

No. 881,599.

PATENTED MAR. 10, 1908.

L. C. MAHER.

MEANS FOR TRANSMITTING POWER FROM THE AXLES OF RAILWAY CARS.

APPLICATION FILED JUNE 29, 1907.

Fig. 2

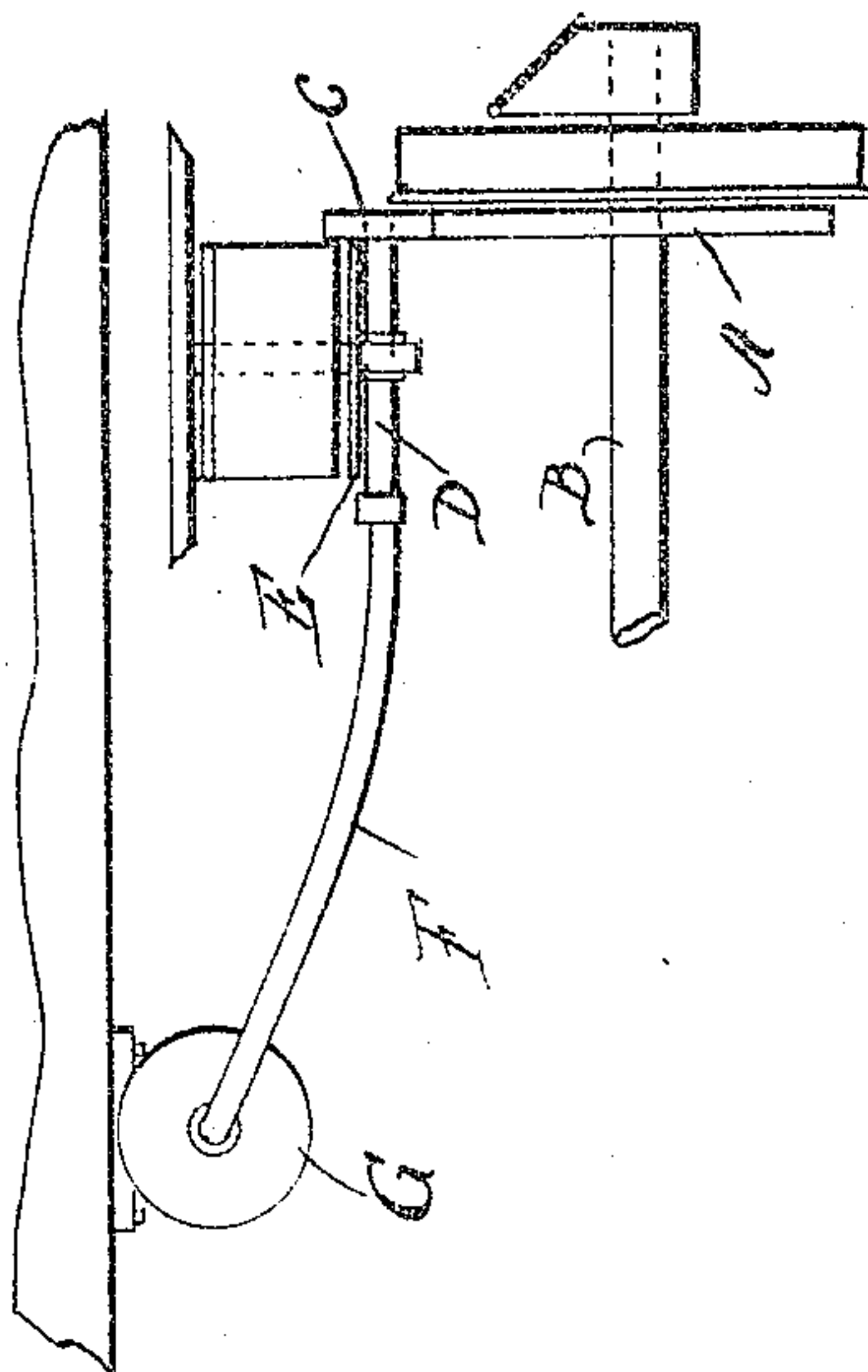
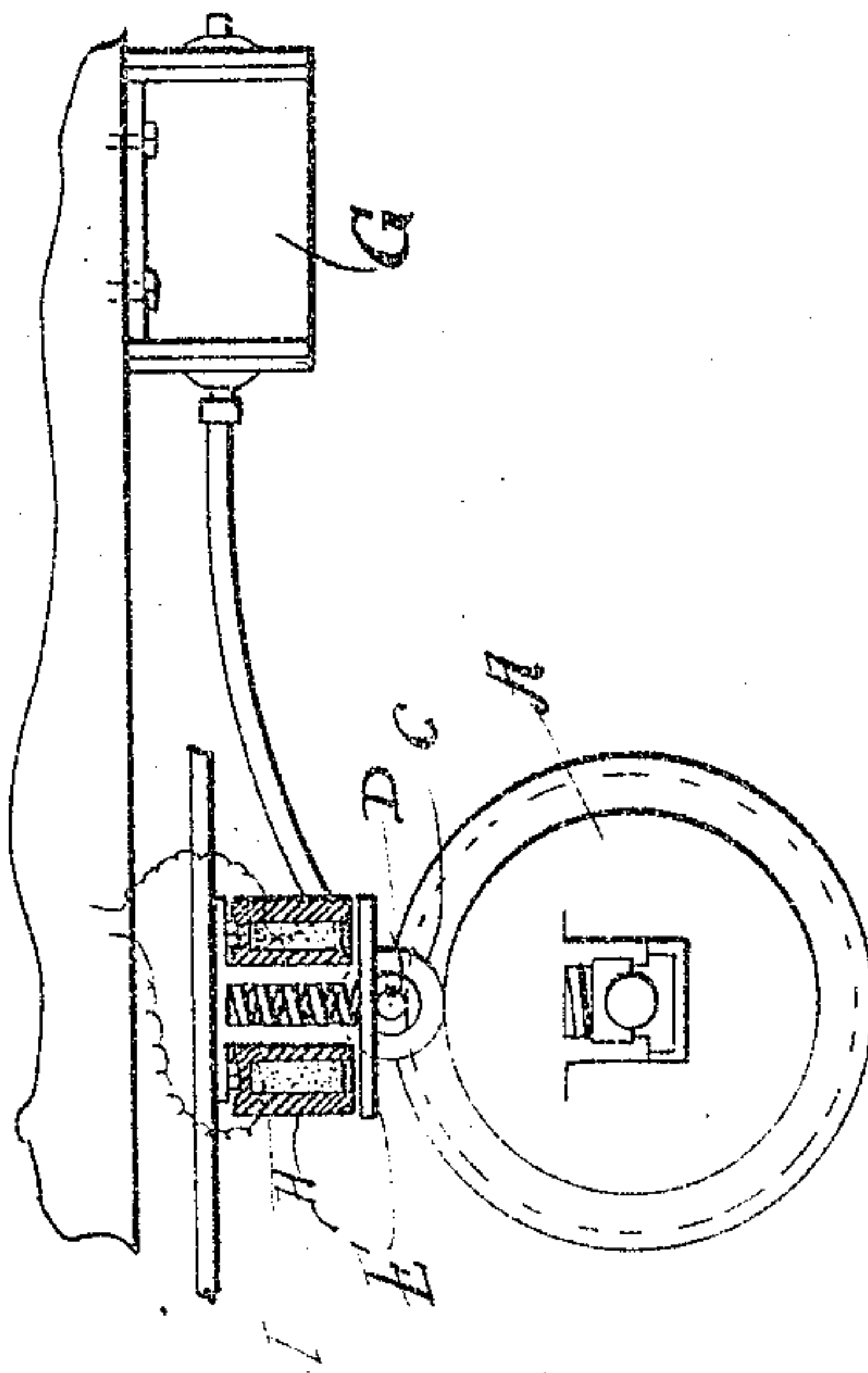


Fig. 1



WITNESSES:

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LAWRENCE C. MAHER, OF PHILADELPHIA, PENNSYLVANIA.

MEANS FOR TRANSMITTING POWER FROM THE AXLES OF RAILWAY-CARS.

No. 881,599.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed June 29, 1907. Serial No. 381,476.

*To all whom it may concern:*

Be it known that I, LAWRENCE C. MAHER, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful improvement in means for transmitting power from the axles of railway-cars and the like to electric generators and for stopping and starting the generator while the axle is in motion, of which the following is a specification.

My invention relates to a new and useful improvement in means for transmitting power from the axles of railway cars and the like to electric generators, and for stopping and starting the generator while the axle is in motion.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which --

Figure 1 is a sectional elevation of a portion of a car and truck showing my improvement applied thereto. Fig. 2, a similar view taken at right angles thereto.

In carrying out my invention as here embodied, A represents a friction or gear wheel secured upon one of the axles B of the truck, and C is a small wheel adapted to engage with the wheel A and receive power therefrom. The wheel C is secured upon a shaft D, which is journaled in suitable bearings formed upon the armature E, and to this shaft is secured a flexible shaft F, the opposite end of which is connected to the armature shaft of the electric generator G, the latter being secured to the under side of the car. By this arrangement power is transmitted to the generator whenever the car is in motion, and the movements of the truck relative to the body of the car are compensated for by the flexible shaft, as will be readily understood.

In order that the generator may be put

into or out of action while the car is running, I provide an electro magnet H so arranged relative to the armature E that when this magnet is vitalized it will draw the armature upward against the action of the spring I, thus lifting the wheel C out of engagement with the wheel A, which will stop the rotation of the flexible shaft and consequently the generator. The wires of this magnet pass into the car and may be connected with a suitable switch, the operations of which will make or break a suitable electric circuit for energizing or de-energizing the magnet.

In practice, when the generator is used for charging a storage battery upon a car, suitable automatic switches may be included in the circuit, and when the battery has been fully charged the magnet H may be vitalized, thereby drawing the wheel C out of contact or mesh with the wheel A causing the generator to stop, thus cutting off the further charging of the battery, or if preferred an ordinary hand switch may be used for sending a current through the magnet H for stopping the generator.

It is to be understood that the wheels A and C may be gears and adapted to mesh together, or they may be friction wheels adapted to transmit the motion of the car axle to the generator by the pressure of one upon the other caused by the spring I.

Having thus fully described my invention, what I claim as new and useful, is

In combination with a generator carried by the body of a car, a wheel, a flexible shaft connecting said generator and wheel, a driving wheel secured upon the axle of the car, a spring for forcing the driven wheel in contact with the driving wheel, an armature upon which the driven wheel is journaled and an electro-magnet so arranged as to draw the armature upward and thereby lift the driven wheel out of contact with the driving wheel when said magnet is vitalized, as specified.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

LAWRENCE C. MAHER.

Witnesses:

WALTER HIMS WORTH,  
MRS. L. C. MAHER.