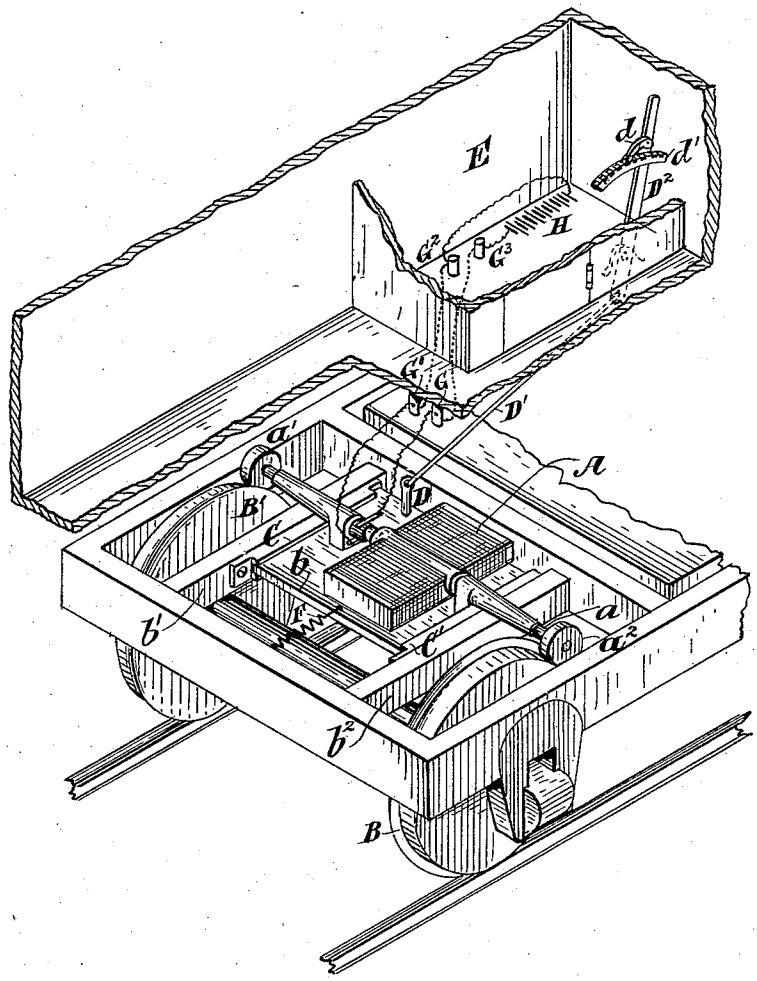
(No Model.)

H. E. DEY.

ELECTRIC LIGHTING APPARATUS FOR RAILROAD CARS.

No. 381,915. Patented May 1, 1888.



Witnesses.
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UNITED STATES PATENT OFFICE.

HARRY E. DEY, OF NEW YORK, N. Y.

ELECTRIC-LIGHTING APPARATUS FOR RAILROAD-CARS.

SPECIFICATION forming part of Letters Patent No. 381,915, dated May 1, 1888.

Application filed January 10, 1888. Serial No. 260,324. (No model.)

To all whom it may concern:

Be it known that I, HARRY E. DEY, a citizen of the United States, residing at New York, in the county and State of New York, have invented a new and useful Improvement in Means for Lighting Railroad-Cars with Electricity, of which the following is a specification, reference being had to the accompanying drawing, forming a part thereof.

My invention relates to an improved method of charging storage-batteries suitably placed in a car and from which electric lamps are supplied.

My improvement consists in providing a dynamo for charging the said storage-batteries and having its armature driven direct from the car-wheels.

The improvement also consists in certain features of construction for supporting and controlling the engagement of the dynamo with the wheels.

The drawing illustrates a portion of the inside end of an ordinary car-truck, and also a portion of the car-body.

A designates a dynamo, which may be of any ordinary construction and having its armature-shaft *a* extended sufficiently to admit of friction-pulleys a' a^2 being mounted thereon and engaging with the periphery of the car-wheels B B'. The pulleys a' a^2 are faced with rubber or other yielding material capable of insuring a proper frictional hold on the surface of the car-wheels. The dynamo is mounted on a plate, *b*, whose side portions are fitted to slide in grooves contained on the usual longitudinal beams, b' b^2. I preferably provide metal groove-pieces C C', and secure the same to the sides of the beams b' b^2 by screws or bolts. The shaft *a* is mounted in bearings secured to the plate *b*, and extended sidewise to afford support for the end portions of said shaft.

D is a post secured to the plate *b* and connected by a rod, D', to a lever, D^2, conveniently placed in the car, which lever is provided with a pawl, *d*, to engage in a notched bar, *d'*, secured to the side of the car, preferably within the water-closet E. By means of this lever the dynamo may be brought into or out of engagement with the car-wheels and be held in any position. A coil-spring, F, may be used to assist, or in lieu of the lever D^2, for effecting the engagement of the pulleys a' a^2 with the car-wheels, and a ball-and-socket joint may be used, if desirable, between the lever D^2 and rod D'.

The wires from the dynamo are connected to binding-posts G G', secured to the bottom of the car above the commutator. The binding-posts are connected by wires to other binding-posts, G^2 G^3, adjacent to the storage-batteries H, with which they are connected.

I have shown the storage-batteries arranged in the water-closet; but they may be secured to the bottom of the car, or elsewhere, if desirable, and also but one friction-wheel, *a'*, used instead of two, as shown.

By my improvement I provide a simple and convenient method of furnishing electricity for car-lighting, avoiding the use of bells and gearing and utilizing vacant space within the truck for the dynamo. The dynamo can be readily attached to any ordinary car-truck without requiring any alteration of the same. The dynamo can also be easily and quickly detached for repair or allow another one to be substituted.

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

1. In combination, the dynamo A, provided with friction-pulleys a' a^2 for direct engagement with the car-wheels, the said dynamo being mounted to slide in grooves arranged on the car-truck, the lever D^2, provided with pawl and notched bar for retaining the dynamo out of engagement with the car-wheels, the rod D' and post D, for connecting the lever D^2 and dynamo-support, and a spring, F, acting in conjunction with the lever D^2, for retaining the dynamo in engagement with the car-wheels, substantially as described.

2. In combination, the dynamo A, mounted to slide in grooves arranged on the car-truck and having its armature provided with friction-wheels for engagement with the car-wheels, the lever D^2, provided with pawl and notched bar for retaining the dynamo in or out of engagement with the car-wheels, and the rod D' and post D, as described.

HARRY E. DEY.

Witnesses:
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MAGGIE MAGANRAN.