

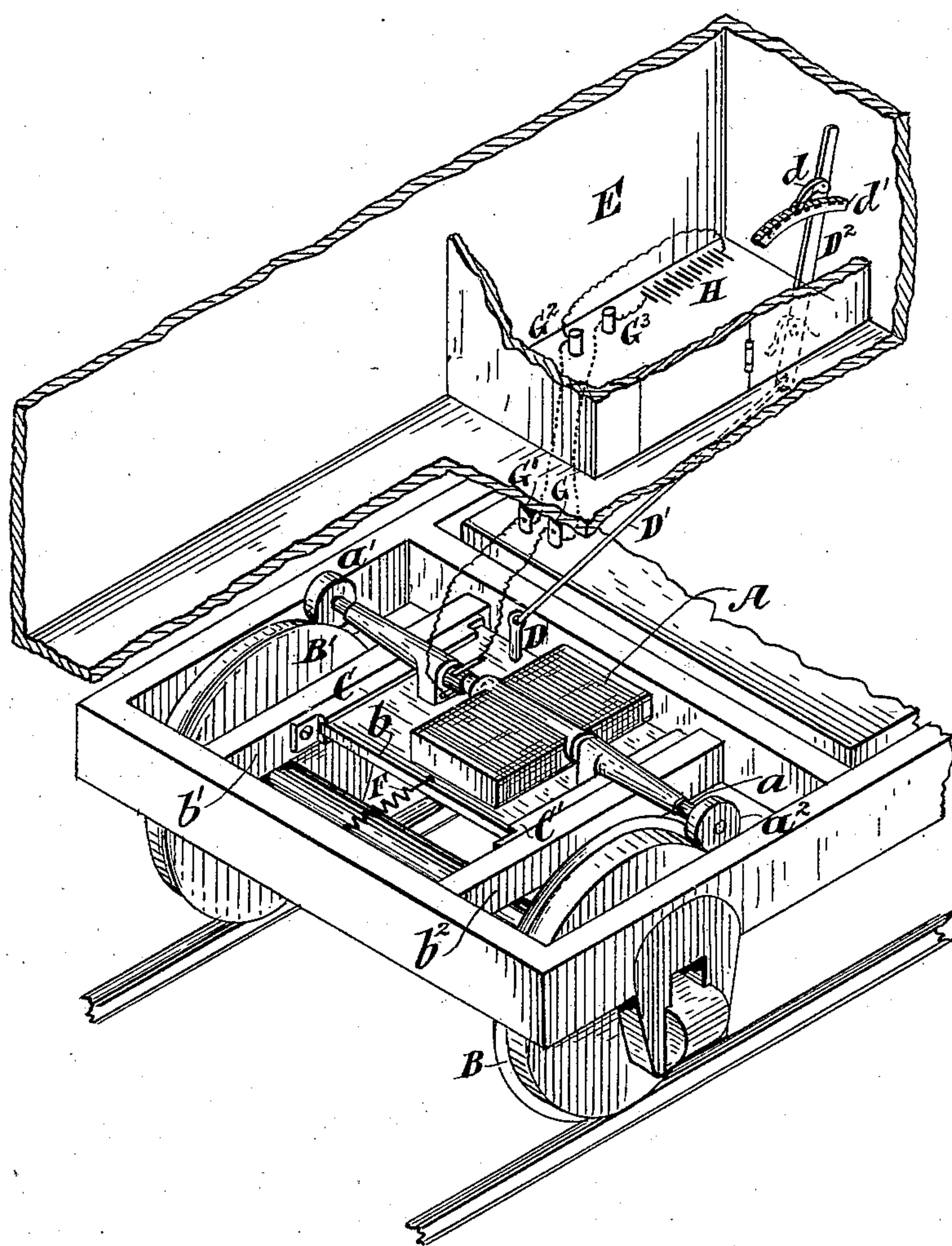
(No Model.)

H. E. DEY.

ELECTRIC LIGHTING APPARATUS FOR RAILROAD CARS.

No. 381,915.

Patented May 1, 1888.



Witnesses.
Geo. Wadman,
Maggie Magauran

Inventor,
Harry E. Dey.

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, D², 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 D², 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 D² 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, G² G³, 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 D², 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 D² and dynamo-support, and a spring, F, acting in conjunction with the lever D², 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 D², 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:

GEO. WADMAN,
MAGGIE MAGANRAN.