

E. T. KENNEY.
ELECTRIC GENERATOR.
APPLICATION FILED APR. 16, 1908.

940,392.

Patented Nov. 16, 1909.

2 SHEETS—SHEET 1.

Fig-1-

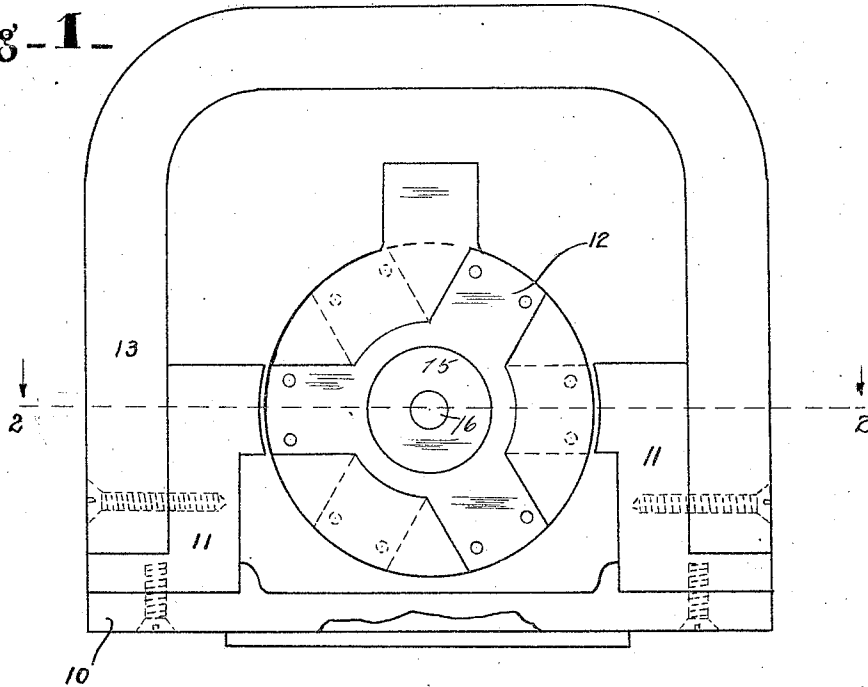
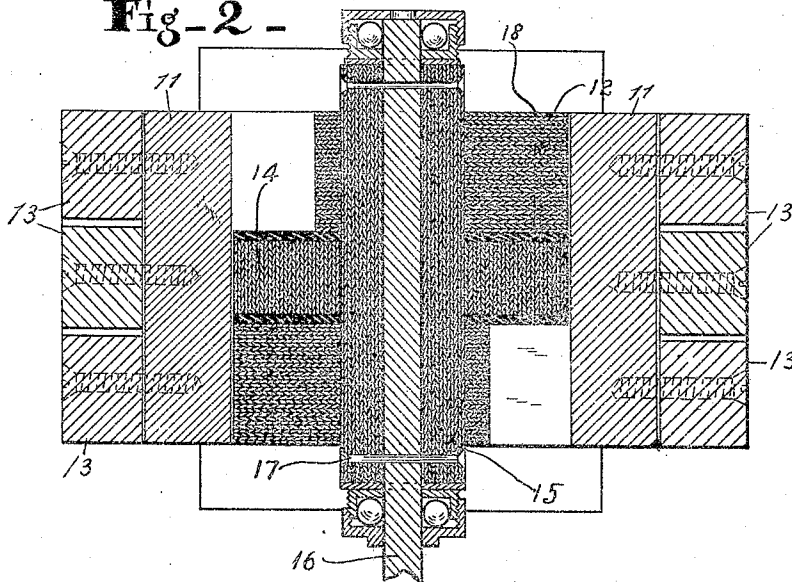


Fig-2 -



WITNESSES:

Olive Breeders
J. H. Swan

INVENTOR.

Edward T. Kenney.

BY

V. H. Hockwood
ATTORNEY.

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2 SHEETS—SHEET 2.

Fig - 3 -

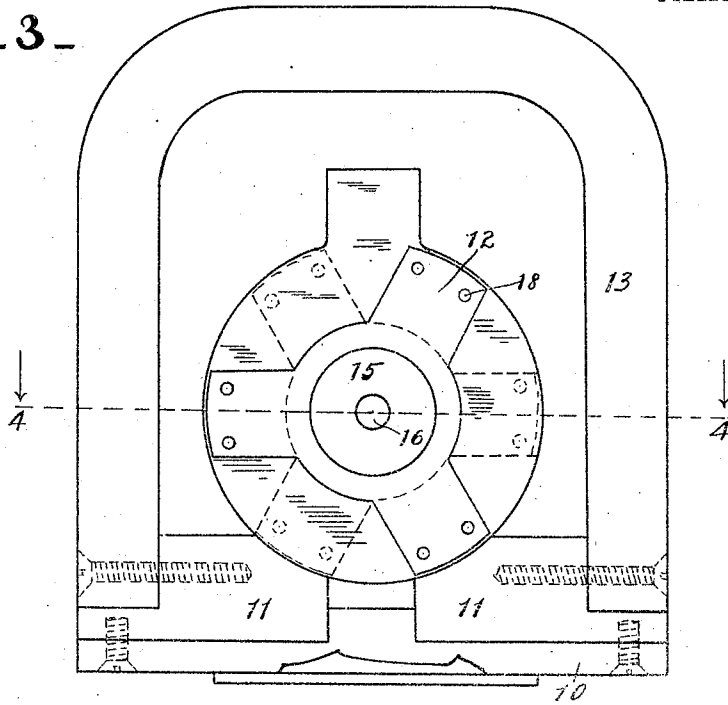
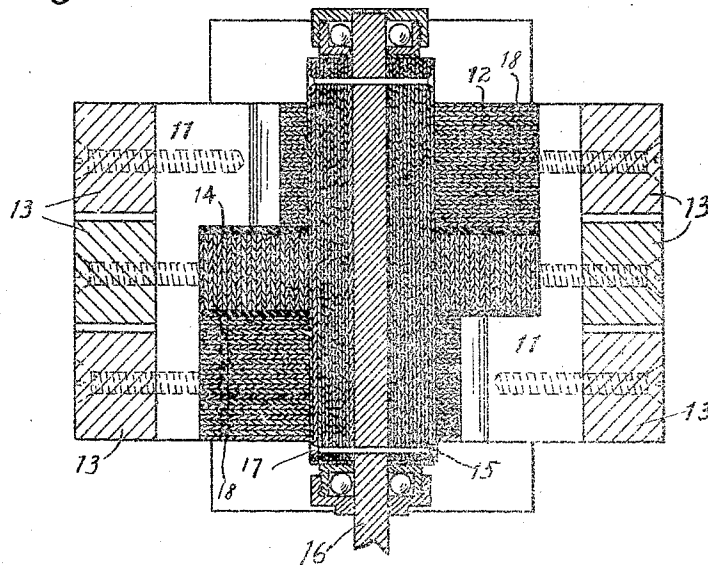


Fig - 4 -



WITNESSES:

Olive Breeders
J. H. Swan

INVENTOR.

Edward T. Kenney.

BY *J. H. Lockwood*
ATTORNEY.

UNITED STATES PATENT OFFICE

EDWARD T. KENNEY, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE HENRICKS NOVELTY COMPANY, OF INDIANAPOLIS, INDIANA, A CORPORATION OF INDIANA.

ELECTRIC GENERATOR.

940,392.

Specification of Letters Patent. Patented Nov. 16, 1909.

Application filed April 16, 1908. Serial No. 427,334.

To all whom it may concern:

Be it known that I, EDWARD T. KENNEY, of Indianapolis, county of Marion, and State of Indiana, have invented a certain new and useful Electric Generator; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

The object of this invention is to improve the construction of magnetos or electric generators. It has been used in connection with magnetos adapted for sparking purposes in combination with explosive engines.

One feature of the invention consists in forming a core with laminations extending longitudinally of the armature shaft, and securing on said core wings formed of laminations extending at a right angle radially from the core whereby heating between said wings and core will be avoided as the magnetism will pass at all times longitudinally of the laminations or layers.

Another feature of the invention consists in providing three-way wings at each end of the core, said wings being in staggered position with relation to each other. In combination with the foregoing a pair of pole pieces are provided so that there will be a coaction at every 60 degrees of revolution of the core. When a wing at one end of the core is in coaction with a pole piece, a wing at the other end of the core is in coaction with the other pole piece and with this arrangement one pair of wings comes in coaction with a pole piece almost immediately after the preceding pair has left the pole piece so that there are as many actions during each revolution of the core as it is possible to have in such a device. And thus, the efficiency of the machine is increased.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims.

In the drawings Figure 1 is an end elevation of such magneto with the pole pieces 180 degrees apart, parts being broken away. Fig. 2 is a horizontal section on the line 2-2 of Fig. 1. Fig. 3 is an end elevation of such a magneto with the pole pieces 60 degrees apart, parts being broken away. Fig. 4 is a horizontal section on the line 4-4 of Fig. 3.

In detail 10 is the base, and 11 the pole pieces which in Fig. 1 are arranged 180 degrees apart and in Fig. 3 are arranged 60 degrees apart, with inner surfaces substantially as wide as the wings 12 of the core. Magnets 13 are mounted in connection with said pole pieces. Between said pole pieces the armature winding 14 is mounted and within said winding the longitudinal core 15 is located, it being secured on the armature shaft 16. The core consists of layers secured longitudinally on the shaft by rivets 17 that pass through said layers and the shaft 16. The wings 12 are likewise formed of laminations or layers surrounding and secured upon the core 15 and extending radially or at a right angle therefrom into proximity with the pole pieces. This manner of constructing the core is convenient and economical as the layers of the wings can be punched out of metal so as to have the desired number of wings, three as herein shown, and then the plates or layers are slipped over the portion 15 of the core and secured in place by rivets 18 or in any suitable manner. There are three wings at each end of the core located equidistant apart circumferentially and the wings at the two ends of the core are staggered with relation to each other, so that there are six wings 60 degrees apart, and each wing is nearly 30 degrees wide, so that very soon after one set of wings leaves the pole pieces, the succeeding pair reaches the pole pieces and no time is lost and as many actions are caused as is possible in such a machine.

What I claim as my invention and desire to secure by Letters Patent is:

1. In a generator, the combination of a pair of poles, a rotor coöperating with said poles and provided at opposite ends with a plurality of wings angularly separated from each other and relatively angularly displaced so as to be brought into successive coaction with the poles in opposite magnetic relations, said rotor being laminated in its wings in planes substantially at right angles to the axis of the rotor and in its intermediate portion being laminated substantially parallel with the axis of the rotor, and a suitable winding surrounding the rotor between the wing members.

2. In a generator, the combination of oppositely magnetized poles, a rotor coöperating with said poles and provided at opposite

ends with radially extending portions adapted to simultaneously cooperate with the poles in successive magnetic alternation, said rotor being laminated in its radial extensions in
 5 planes substantially at right angles to the axis of the rotor and in its intermediate portion being laminated substantially parallel with the axis of the rotor, and a suitable winding surrounding the rotor between said
 10 radial extensions.

3. In a generator, the combination of a rotor comprising a central portion and a pair of wing members at its ends, each of said wing members comprising three radially extending wings spaced 120 degrees
 15 and the wings of one of said members angularly displaced relative to the other, the medial portion of said rotor being laminated

substantially parallel with the axis and the wing portions being laminated substantially at right angles to the axis, a pair of magnetic poles arranged to cooperate with both wing members and magnetically spaced a distance substantially equal to the angular displacement of the wings of one wing member relative to the wings of the other wing member, and a winding surrounding the rotor between the wing members thereof.

In witness whereof, I have hereunto affixed my signature in the presence of the witnesses herein named.

EDWARD T. KENNEY.

Witnesses:

OLIVE BREEDEN,
 J. H. SWAN.