

F. R. SIMMS.
HIGH TENSION MAGNETO ELECTRIC MACHINE.
APPLICATION FILED FEB. 23, 1910.

1,012,730.

Patented Dec. 26, 1911.

Fig. 1.

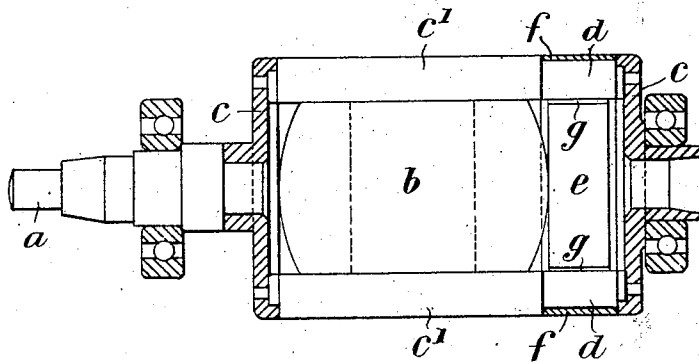
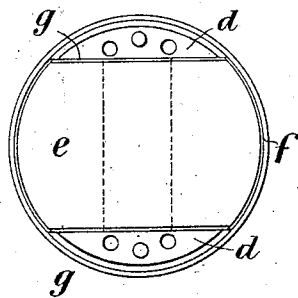


Fig. 2.



Witnesses.
J. K. Moore
R. E. Barry

Inventor.
Frederick R. Simms
By Whitaker & Tarrant
Attys.

UNITED STATES PATENT OFFICE.

FREDERICK RICHARD SIMMS, OF LONDON, ENGLAND, ASSIGNOR TO THE SIMMS MAGNETO COMPANY, A CORPORATION OF NEW YORK.

HIGH-TENSION MAGNETO-ELECTRIC MACHINE.

1,012,730.

Specification of Letters Patent.

Patented Dec. 26, 1911.

Application filed February 23, 1910. Serial No. 545,453.

To all whom it may concern:

Be it known that I, FREDERICK RICHARD SIMMS, a subject of the King of Great Britain, and residing at Welbeck Works, Kimberley Road, Willesden Lane, London, England, have invented new and useful Improvements in or Connected with High-Tension Magneto-Electric Machines, of which the following is a specification.

My invention relates to high tension magneto-electric machines such as are used in connection with magneto-electric ignition gear for internal combustion engines and in which the condenser is arranged in the armature coil, the object of the invention being to provide means whereby the condenser may be firmly held in position and prevented from moving.

According to my invention I extend the cheeks of the armature, and introduce the condenser within the said extended ends, which, with the condenser, are inclosed in a ring, packing being also introduced between the outer surface of the condenser and the inner surfaces of the cheeks.

To enable the invention to be fully understood I will describe the same by reference to the accompanying drawing, in which:—

Figure 1 represents in sectional elevation an armature of a high tension magneto-electric machine having the improvements applied thereto, and Fig. 2 is an end view thereof with one of the end plates removed.

a is the armature spindle, b is the armature mounted upon the spindle and c, c the end plates thereof.

c^1, c^1 are the cheeks of the armature, the said cheeks being extended in length at one

end so that they project beyond the armature b and form a housing d adapted to receive the condenser e , the said ends and condenser being preferably surrounded by a ring f , and the condenser being prevented from moving by means of the packing g .

Claims:

1. In a high tension magneto-electric machine, the combination with the armature provided with separated lateral cheeks, and end plates connected therewith, said cheeks being extended at one end beyond the armature coil, to form a housing, of a condenser fitted tightly between said cheeks within said housing and a ring surrounding said cheek extensions and condenser, said condenser being held by said ring and cheek extensions from movement and vibration with respect to the armature during the rotation of the same.

2. In a high tension magneto-electric machine, the combination with the armature provided with separated lateral cheeks, and end plates connected therewith, said cheeks being extended at one end beyond the armature coil, to form a housing, of a condenser within said housing, packing located between said condenser and said cheek extensions, and a ring surrounding said cheek extensions and said condenser, whereby said condenser is held from movement and vibration with respect to said armature during the rotation of the same.

FREDERICK RICHARD SIMMS.

Witnesses:

C. G. REDFERN,
JOHN E. BOUSFIELD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."