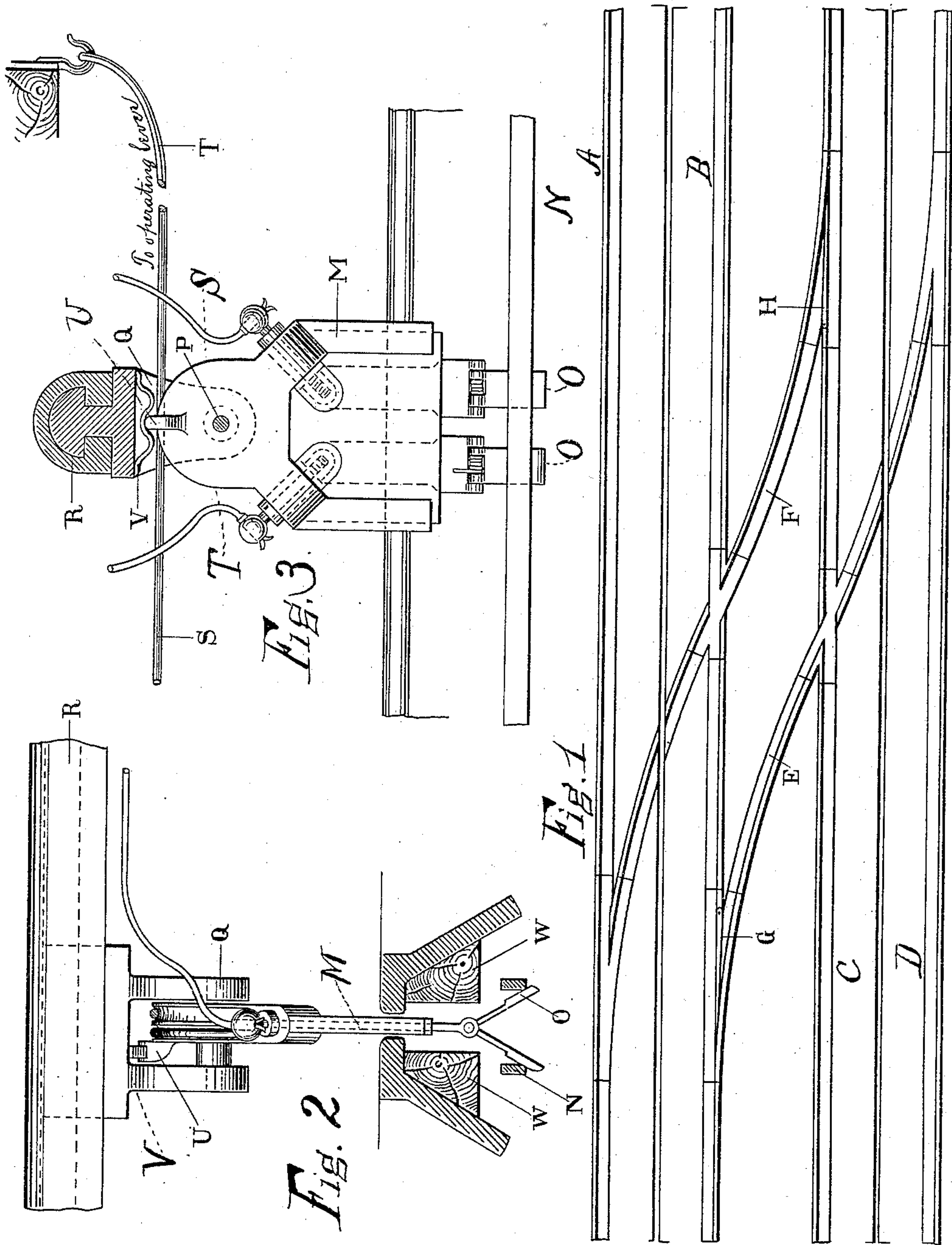
(No Model.)

E. M. BENTLEY.

CONTACT DEVICE FOR ELECTRIC RAILWAYS.

No. 445,634.

Patented Feb. 3, 1891.



WITNESSES

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CONTACT DEVICE FOR ELECTRIC RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 445,634, dated February 3, 1891.

Application filed September 20, 1888. Serial No. 285,934. (No model.)

To all whom it may concern:

Be it known that I, EDWARD M. BENTLEY, a citizen of the United States, residing at New York, in the county of New York, State of New York, have invented certain new and useful Improvements in Contact Devices for Electric Railways, of which the following is a specification.

My invention relates to electric railways wherein the supply-conductor is inclosed in a slotted conduit in a well-known manner. In a road of this character comprising a double track I find it desirable to provide cross-overs at suitable points, by which a car may be transferred from one track to the other. This cross-over section of track preferably is not provided with a conduit, and in order that a car may be run over them I make use of a contact device so constructed that it can readily be removed through the slotted conduit. Such a contact device forms the subject of my present invention, and in claiming it I do not in any wise limit it merely to its use in connection with the cross-over track, also described, for it is evident that the improvements are of such a nature as make them of equal value and importance in other connections as well. When it is desired to use the cross-over, I propel the car, either by hand or other suitable means, from one track to the other, having first removed the contact device. After being transferred the contact device is inserted into the conduit in the opposite track and the vehicle can proceed.

My invention is shown in the accompanying drawings, in which—

Figure 1 is a plan of a double-track railway and cross-over. Fig. 2 is an end elevation of a removable contact device, and Fig. 3 is a side elevation of the same.

In the figures, A, B, C, and D are the four rails of the two tracks.

E and F are the two rails of the cross-over track, G and H being ordinary track-switches. The two tracks are provided with slotted conduits K and L, respectively.

M is a contact device extending into the slot, having two contact-pieces N and O, which normally press against the two supply-

conductors, respectively, but which may collapse and be withdrawn from the slot of the conduit. This contact device is pivoted at P in a traveler Q, adapted to slide in a transverse guide R. The upper part of the contact device is provided with a segment, around which pass in opposite directions the two operating-cords S and T. It is normally held in a vertical position by the lug U engaging with the spring-catch V. When, however, it is necessary to remove the contact device from the conduit, one of the cords S or T is pulled until U is forced out of the spring-catch V. The device then turns upon pivot P until it comes out of the conduit. When the device is once out, the vehicle may be transferred across to the opposite track and the device again inserted, the insulating-lining W guiding the contact devices N and O onto the two supply-conductors, respectively.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in an electric railway, of a contact device pivoted on a transverse axis to a traveler movable laterally with respect to the vehicle.

2. The combination, with a transverse guide, of a traveler Q, sliding thereon, and a contact device M, pivoted to said traveler on a transverse axis.

3. The combination, with a laterally-movable traveler, of a contact device pivoted thereto on a transverse axis, and a spring-catch connection between the said contact device and the traveler, by which the former is held normally in its operative position.

4. The combination of a contact device attached to a laterally-movable traveler, and a flexible actuating device leading from said contact device to a fixed point on the vehicle, whereby the contact device may be operated independently of its transverse movement.

5. The combination, in an electric railway, of a conduit and supply-conductor therein with a vehicle, a transverse guide thereon, and a contact device traveling along said guide and movable into and out of the conduit without moving the guide.

6. The combination, in an electric railway, of a transverse guide with a traveler mov-

able along said guide, and a contact device pivoted to the traveler upon a substantially horizontal axis.

7. The combination of a transverse guide,
5 a traveler movable along the guide, and a contact device pivoted to the traveler, with a flexible conducting-lead extending directly from the said contact device to the car.

8. The combination, with a laterally-mov-

able traveler, of a contact device movable relatively to the traveler, and a spring-catch connection between the contact device and the traveler, by which the former is held normally in its operative position.

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Witnesses:

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