

(No Model.)

T. A. EDISON.

METHOD OF WINDING FIELD MAGNETS.

No. 397,705.

Patented Feb. 12, 1889.

Fig. 1.

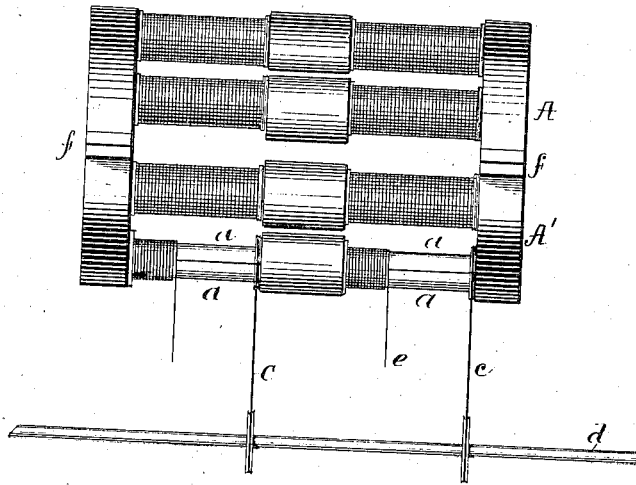


Fig. 2.

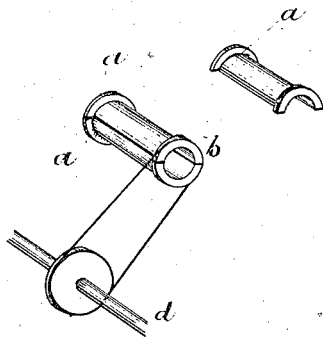


Fig. 3.

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UNITED STATES PATENT OFFICE.

THOMAS A. EDISON, OF LLEWELLYN PARK, NEW JERSEY.

METHOD OF WINDING FIELD-MAGNETS.

SPECIFICATION forming part of Letters Patent No. 397,705, dated February 12, 1889.

Application filed September 15, 1888. Serial No. 285,525. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. EDISON, of Llewellyn Park, in the county of Essex, in the State of New Jersey, have invented a certain
5 new and useful Improvement in the Method of Winding Field-Magnets, (Case No. 798,) of which the following is a specification.

The object of my invention is to provide a simple and convenient mode of winding the
10 field-magnets of dynamo-electric machines with their wire-coils, whereby I am enabled to cast the magnet-cores with their pole-pieces and yokes in one piece instead of making them separately and afterward bolting them
15 together.

It has heretofore been found necessary in most cases to wind the field-magnet core by itself and afterward bolt it to the other parts
20 of the magnet, because the operation of winding after the parts were secured together would be exceedingly inconvenient, if not impracticable.

The main feature of my invention consists in placing upon the core a cylinder adapted
25 to be turned, and turning said cylinder to wind the wire upon it, the cylinder being left on the core under the coils.

My invention is illustrated in the accompanying drawings.

30 Figure 1 is a view of a field-magnet, showing the operation of my invention; Fig. 2, a perspective view of the cylinder and the devices for turning it; Fig. 3, a view of one of the parts of which the cylinder is composed.

35 In making the kind of machine illustrated

in Fig. 1, I prefer to cast the field-magnet in two halves, A and A', each half being cast complete with the yokes and pole-pieces, and I then place upon each of the cores a cylinder made up of two halves, *a a*. This cylinder may be made of any suitable material; but I prefer to make it of thin wood or of card-board. At one end the cylinder is provided with a grooved flange, *b*, and by means of a suitable cord or belt, *c*, operated by suitable power, as illustrated in the drawings by the shaft *d*, the cylinder is rotated on the magnet-core, and the wire *e*, being fed onto the cylinder in any suitable manner, is readily and quickly wound thereon. The belt being
50 removed from the cylinder, the winding is complete. The two halves of the field-magnet will be bolted together at *f*.

What I claim is—

1. The method of winding a magnet, which
55 consists in placing a cylinder on the magnet-core and turning said cylinder to wind the wire thereon, substantially as set forth.

2. The method of winding a magnet-core, which consists in placing on the core a cylinder
60 made in two halves and turning said cylinder so as to wind the wire thereon, substantially as set forth.

This specification signed and witnessed this 31st day of August, 1888.

THOS. A. EDISON.

Witnesses:

WILLIAM PELZER,
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