

(No Model.)

2 Sheets—Sheet 1.

D. BROOKS, Jr.
ELECTRIC RAILWAY.

No. 550,437.

Patented Nov. 26, 1895.

Fig. 2.

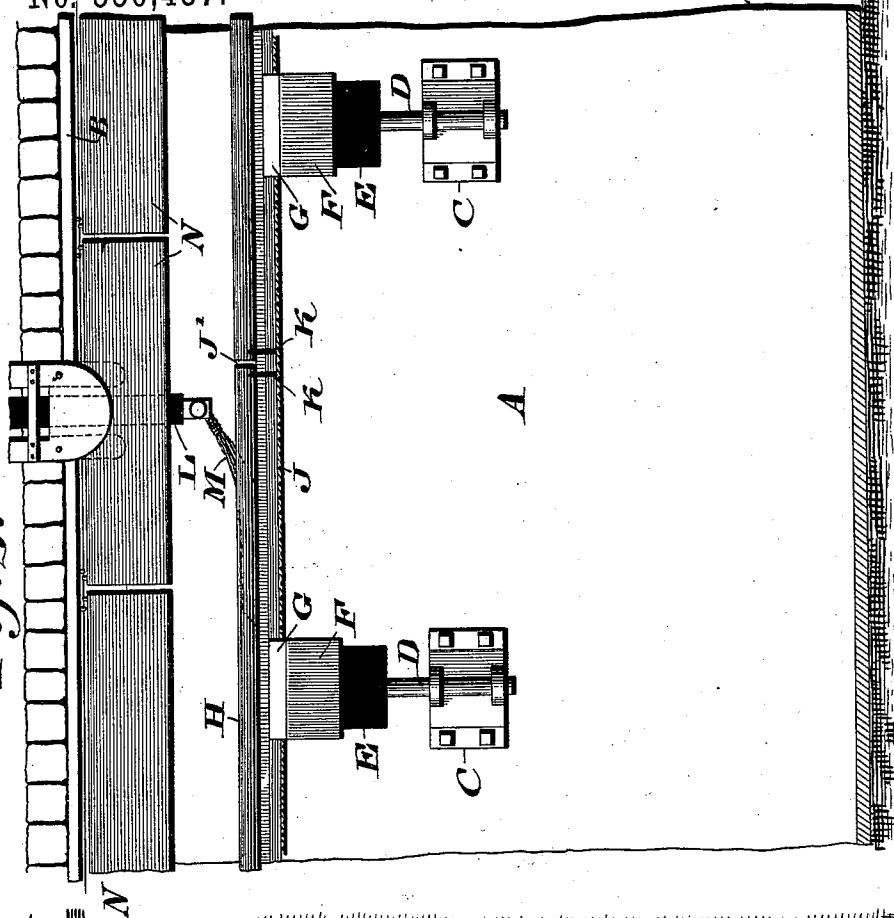


Fig. 1.

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(No Model.)

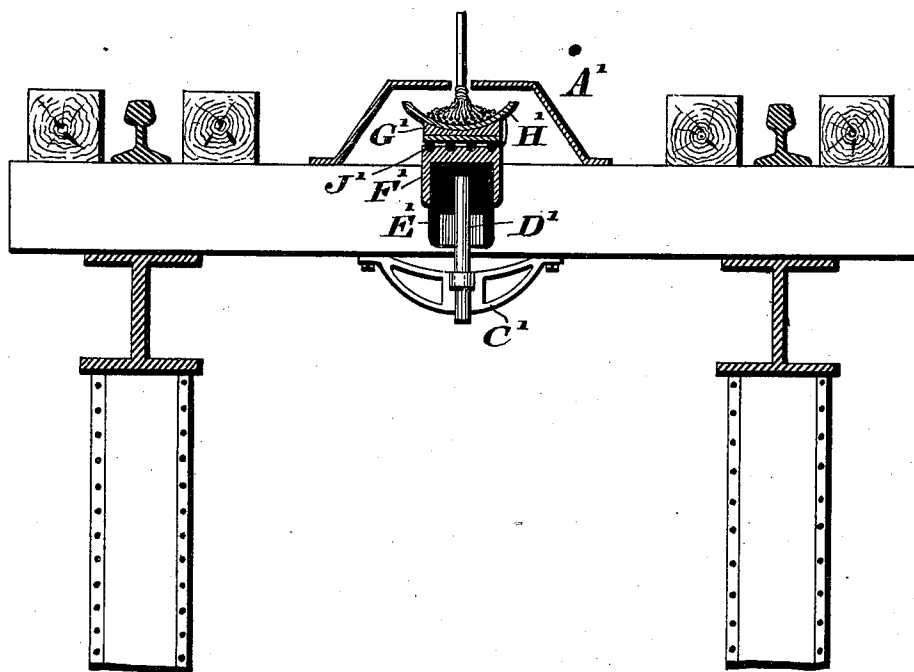
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Fig. 3



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UNITED STATES PATENT OFFICE.

DAVID BROOKS, JR., OF PHILADELPHIA, PENNSYLVANIA.

ELECTRIC RAILWAY.

SPECIFICATION forming part of Letters Patent No. 550,437, dated November 26, 1895.

Application filed February 28, 1894. Serial No. 501,755. (No model.)

To all whom it may concern:

Be it known that I, DAVID BROOKS, JR., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Electric Railways, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to an improvement in electric railways embodying an underground trolley; and it consists of an electrically-charged rail of novel construction, novel means for supporting said rail, and a novel brush or drag, whereby the current may be transmitted from said rail to the motor of a car.

Figure 1 represents a transverse section of an electric railway embodying my invention. Fig. 2 represents a longitudinal section thereof. Fig. 3 represents a transverse section of another form of the invention.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a subway or conduit of suitable construction, and B designates a slot in the crown or top thereof. Within the conduit are secured the brackets C, from which rise the posts or columns D, on which latter are supported the insulators E.

F designates hoods, which are rested on said insulators E, and G designates a longitudinally-extending strip of wood, which is sustained on said hoods and carries the trough H, said parts G and H forming a rail. Interposed between the hood F and strip G are wires J, which form the electric conductors for the trough H of the rail, said wires thus being suspended from the hoods. The strip G is continuous and the trough is sectional or separated at intervals, as at J', the ends of the sections having connected with them pieces K of fusible material, said pieces being attached to the wires J, by which provision, should any material or article drop upon the trough and thus cause a short circuit, the proper connection K will fuse and burn out, so that the relative section of the conductor

may be affected without injuring the remaining sections.

L designates the arm, which is connected with the car and moves through the slot B, said arm carrying the brush or drag M, which is spread out below and rests freely on the trough H, so as to be permitted to rise and fall with said arm while always remaining in contact with said trough, owing to the channeled nature of the latter, it being evident that the electric current communicated to said trough by the wires J is taken up by said brush and thus conducted by the receiver to the motor of the car. Depending from the crown of the conduit, aside the slot B, are swinging guards N, the same inclosing the lower portion of the arm or receiver L and protecting the same.

In Fig. 3 I show the invention as applied to an elevated railway. In this case the slotted conduit A' and the brackets C' are secured to the elevated structure, the other parts including the posts D', insulators E', hoods F', troughs H', strip G', and wires J' being similar to those shown in Figs. 1 and 2.

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

1. In an electric railway, a rail formed of a strip, and a trough thereon, an electric conductor in contact with said strip, and supporting insulators, said rail and conductor being supported by said insulators, substantially as and for the purpose set forth.

2. In an electric railway, a brush depending from the current receiving arm of a car, and a trough connected with an electric conductor, said brush spreading from said arm and freely resting on said trough, substantially as described.

3. In an electric railway, insulators, and suitable supports therefor, hoods sustained on said insulators, a strip of wood supported by said hoods, a trough on said strip and an electric conductor interposed between said strip and hood, substantially as described.

4. In an electric railway, insulators and suitable supports therefor, hoods sustained

on said insulators, strips of wood supported by said hoods, a sectional trough on said strip, an electric conductor interposed between said strip and hoods, and pieces of fusible material connecting said section and conductor, substantially as described.

5. In an electric railway, a current receiving arm on a car, a brush depending from

said arm, and a conduit having swinging guards below the slot beside a portion of said arm, substantially as described.

DAVID BROOKS, JR.

Witnesses:

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