(No Model.)

F. M. ASHLEY.

ELECTRIC RAILWAY CONDUIT.

No. 514,114. Patented Feb. 6, 1894.

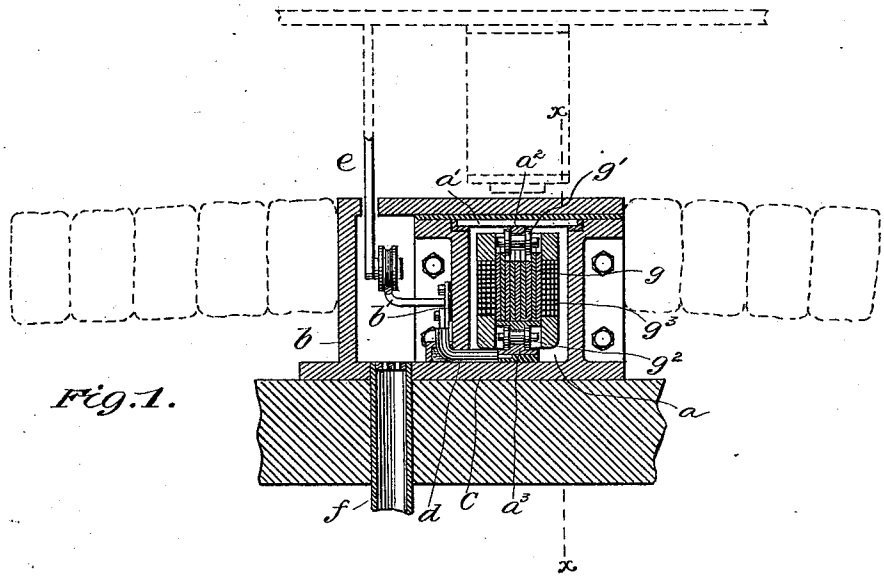

Fig. 1.

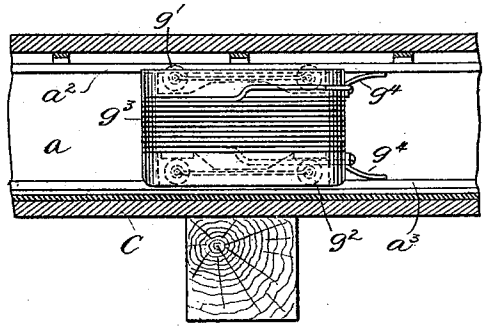

Fig. 2.

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ELECTRIC-RAILWAY CONDUIT.

SPECIFICATION forming part of Letters Patent No. 514,114, dated February 6, 1894.

Application filed December 23, 1892. Serial No. 456,138. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. ASHLEY, a citizen of the United States, residing at Hawthorne, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Electric Railways, of which the following is a full, clear, and exact description.

My invention relates to electric railways, the object being to provide an improvement in the construction of the conduits wherein a traveling switching apparatus is caused to move by the attraction of a magnet carried by a car and thereby switch the current from a continuous to a sectional conductor.

The invention consists of the details of construction hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a cross-section of the conduit and switching apparatus, and Fig. 2 is a longitudinal section taken on line x—x of Fig. 1.

The conduit is divided into two longitudinal passages a and b respectively, both of which are preferably formed in a single structure C which is located in the road-bed of the railway. The compartment a is made as near air and water tight as possible, and its top plate or roof is flush with the surface of the street.

To the top plate of the conduit is attached a series of strips a' of non-conducting material upon which are supported in a central position a continuous main conductor a^2; this conductor is made in the form of a rail and is supplied with current from the generator at the central station. Directly below this rail and supported by insulators attached to the bottom of the compartment is a sectional rail and electrical conductor a^3. In the compartment b is located, in any suitable position, a sectional conductor b' which is mounted and insulated in any suitable manner. The sections of this conductor correspond with the sections of the conductor a^3 and the corresponding sections are electrically connected together by branch wires d. The compartment b is provided with a slot in its top plate through which a collector e from the car projects and makes contact with the sectional conductor b'. The compartment b being open moisture is liable to collect and for carrying this off the pipe f is provided and connected with a sewer. In the compartment a is placed a traveling switching apparatus g which consists of a rectangular body of iron having two spring mounted wheels or rollers g' located in a chamber formed in its upper surface, and with two other similar rollers g^2 located in a chamber in its lower surface. These rollers are provided with flanges and the two pairs run respectively on the two rails a^2, a^3. The body g is surrounded horizontally with a coil of wire g^3 which, when current passes through it, establishes a polarity in the body g. The terminals of this coil connect with dragging brushes g^4 on the end of part g and it thereby gets a portion of the current flowing from rail to rail.

The vehicle will be provided with an electro-magnet shown in dotted lines in Fig. 1 which will cause the traveling switch to move along in unison with the car by magnetic attraction.

Having described my invention, I claim—

In an electric railway, a conduit divided into two compartments located in the same horizontal plane, one of which is closed and the other open, a traveling switch moving in the closed conduit and rails located above and below the switch upon which the latter runs, one of said rails being sectional, and a sectional conductor located in the open compartment with its sections connected respectively with the sections of the sectional rail.

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

FRANK M. ASHLEY.

Witnesses:

JOS. J. UHL,

Mrs. F. M. ASHLEY.