

(No Model.)

R. THURY.  
DYNAMO ELECTRIC MACHINE.

No. 529,145.

Patented Nov. 13, 1894.

Fig. 1.

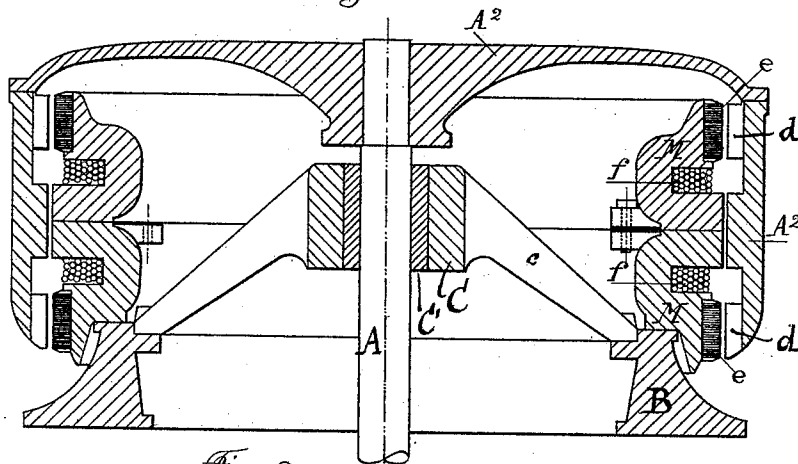


Fig. 2.

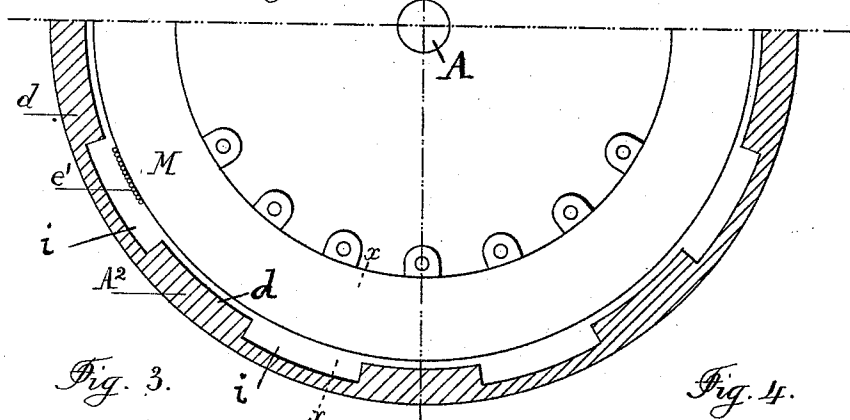


Fig. 3.

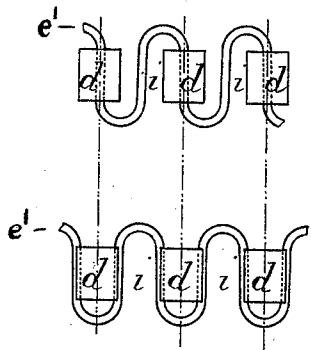


Fig. 4.

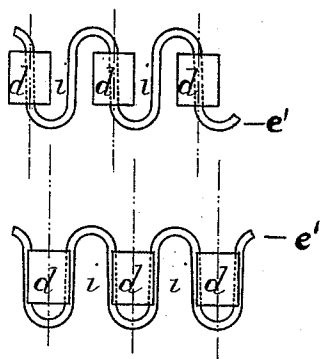
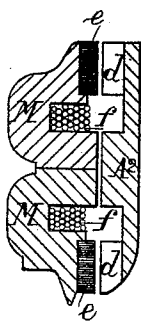


Fig. 5.



Witnesses:  
J. Stair  
Chas. H. Smith

Inventor:  
René Thury  
Lemuel W. Serrell atty

# UNITED STATES PATENT OFFICE.

RENÉ THURY, OF GENEVA, SWITZERLAND, ASSIGNOR TO THE COMPAGNIE  
DE L'INDUSTRIE ELECTRIQUE, OF SAME PLACE.

## DYNAMO-ELECTRIC MACHINE.

SPECIFICATION forming part of Letters Patent No. 529,145, dated November 13, 1894.

Application filed August 13, 1894. Serial No. 520,680. (No model.)

*To all whom it may concern:*

Be it known that I, RENÉ THURY, electrician, of Geneva, Switzerland, have invented some new and useful Improvements in Dynamo-Electric Machines, of which the following is a specification.

The invention refers to that class of dynamo-electric machines which have been described and shown in my patent-application filed December 23, 1893, Serial No. 494,525, and has for its object a very compendious and economical construction of such machines especially adapted for large dynamos with vertical axis of rotation.

I will now proceed to describe my said improved construction of dynamo electric machines with reference to the accompanying drawings, in which—

Figure 1 is a vertical section of the whole machine. Fig. 2 is a top-view of one half of the fixed part of the machine shown in Fig. 1 and a horizontal section of the revolving part of the same. Figs. 3 and 4 show two alternative dispositions which may be adopted for the teeth  $d$  with which the inner wall of the revolving bell  $A^2$  is provided. Fig. 5 is a section at the line  $x, x$ , of Fig. 2.

In all the figures the same letters refer to the same parts.

B is a fixed basis upon which bear the arms  $c$  of a fixed bearing C in which is located the socket  $C'$  of the axis A. Upon the ring-shaped head of the basis B there are disposed two superposed fixed rings M of cast iron or steel of approximately U-shaped section, each of these rings containing an induction coil  $f$  and being provided with a circular laminated pole-piece  $e$ . Upon each of the laminated pole-pieces  $e$ , formed of sheet-iron, there is

provided an induced coil  $e''$  disposed substantially as shown in Figs. 3 and 4.

The axis A bears a bell  $A^2$  of cast iron or steel which surrounds the above-described fixed parts and the inner wall of which is provided with a double range of teeth  $d$ , each of these ranges of teeth being in front of one of the ring-shaped poles  $e$ . The teeth  $d$  of the one range may be placed with respect to those of the other range either in the position shown in Fig. 3, or in the position shown in Fig. 4 according as one desires to produce single-phased or double-phased currents. According as either a tooth  $d$  or a depression  $i$  passes in front of the wires  $e'$  of the fixed part, when the bell  $A^2$  is rotating, the flux of the magnetic current is caused to vary in one point of the intermediate space and an induction is obtained without varying the total flux created by the exciting current.

Having thus fully described my invention, I claim—

A dynamo electric machine essentially composed of two superposed horizontal and fixed rings M of U-shaped section, each provided with a coil  $f$  and with a circular pole-piece  $e$  on which are disposed suitable wires  $e'$  in combination with a vertical axis A bearing a bell  $A^2$  the inner wall of which is provided with suitable ranges of teeth  $d$  disposed in front of the wires  $e'$ , substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RENÉ THURY.

Witnesses:

BENJ. H. RIDGELY,  
OTTO MAYE.