

(No Model)

W. M. BROWN.

CURRENT COLLECTING DEVICE FOR ELECTRIC RAILWAYS.

No. 583,324.

Patented May 25, 1897.

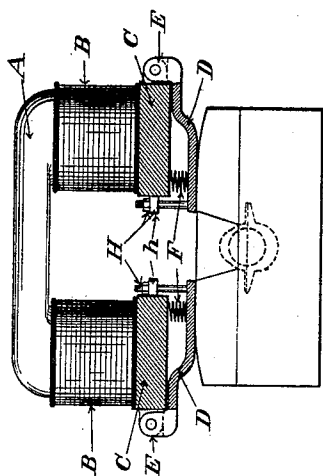


Fig. 1.

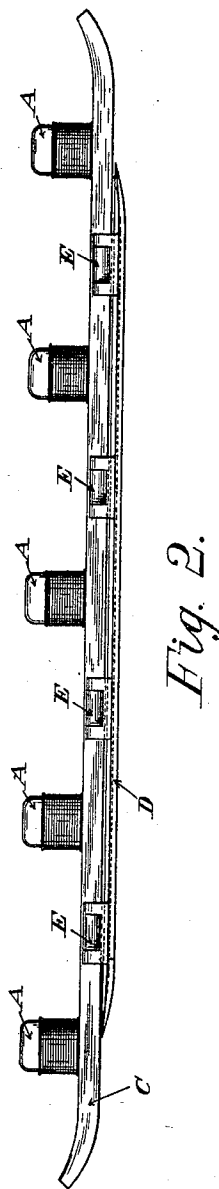


Fig. 2.

WITNESSES:

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CURRENT-COLLECTING DEVICE FOR ELECTRIC RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 583,324, dated May 25, 1897.

Application filed July 18, 1896. Serial No. 599,650. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MILTON BROWN, of Johnstown, county of Cambria, State of Pennsylvania, have invented certain new and useful Improvements in Current-Collecting Devices for Electric Railways, of which the following specification is a true and exact description, due reference being had to the accompanying drawings.

My invention is designed for use upon that class of electrically-propelled vehicles which receive their power from isolated or non-continuous contacts normally out of circuit with the source of supply but adapted to be put in circuit therewith by a switching mechanism controlled by a suitable magnet upon the vehicle.

The object of my invention is to provide a simple, durable, and effective form of contact-shoe adapted to make a comparatively noiseless yielding contact with the fixed contacts before described, adapted to be readily adjusted to allow for wear, and adapted to be secured below the poles of the switch-operating magnet, so that it may provide a path between the fixed contact and the magnet-pole for the magnetic lines of force.

To these ends my invention consists in the novel arrangement and combination of parts to be described and claimed.

Referring to the drawings, Figure 1 is a transverse section through a magnet embodying my invention. Fig. 2 is a side view of such a magnet.

In the drawings, A are the magnet-cores, having the spools B, a number of these magnets being attached to the pole-pieces C. Beneath these pole-pieces are the collecting-pieces D, suitably hinged to the pole-pieces at E. These shoes are pressed downward by the springs F and are restrained from too much movement and may be adjusted to compensate for the wear of the shoes and fixed contacts by the bolts H, passing through lugs h on the magnet-poles. The shoe is preferably so arranged that one portion of it next the hinge side bears against the pole-piece or is in close proximity to it, while the other side

drops down, so as to engage the surface of the box. The magnetic lines of force can then flow down into the portion of the shoe next to the magnetic pole and thence transversely across the shoe and to the contact-box without having to traverse any air-gap.

The springs F always serve to maintain the shoe in contact with the box and allow it to rise and fall, as may be necessary.

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

1. In combination with an electrically-propelled vehicle and a magnet carried thereby, a flexible member depending below each magnet-pole, and a spring between, and bearing against, the pole and flexible member.

2. In combination, an electrically-propelled vehicle, a switch-operating magnet carried thereby, a flexible contact-shoe secured to each magnet-pole, and a vertical spring between the pole and the shoe, adapted to press the shoe toward the fixed contact.

3. In combination, an electrically-propelled vehicle, a switch-operating magnet carried thereby, a spring-pressed contact-shoe carried by each magnet-pole, one side of said shoe being pivoted to the pole, the other side being secured thereto by a vertical bolt and adjusting-nut.

4. In combination, an electrically-propelled vehicle, a magnet carried thereby and having two longitudinal, parallel poles, a longitudinal, flexible member secured to each pole, and means for adjusting the position of said member.

5. In combination, an electrically-propelled vehicle, a switch-operating magnet carried thereby having two longitudinal parallel poles, longitudinal, flexible, spring-pressed shoes secured to said pole, and means for adjusting the operative position of said shoes.

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

WILLIAM MILTON BROWN.

Witnesses:

K. C. HOXIE,
H. W. SMITH.