

C. A. PFANSTIEHL.
MANUFACTURE OF ARMATURE HOUSINGS.
APPLICATION FILED APR. 18, 1910.

985,700.

Patented Feb. 28, 1911.

Fig. 1.

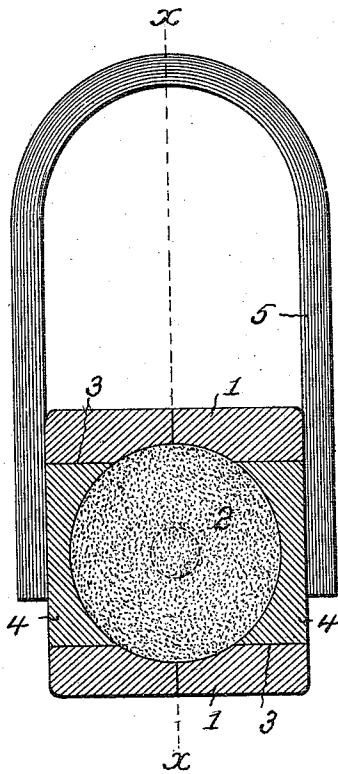


Fig. 2.

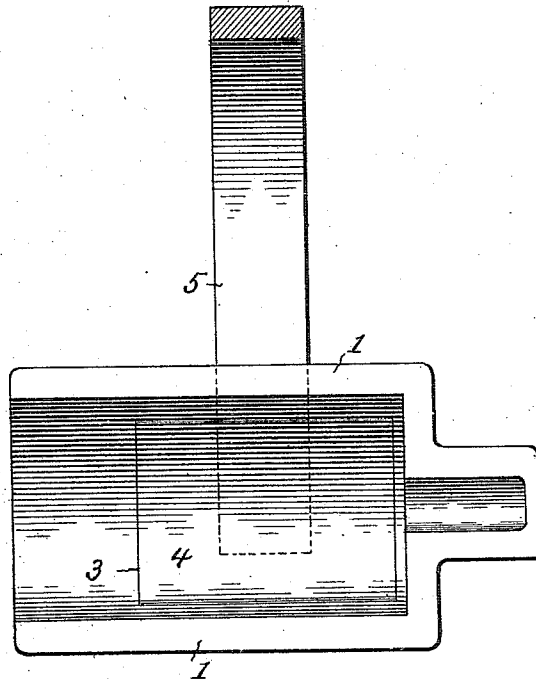
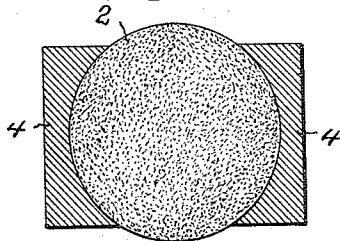


Fig. 3.



Attest:

John Enders
Henry Allen.

Inventor:

Carl A. Pfanstiehl,
by Robert H. Burns
Attorney.

UNITED STATES PATENT OFFICE.

CARL A. PFANSTIEHL, OF HIGHLAND PARK, ILLINOIS, ASSIGNOR TO PFANSTIEHL ELECTRICAL LABORATORY, OF NORTH CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

MANUFACTURE OF ARMATURE-HOUSINGS.

985,700.

Specification of Letters Patent. Patented Feb. 28, 1911.

Application filed April 18, 1910. Serial No. 556,248.

To all whom it may concern:

Be it known that I, CARL A. PFANSTIEHL, a citizen of the United States of America, and a resident of Highland Park, in the county of Lake and State of Illinois, have invented certain new and useful Improvements in the Manufacture of Armature-Housings, of which the following is a specification.

This invention relates to magneto-electric machines, and more especially to means for supporting the pole pieces while the same are permanently fixed in the armature housing of the machine. And the present improvement has for its object to provide a simple and efficient process in which the pole pieces are accurately and effectively connected to a core which is subsequently used in the formation of the armature housing by casting in a suitable mold, and thus attain the accurate location of said pole pieces in said housing in a very economical and convenient manner, all as will hereinafter more fully appear.

In the accompanying drawings:—Figure 1, is a transverse section of the core mold, pole pieces and holding magnet used in carrying out the present process, the sand core being shown in place. Fig. 2, is a longitudinal section of the same, on line $x-x$, Fig. 1, previous to the formation of the sand core. Fig. 3, is a transverse section of the sand core with the pole pieces in place thereon.

Similar numerals of reference indicate like parts in the different views.

Referring to the drawings, 1 represents the two-part mold in which the cylindrical sand core 2, is formed in the usual manner. In the present improvement, the counter-part halves of said mold are formed with orifices 3 in their sides, and of a form corresponding to that of the pole pieces 4 of a magneto-electric machine, and said recesses are adapted to hold said pole pieces in proper opposed relation during the forming of the sand core within the mold.

5, is a U shaped magnet, preferably of the permanent type, and having its free end spaced apart in parallel relation so that they will span the outsides of the mold halves as shown, and by their electrical attraction

draw outward the respective pole pieces 4 and maintain the same in proper separated relation during the formation of the sand core. In this connection a material part of or step in the present invention consists in coating the inner and opposed faces of the pole pieces 4 with an adhesive coating of any suitable material, in order that when the sand core is formed and removed from the mold, the pole pieces will be attached thereto in proper relative position ready for use in the mold in which the armature inclosing housing of a magneto-electric machine is cast, as set forth in detail in my companion application for Letters Patent Serial No. 556,247, filed April 18, 1910.

Having thus fully described my said invention what I claim as new and desire to secure by Letters Patent, is:—

1. The herein described process of forming the core used in casting the armature housing of a magneto-electric machine, the same consisting in the formation of the core in a suitable core box and effecting an adhesion of the pole pieces to the surface of the core in the formation of the same.

2. The herein described process of forming the core used in casting the armature housing of a magneto-electric machine, the same consisting in the formation of the core in a suitable core box and effecting an adhesion of the pole pieces to the surface of the core in the formation of the same, the pole pieces being held in proper separated relation by electrical attraction.

3. The herein described process of forming the core used in casting the armature housing of a magneto-electric machine, the same consisting in the formation of the core in a suitable core box and effecting an adhesion of the pole pieces to the surface of the core in the formation of the same, the pole pieces being held in proper separated relation by the ends of a permanent magnet against which the pole pieces are drawn by electrical attraction.

Signed at Highland Park, Ills., this 5th day of April 1910.

CARL A. PFANSTIEHL.

Witnesses:

NELLIE FITZGERALD,
HERBERT MOON.