# UNITED STATES PATENT OFFICE.

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## GALVANIC RING.

**SPECIFICATION** forming part of Letters Patent No. 567,422, dated September 8, 1896.

Application filed June 29, 1896. Serial No. 597,307. (No model.)

*To all whom it may concern:*

Be it known that I, MERRITT L. THOMPSON, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Galvanic Rings, of which the following is a specification.

In electric body-wear two metals of different polarity have in many instances been brought into contact with the surface of the body for developing a galvanic action, and these have been availed of to exert a remedial influence in diseases such as rheumatism and neuralgia; but difficulty has been experienced in making such devices sufficiently light and durable and presenting sufficient surface to the section for producing beneficial results.

In the present invention I make a ring with a center of copper or similar sheet metal and an exterior of zinc with its edges turned over inward, so as to lap upon the surface of the copper ring, and the parts are bent so that the surfaces of the different metals are in line with each other in order to be equally influenced by the moisture from the body and to set up a galvanic action for remedial purposes, and the ends of the strips of sheet metal are lapped and the exterior ring soldered together, so as to make a complete band of a size and shape adapted to the place upon the person where the same is to be worn.

In the drawings, Figure 1 is a cross-section showing the interior surface of the ring, and Fig. 2 is a horizontal section at the joint between the ends of the metallic bands.

The interior strip A of sheet metal is to be copper or similar negative metal, and the exterior strip B is to be zinc or similar positive metal, and these are to be of the proper thickness to obtain the desired strength, and of a length and width adapted to the place where the ring is to be worn.

The exterior strip of metal B is cut wider than the strip A, so that the edges of the exterior strip can be folded inward and around the edges of the interior strip, and there will be approximately the same area of the two metals within the ring, and the inner ring A is held in position by the outer ring B, and it is advantageous to join up the ends of the two strips, so as to form a complete ring or band. With this object in view one end of the interior strip A is lapped past the other end, as shown at 2, and one end of the exterior strip B is cut across square and the other end is made with a tongue 3 to pass beneath the straight end of the strip at the outer side, the parts being united up by solder, but the ends of the strip B at the inner surface of the ring advantageously abut, so as to be substantially smooth both on the edges and the inner surface.

The sheet metal is bent up so that the inner surface of the copper strip A is in line with the inner surfaces of the folded portions 4 of the outer strip B. This is advantageously done after the ring has been joined up, as aforesaid, and it may be effected by suitable rollers acting inside and outside the ring. This ring is very strong and there are no rough edges or surfaces, and the galvanic action set up will be electropositive and electronegative about in equal proportions in consequence of the surfaces of the two metals being equal, or nearly so, and the ring can be very light and hence inexpensive, and it will be as efficient as though made of heavier thick metal, and it can be worn upon any portion of the body beneath the clothing without being noticeable, and it can be made with facility of any desired length, so as to fit the limb sufficiently tight to maintain its position; but, if desired, straps or cords can be employed for holding it in position, and the joint in the ring is made very strong by lapping the sheet metal, as aforesaid, and the extent of surface-contact is sufficient to prevent any interruption to the current or diminished conductivity.

In order to provide an easy means for preventing the ring or band slipping, I stamp up a hollow teat 6 in the sheet metal and perforate the same with two or four holes, so that a pin can be easily inserted through an outer garment and through the holes to steady the band and lessen the risk of the same slipping, or threads may be sewed through the perforations.

I claim as my invention—

1. The galvanic ring for remedial purposes composed of sheet metal of different polarity, the edges of the outer strip being folded over the edges of the inner strip to hold the same and to present a substantially equal surface

(No Model.)

3 Sheets—Sheet 1.

# R. THURY.

# DYNAMO ELECTRIC MACHINE.

No. 567,423.

Patented Sept. 8, 1896.

Fig. 1.

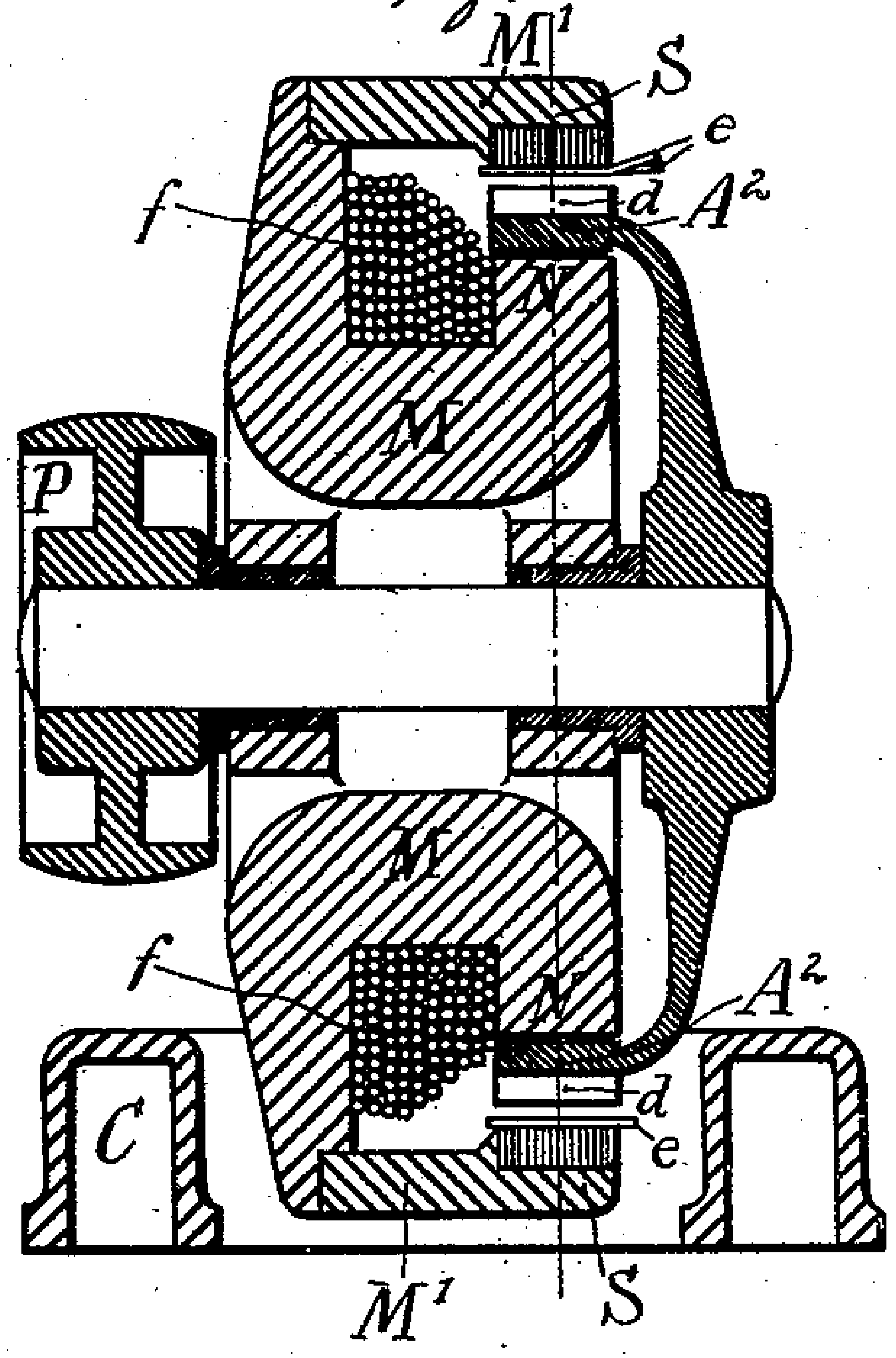


Fig. 2.

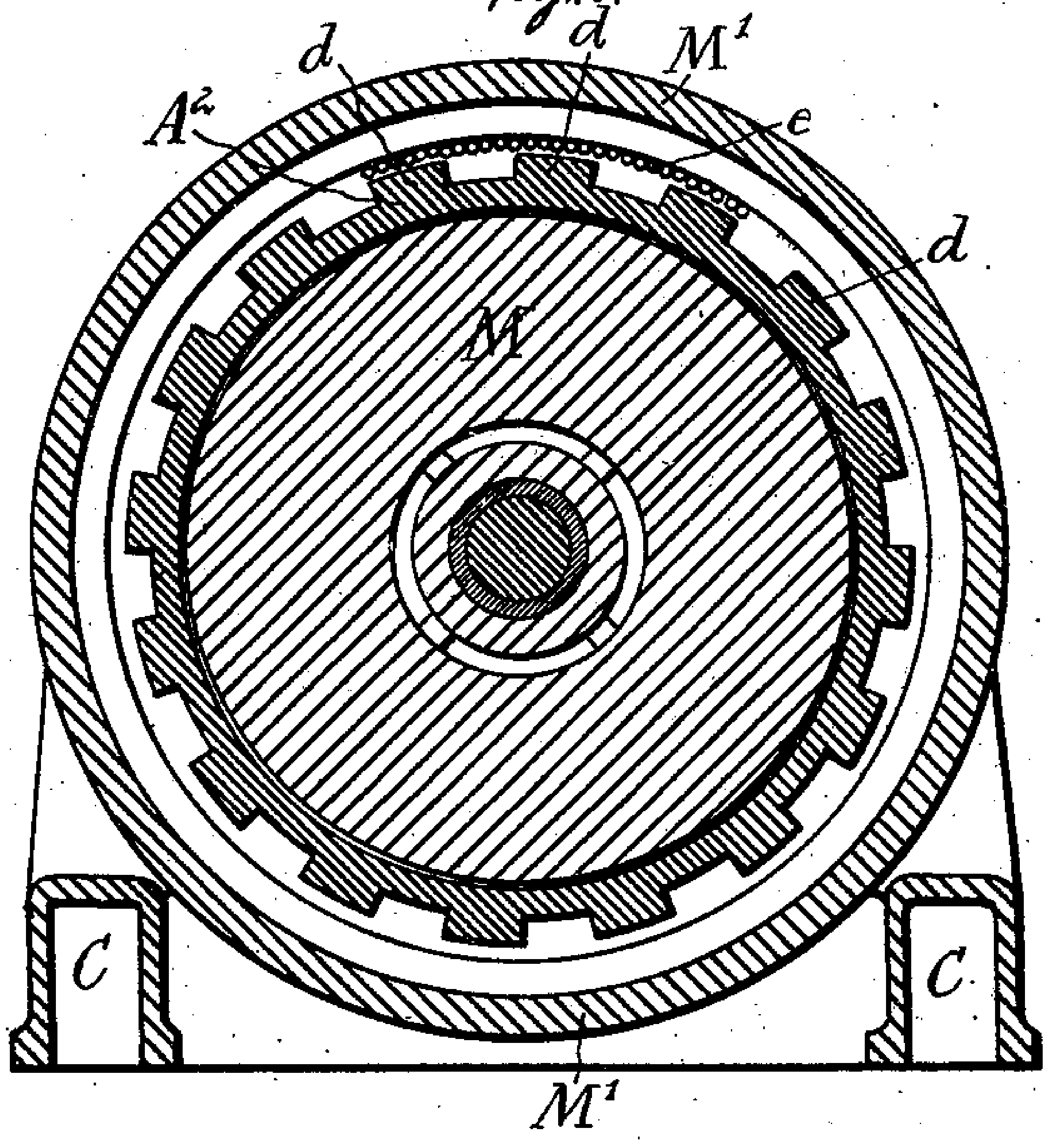


Fig. 1a.

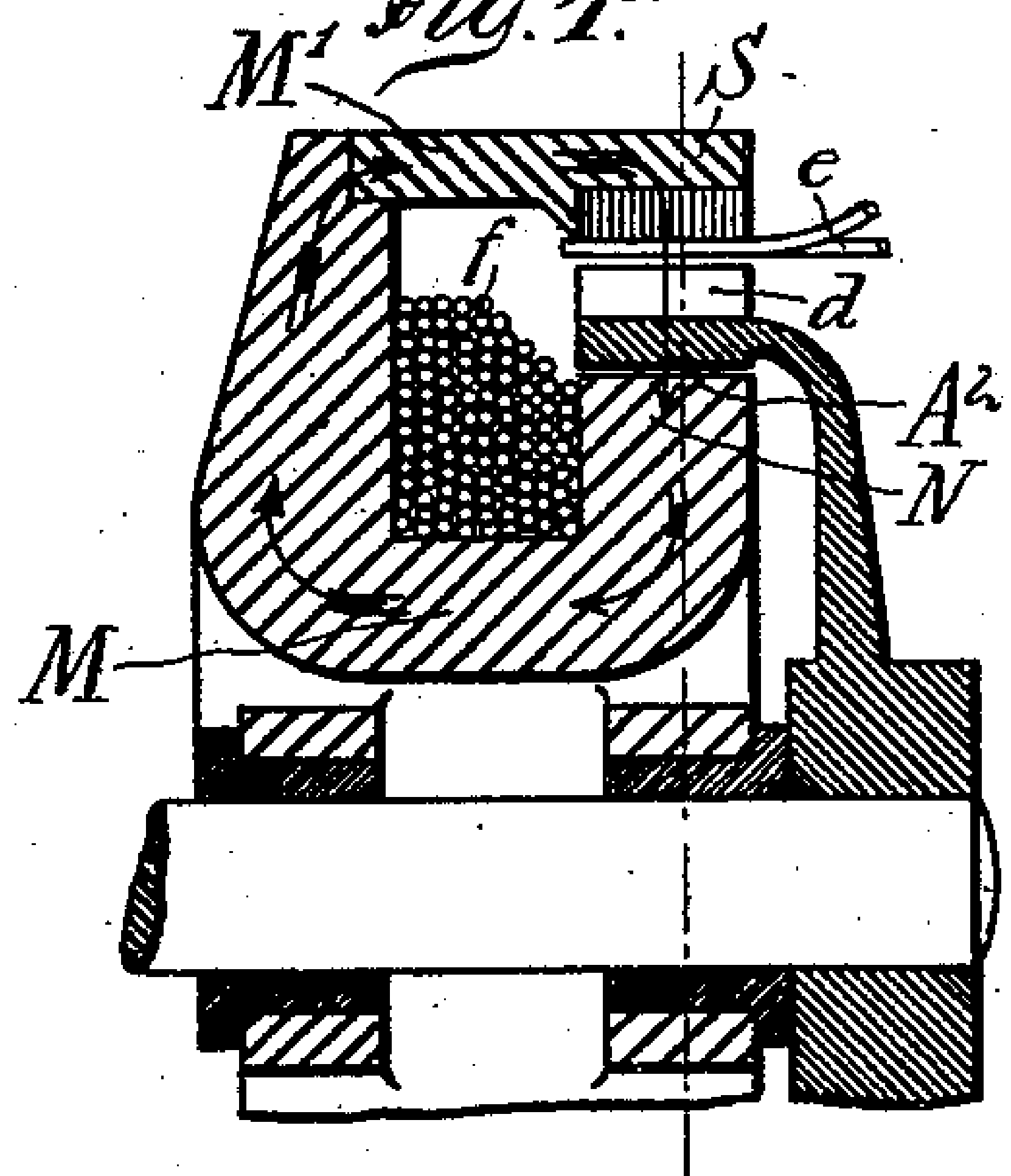


Fig. 2a.

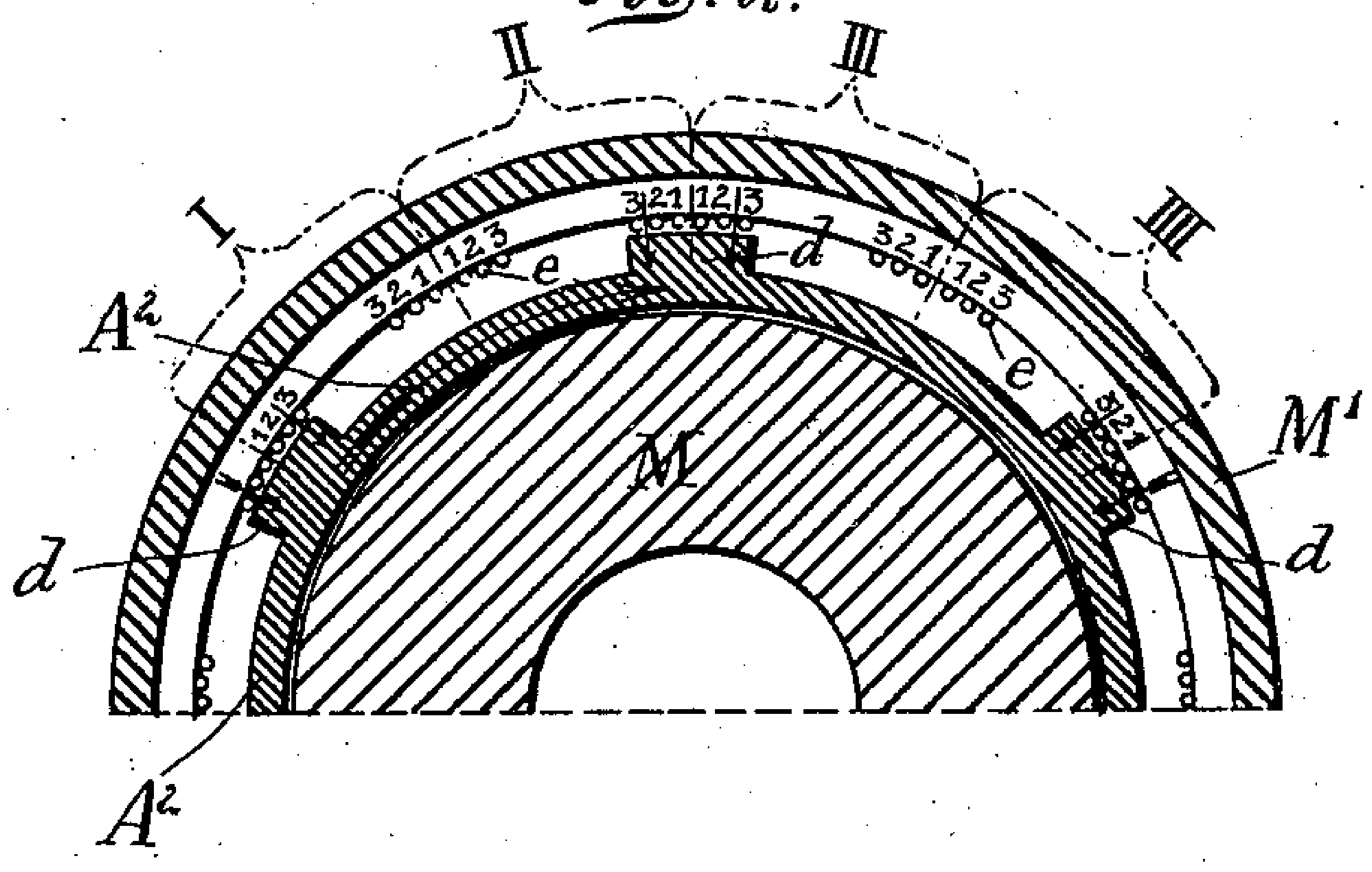


Fig. 2b.

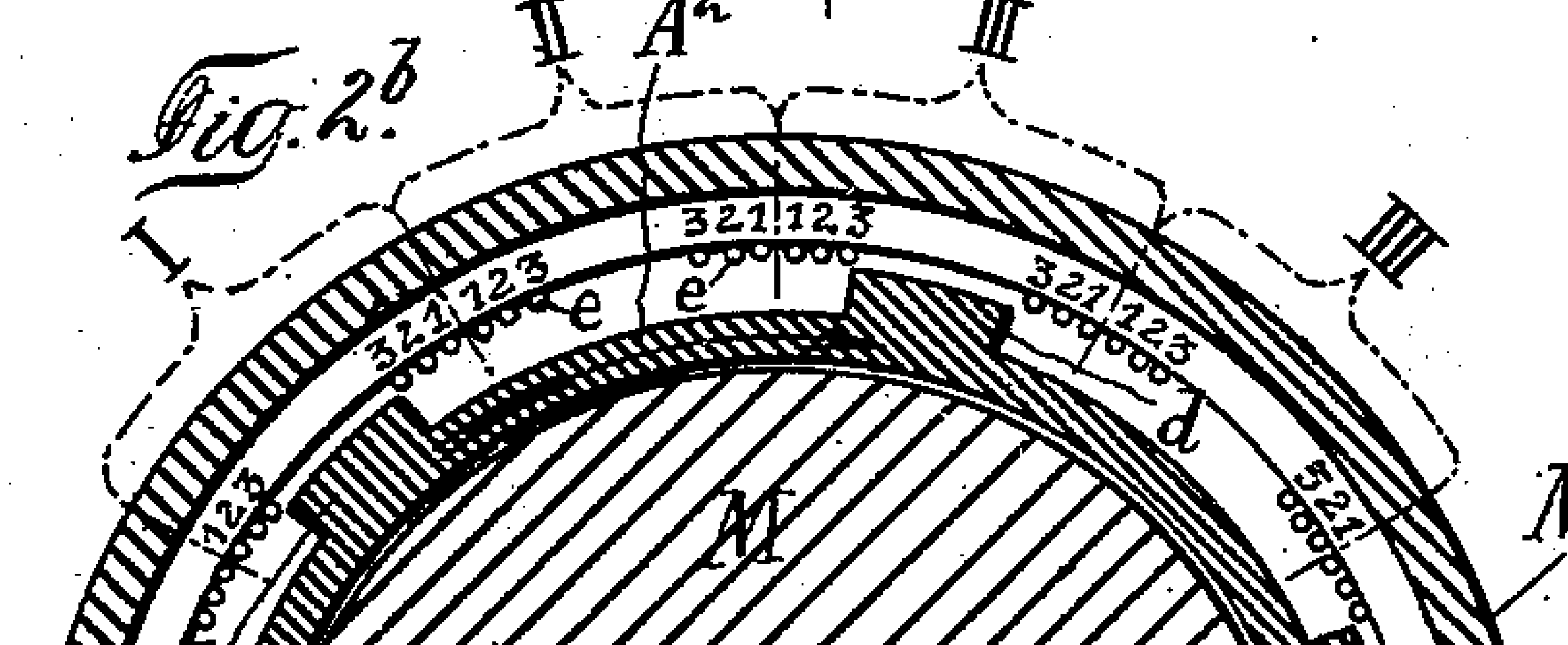
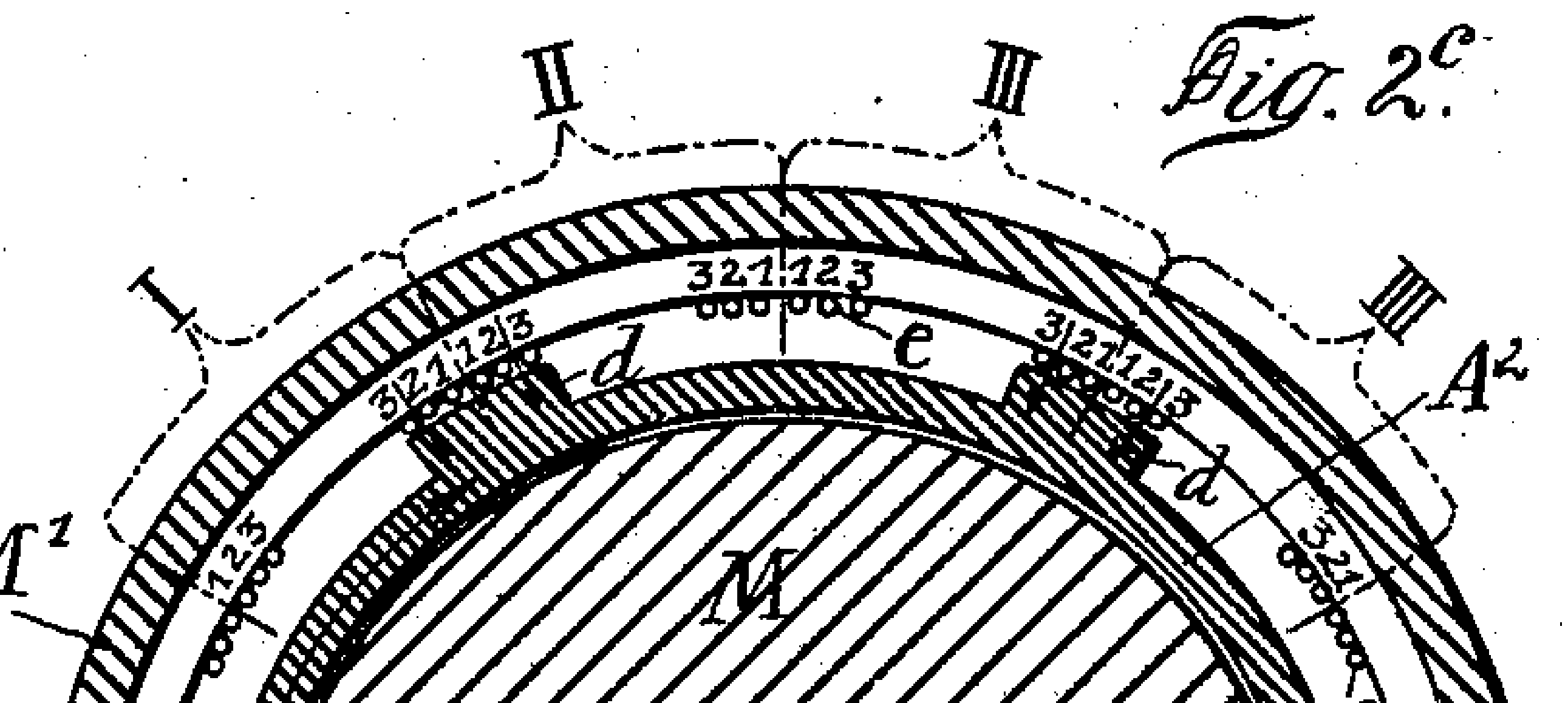


Fig. 2c.



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