

No. 834,480.

PATENTED OCT. 30, 1906.

J. W. LUNDSKOG.
COIL FORMER.

APPLICATION FILED MAR. 25, 1904.

Fig. 1 -

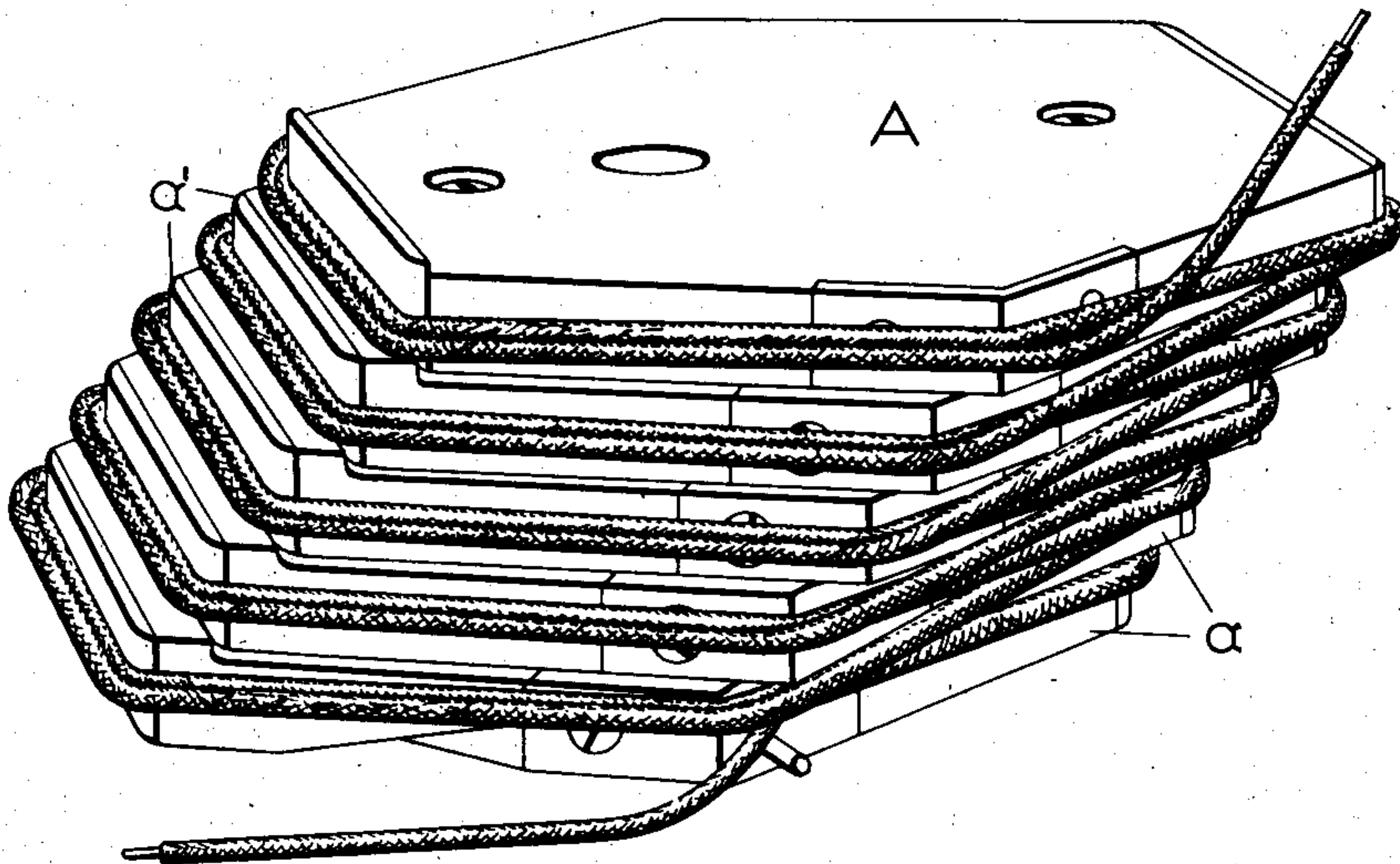


Fig. 2 -

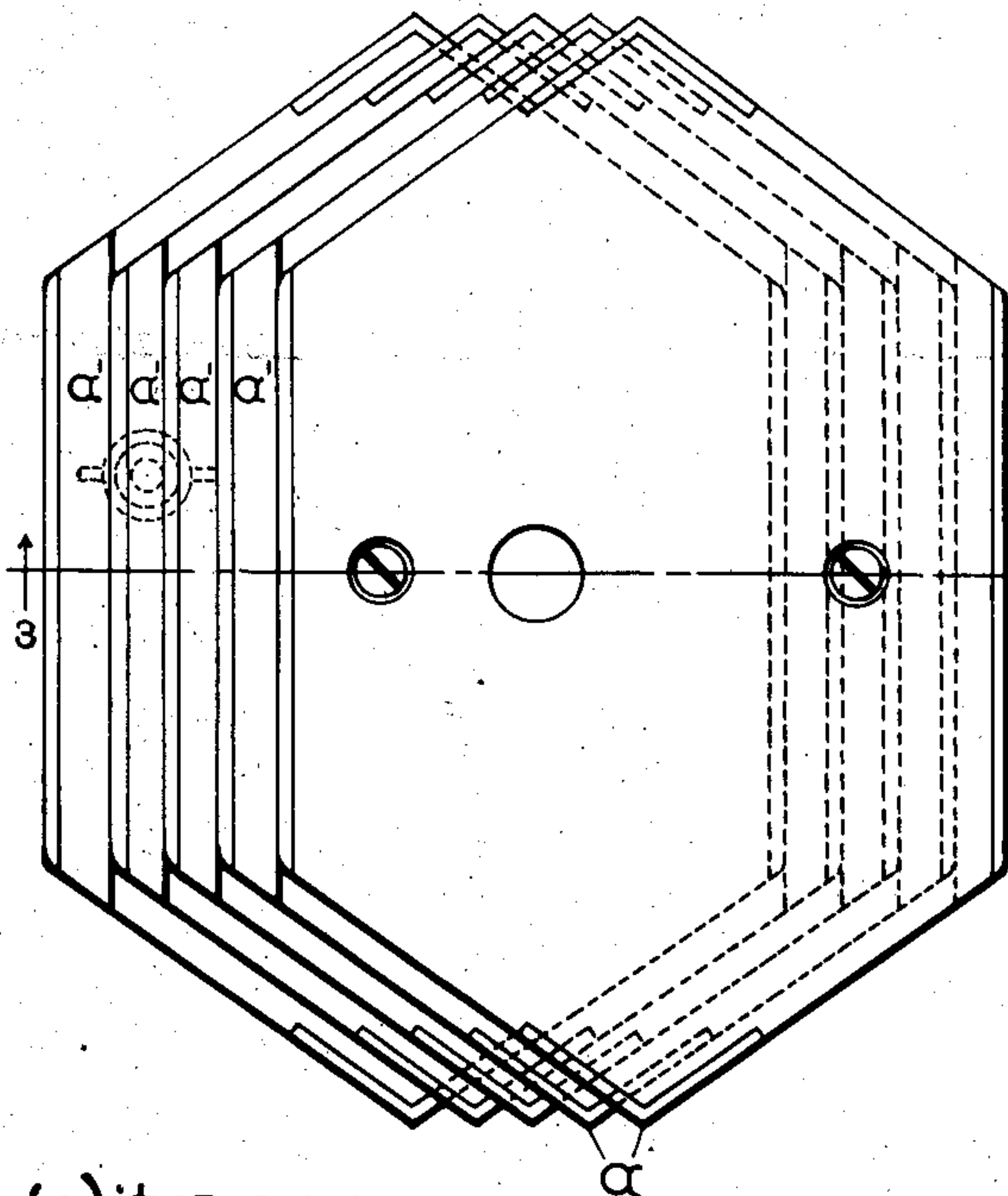
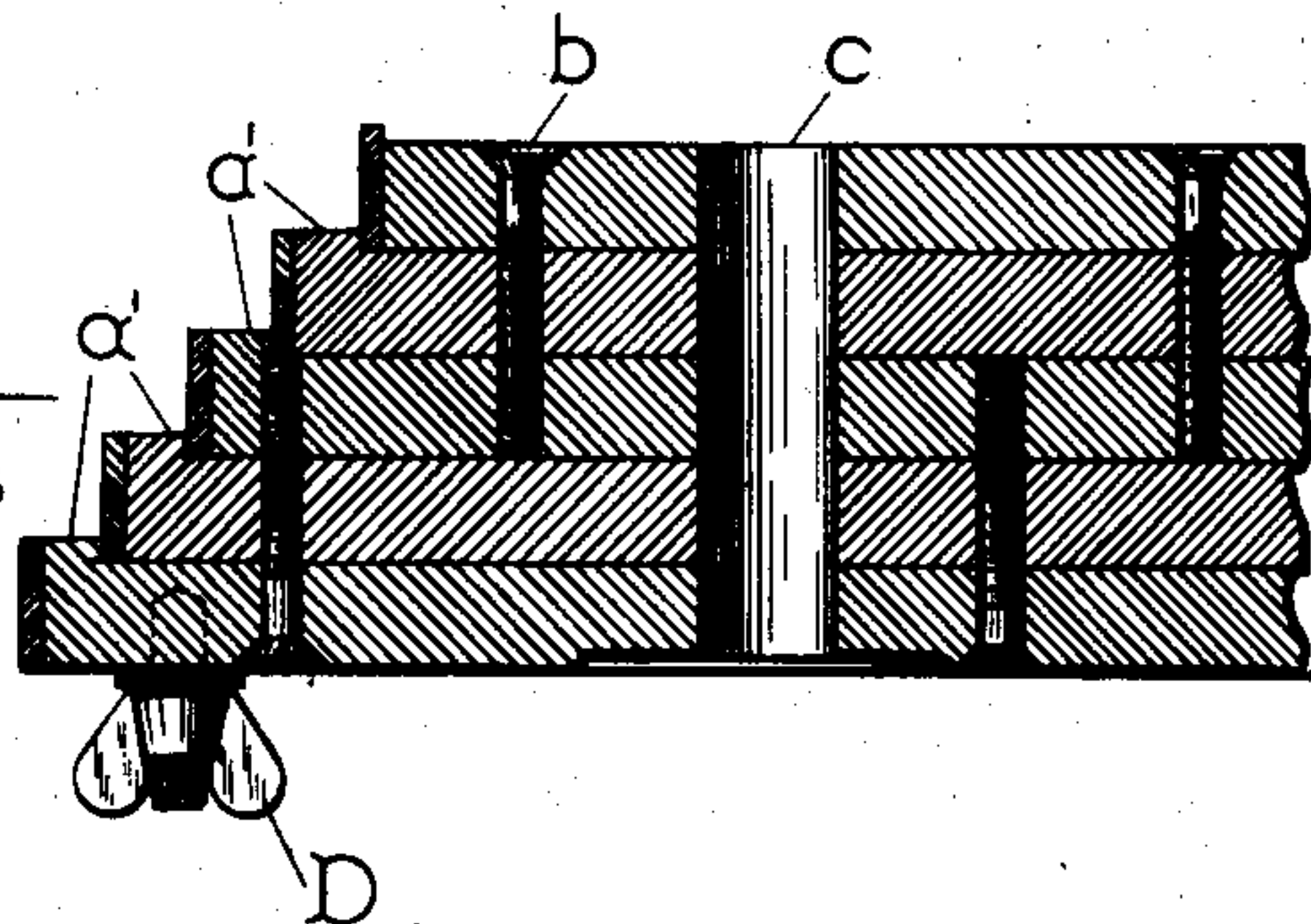


Fig. 3 -



Witnesses:

Ethan E. Briggs
Allen Clifford

Inventor,
Julius W. Lundskog,
By *Albert B. Davis*
att'y.

UNITED STATES PATENT OFFICE.

JULIUS W. LUNDSKOG, OF LYNN, MASSACHUSETTS, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

COIL-FORMER.

No. 834,480.

Specification of Letters Patent.

Patented Oct. 30, 1906.

Application filed March 25, 1904. Serial No. 199,921.

To all whom it may concern:

Be it known that I, JULIUS W. LUNDSKOG, a citizen of the United States, residing at Lynn, county of Essex, State of Massachusetts, have invented certain new and useful Improvements in Coil-Formers, of which the following is a specification:

My invention relates to formers for the coils of dynamo-electric machines, and refers particularly to formers adapted to produce coils for a type of winding used in many alternating-current machines and known as a "distributed" winding.

The object of my invention is to provide a former which shall enable such windings to be wound continuously, thereby obviating the necessity of making the end connections which must be made when windings are formed of individual coils.

In the accompanying drawings, Figure 1 shows a perspective view of a former constructed in accordance with my invention, the coils being shown wound thereon. Fig. 2 is a plan view of the same without the coils, and Fig. 3 is a cross-sectional elevation of the same on line 3 3 of Fig. 2.

In the drawings, A represents a former composed of a plurality of layers or slabs *a*. Each slab *a* is of the dimensions desired for the inner dimensions of a coil. The slabs are placed one above another, and each is displaced laterally from the one beneath it, so as to form at one side a terrace and at the other side an inverted terrace. I have shown each slab formed with a raised strip *a'* along one edge to furnish a gage for the desired displacement, the width of the strip *a'* being equal to the desired distance between coils. The slabs are fastened together by the screws *b*, and a hole C is bored through the center of the former to allow it to be rotated on a shaft for convenience in winding. D is a clamping-nut, by means of which the end of the wire may be fastened at starting. The wire is given one or more turns around each slab, as shown in Fig. 1, according to the number of turns desired for each coil. The number of slabs is equal to the number of

continuous coils desired. The former shown is thus suited for a "five coil per pole per phase" distributed winding of any desired number of turns per coil. By the use of this former a continuous winding may be expeditiously made and the expense of making end connections avoided.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A coil-former formed with its opposite ends parallel-inclined and arranged in steps.

2. A coil-former composed of a plurality of superimposed slabs laterally displaced from each other.

3. A coil-former for a distributed winding composed of a plurality of superimposed slabs laterally displaced from each other by a distance equal to the desired distance between coils.

4. A coil-former for distributed windings formed with its opposite ends parallel-inclined, and arranged in steps, the width of each step being equal to the desired distance between coils.

5. A coil-former formed with its opposite ends parallel-inclined and arranged in steps, said former being adapted to be rotated.

6. A coil-former composed of a plurality of superimposed slabs laterally displaced from each other, said former being adapted to be rotated.

7. A coil-former composed of a plurality of superimposed slabs laterally displaced from each other, each of said slabs having a raised portion to serve as a gage for the desired displacement.

8. A coil-former composed of a plurality of superimposed slabs laterally displaced from each other, each of said slabs having a raised portion along one edge of a width equal to the desired distance between coils.

In witness whereof I have hereunto set my hand this 21st day of March, 1904.

JULIUS W. LUNDSKOG.

Witnesses:

DUGALD MCK. MCKILLOP,
HENRY S. BALDWIN.