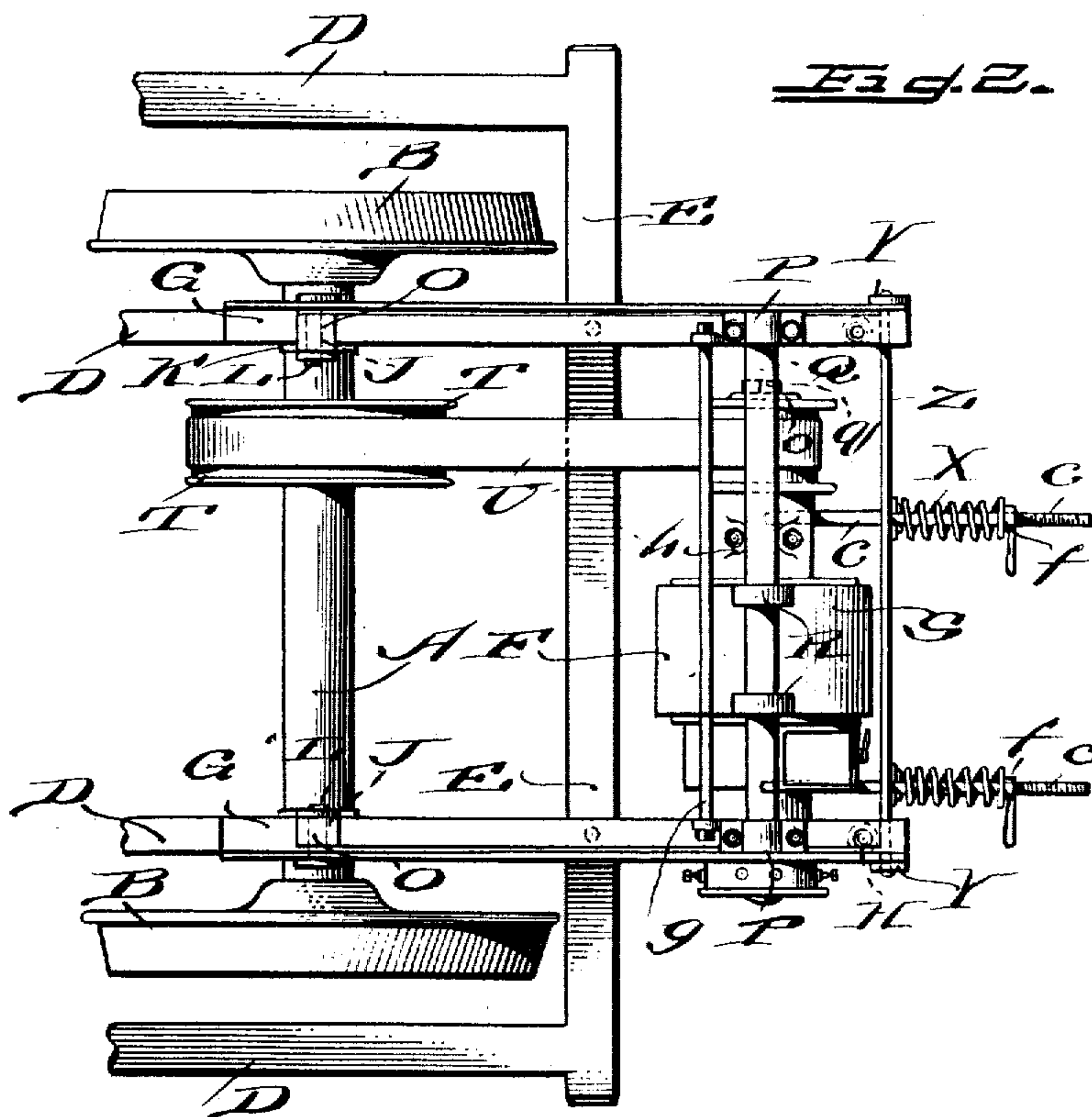
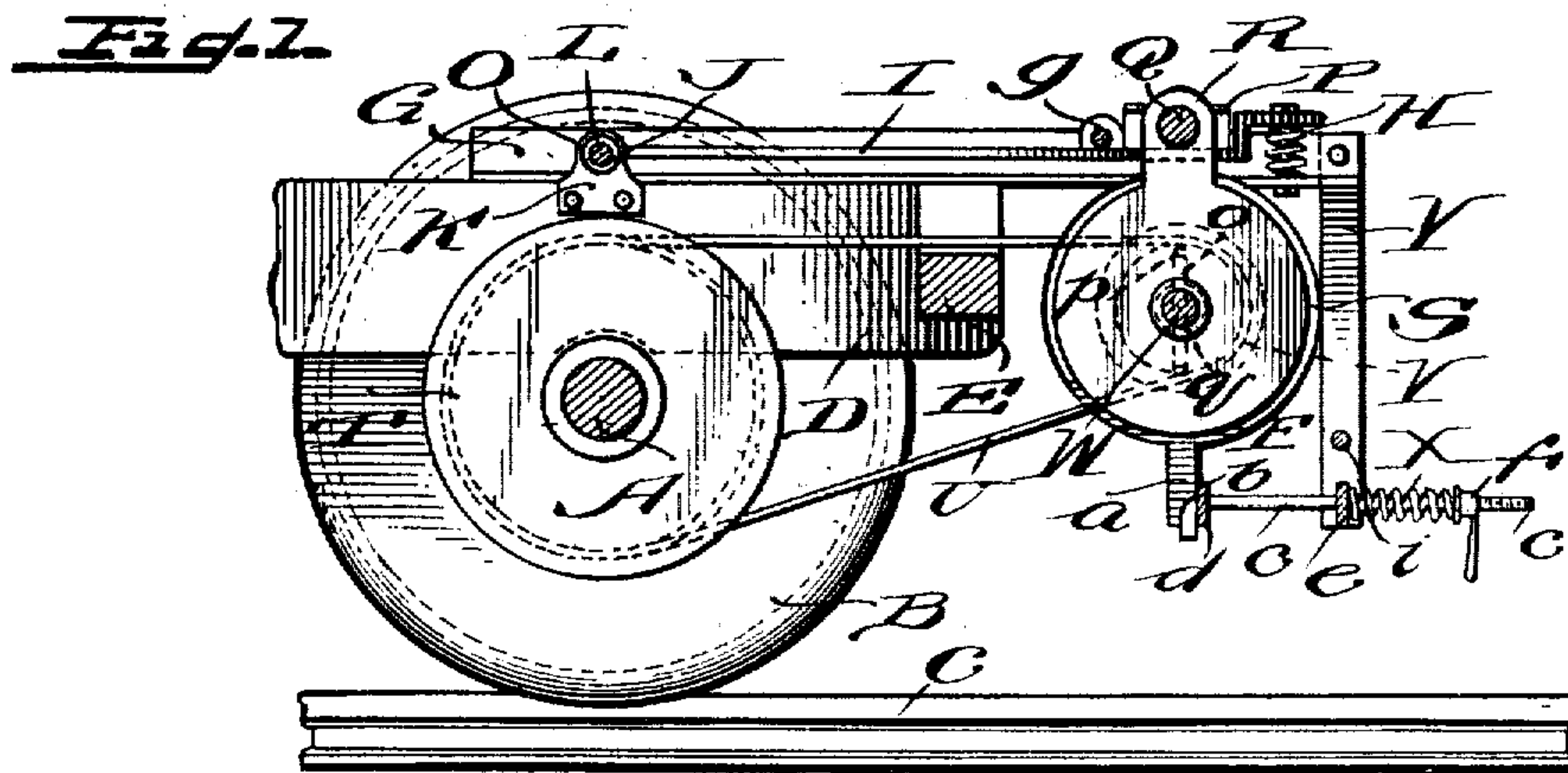


No. 844,165.

PATENTED FEB. 12, 1907.

M. MOSKOWITZ.
POWER TRANSMISSION.
APPLICATION FILED SEPT. 11, 1906.

2 SHEETS—SHEET 1.



Attest:
R. W. Ashby
A. L. O'Brien

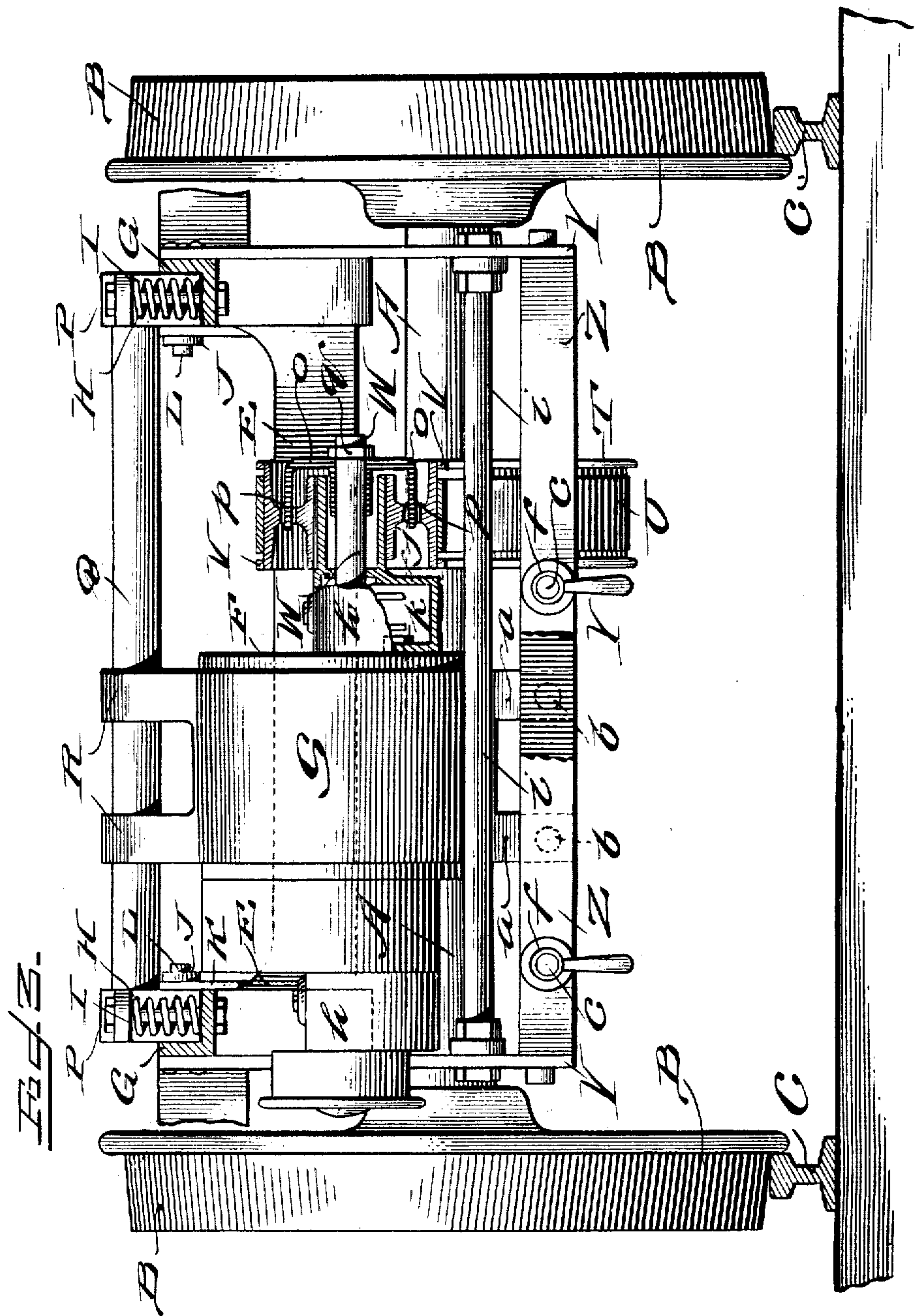
Inventor:
MORRIS MOSKOWITZ
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Attys.

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2 SHEETS—SHEET 2.



Attest:

W. L. O'Brien

Inventor:

MORRIS MOSKOWITZ

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UNITED STATES PATENT OFFICE.

MORRIS MOSKOWITZ, OF NEW YORK, N. Y., ASSIGNOR TO THE UNITED STATES LIGHT & HEATING COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

POWER TRANSMISSION.

No. 844,165.

Specification of Letters Patent.

Patented Feb. 12, 1907

Application filed September 11, 1905. Serial No. 278,062.

To all whom it may concern:

Be it known that I, MORRIS MOSKOWITZ, a citizen of the United States, and a resident of the borough of Brooklyn, county of Kings, city and State of New York, have invented certain new and useful Improvements in Power Transmission, of which the following is a specification accompanied by drawings.

This invention relates to improvements in power transmission, more particularly to improved means for transmitting power from the axle of a car-truck to a dynamo-electric machine suitably suspended from the truck.

The object of the invention is to obviate the wear upon the axle of the dynamo and the consequent destruction of the armature, which occurs with the usual power-transmitting mechanism.

The invention in some respects is an improvement upon the construction disclosed in United States Patent No. 768,392, granted to me August 23, 1904.

I have preferably illustrated the present invention in connection with the same mode of suspension disclosed in said prior patent, although the invention may be used in any connection in which it is applicable.

Further objects of the invention will hereinafter appear; and to these ends the invention consists of apparatus for carrying out the above objects embodying the features of construction, combinations of elements, and arrangement of parts having the general mode of operation substantially as herein-after fully described and claimed in the accompanying specification, and shown in the drawings, in which—

Figure 1 is a side elevation, partly in section, of the end of a truck for a railway-car provided with a dynamo driven in accordance with this invention. Fig. 2 is a plan view; and Fig. 3 is an end view, partly in section.

Referring to the drawings, A represents the car-axle; B, the wheels, running on the rails C. D represents the wheel-guards, and E is the end sill. These parts of the car may be constructed in the usual manner.

The dynamo F is suspended outside of the end sill of the truck by beams G, secured to

the wheel-guards D, the ends of the beams projecting beyond the end sills E. The dynamo F is cushioned in a vertical direction by suitable cushioning-springs H.

Pivot-bars I are pivoted at J to the angle-beams G, while the other ends of said beams bear upon the cushioning-springs H. The inner ends of the pivot-bars I may be pivoted to the angle-beams G in any suitable manner—in this instance a bearing K being secured to the wheel-guard D, while a pivot-pin L passes through the upright flange of the angle-beam G and through said bearing K. The eye or enlarged portion O of the bar I is pivoted upon the pin L. Suitable bearings P are provided upon the pivot-bars I for the shaft Q, upon which the dynamo F is pivoted. The shaft Q, as shown, extends transversely of the truck and passes through the ears R on the field S of the dynamo F. The weight of the dynamo F is therefore transmitted through the shaft Q to the pivot-bars I and from thence through the cushioning-springs H to the angle-beams G.

The axle A is provided with a suitable driving-pulley T, connected by a belt U with the pulley V, connected to drive the shaft W of the dynamo in accordance with this invention. Suitable belt-tightening springs X are provided, and downwardly-depending rods Y are secured to the outer ends of the angle-beams G, the lower ends of these rods being connected by a cross-rod Z. The field of the dynamo is provided with downwardly-depending lugs or ears *a*, to which is secured a cross-rod *b*, provided with apertures at its ends for the hooked rods *c*. These hooked rods *c* are provided with screw-threads. The rods *c* are thrust through the apertures *d* in the rods or bars *b* and also through the apertures *e* in the cross rods or bars Z. The springs X are passed over the ends of the rods *c* and compressed between the cross-rods Z and the gravity-nuts *f*. The tendency of the springs X is therefore to pull the lower portion of the dynamo F away from the car-axle A, and thereby maintain the belt U taut.

Preferably a cross-rod *g* is provided, connecting two pivot-bars I together. Suitable bearings *h* are provided on the field of the

dynamo for the shaft W of the dynamo. A cross binding-rod *i* is preferably provided, connecting the two downwardly-depending bars Y.

5 A frame *j*, forming one bearing for the dynamo-shaft W, is suitably connected to the field S, as by means of the bolts *k*, and upon the outer end of said frame is carried the pulley V, which is connected to drive the
10 shaft W by means of a dog or spider *o*, keyed to the shaft and having arms *p* loosely inserted in apertures in the body or spokes of pulley V. A nut *q* or other suitable means holds the dog on the shaft. Any other suitable means may be provided for supporting
15 the pulley V on a bearing separate from the shaft W and for driving the shaft from said pulley without throwing a transverse strain upon the shaft. According to the construction disclosed, which has been found to operate satisfactorily and well, the bearings for the dynamo-shaft are not worn away rapidly and the armature remains true for the life of the same. Any suitable form of bearing
20 may be provided for the pulley V, as a ball-bearing or an oilless bearing, which may be readily renewed whenever desired without removing the armature.

Obviously some features of this invention
30 may be used without others, and the invention may be embodied in widely-varying forms.

Therefore, without limiting the invention to the construction shown and described
35 nor enumerating equivalents, I claim, and desire to secure by Letters Patent, the following:

1. The combination with a car-truck, of a dynamo suitably supported thereon, a belt
40 operatively connected to drive the dynamo from the car-axle, and means for preventing transverse strain on the armature-shaft.

2. The combination with a car-truck, of a dynamo suitably supported thereon, a belt
45 operatively connected to drive the dynamo

from the car-axle, and means for preventing substantial wear upon the armature-shaft or its bearings.

3. The combination with a car-truck, of a dynamo suitably supported thereon, a belt 50 operatively connected to drive the dynamo from the car-axle, and means for preventing irregular wear upon the armature-shaft or its bearings caused by transverse strains on the dynamo-shaft. 55

4. The combination with a car-truck, of a dynamo supported thereon, a frame supported adjacent the armature-shaft, a pulley supported thereon, a dog connecting the pulley with the armature-shaft to drive said 60 shaft from the pulley, and means for driving the shaft from the axle.

5. The combination with a car-truck, of a dynamo suitably supported thereon, a frame connected to the field of the dynamo, a 65 pulley supported thereon, a dog connecting the pulley with the armature-shaft to drive said shaft from the pulley, and means for driving the shaft from the axle.

6. The combination with a car-truck, of a 70 dynamo suitably supported thereon, a frame connected to the field of the dynamo, a pulley revolvably supported thereon, operative connections between the pulley and the armature-shaft, and connections for driving the 75 pulley from the axle.

7. The combination with a car-truck, of a dynamo suitably supported thereon, a frame connected to the field of the dynamo, a pulley supported thereon, a dog connecting the 80 pulley with the armature-shaft to drive said shaft from the pulley and belt for driving the shaft from the axle.

In testimony whereof I have signed this specification in the presence of two sub- 85 scribing witnesses.

MORRIS MOSKOWITZ.

Witnesses:

GEO. L. COOPER,
E. VAN ZANDT.