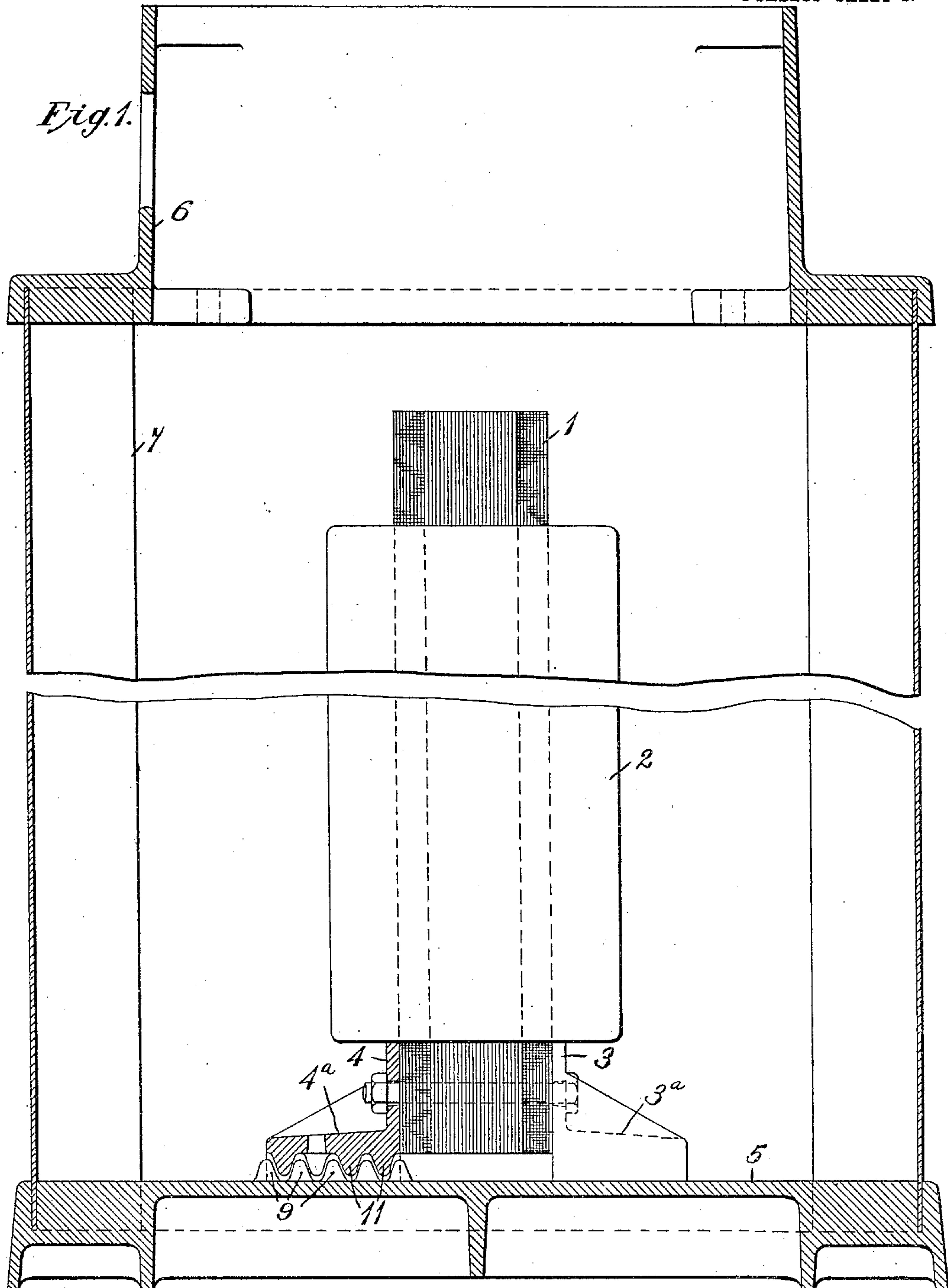


C. AALBORG.
ELECTRICAL APPARATUS.
APPLICATION FILED JULY 8, 1909.

962,689.

Patented June 28, 1910.

2 SHEETS—SHEET 1.



WITNESSES:

Frederic H. Miller
R. J. Dearborn

INVENTOR

Christian Aalborg
BY
Wesley S. Carr
ATTORNEY

962,689.

Patented June 28, 1910.

2 SHEETS—SHEET 2.

Fig. 2.

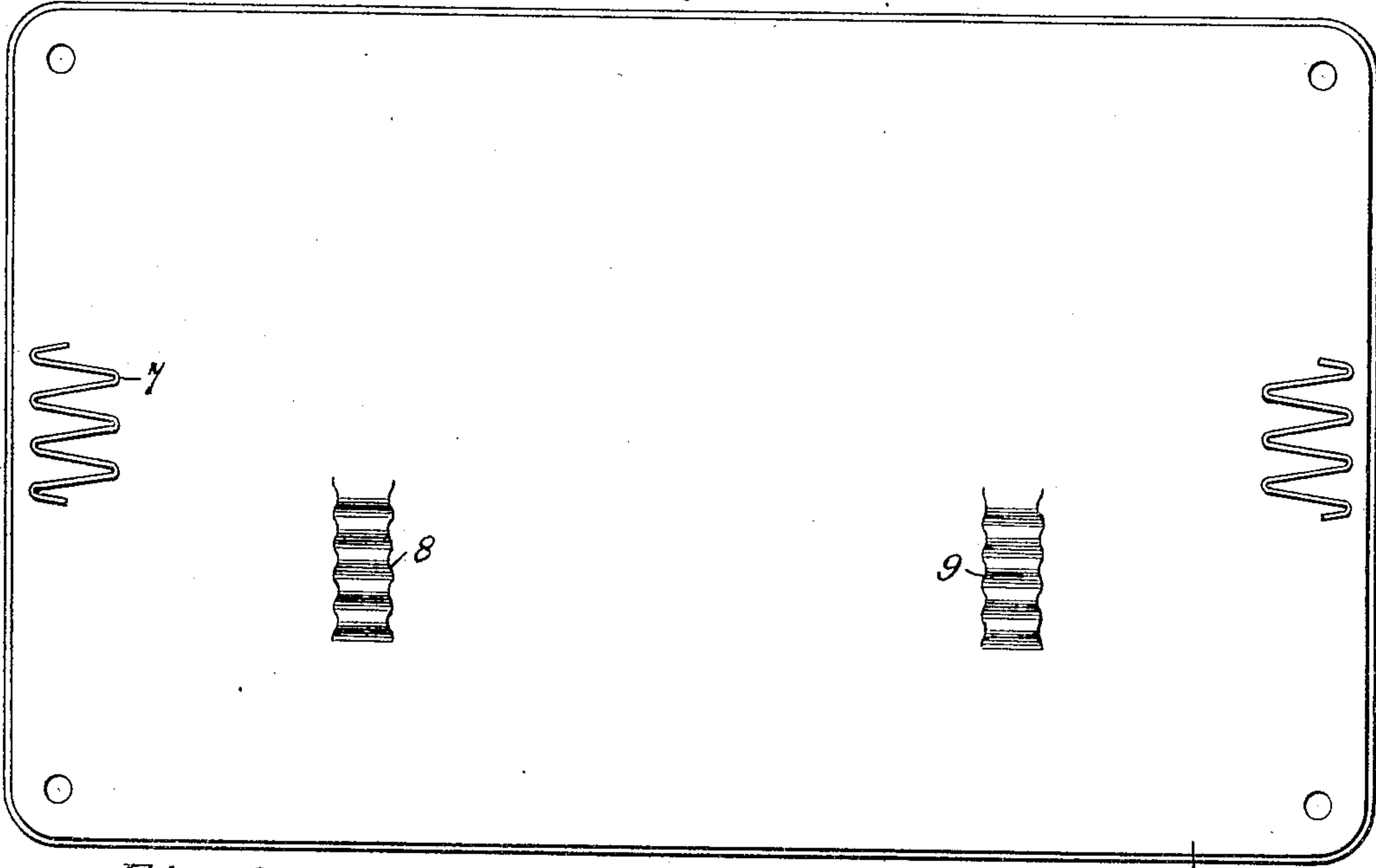
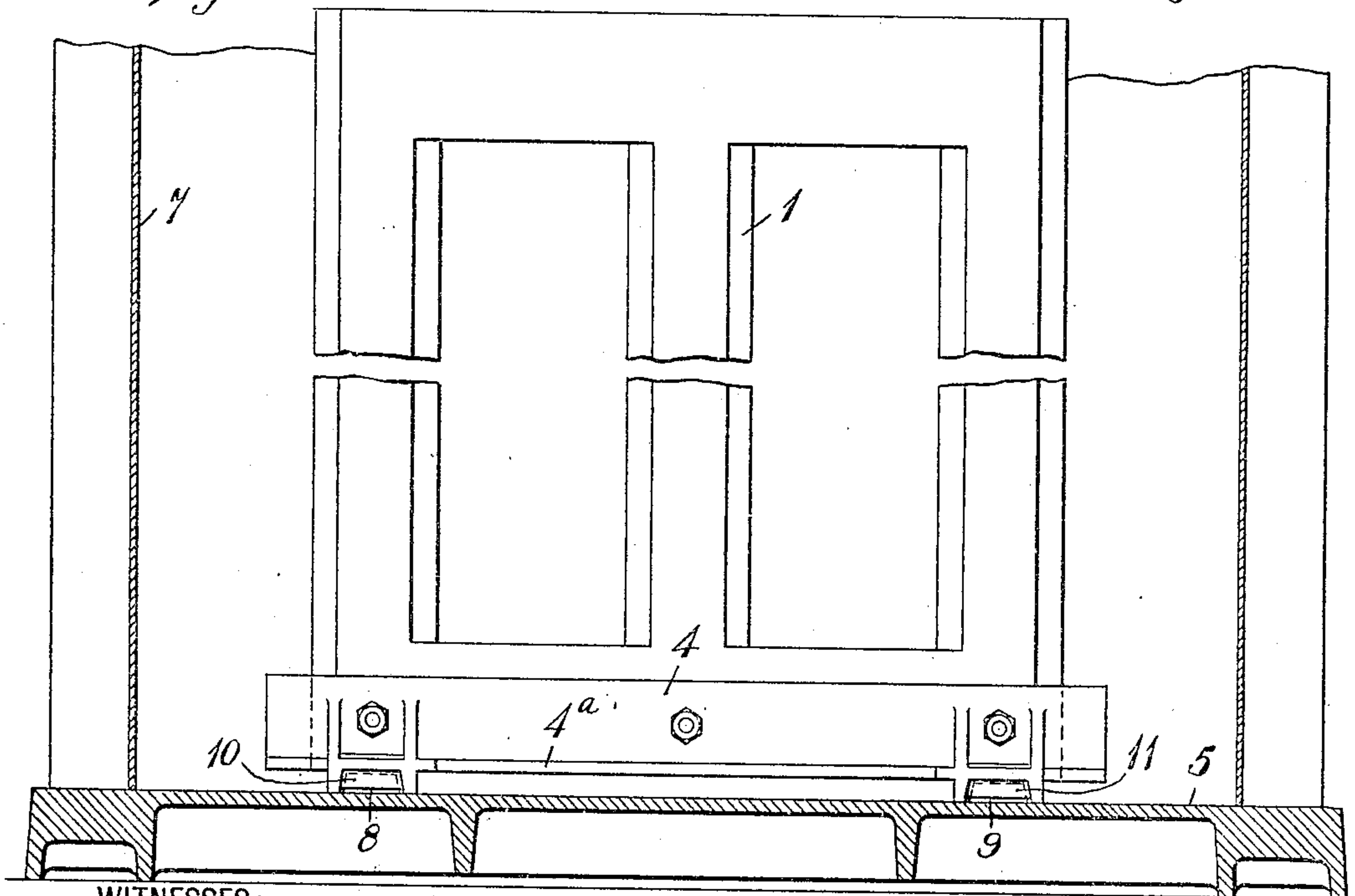


Fig. 3.



WITNESSES:

Fred H. Miller
R. J. Dearborn

INVENTOR

Christian Aalborg
BY
Wesley C. Carr
ATTORNEY

UNITED STATES PATENT OFFICE.

CHRISTIAN AALBORG, OF WILKINSBURG, PENNSYLVANIA, ASSIGNOR TO WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, A CORPORATION OF PENNSYLVANIA.

ELECTRICAL APPARATUS.

962,689.

Specification of Letters Patent. Patented June 28, 1910.

Application filed July 8, 1909. Serial No. 506,606.

To all whom it may concern:

Be it known that I, CHRISTIAN AALBORG, a citizen of the United States, and a resident of Wilkesburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Electrical Apparatus, of which the following is a specification.

My invention relates to electrical apparatus and particularly to transformers and similar devices which are disposed in inclosing tanks or casings and rest upon the base walls of the tanks in which they are located.

In the manufacture of electrical transformers for commercial purposes, it is necessary to produce a great number of different sizes, and, in order to minimize the number of drawings and patterns for a given line, it is desirable to utilize cases or tanks of the same size for several different sizes of transformers. Under these circumstances, it is sometimes difficult to properly center the transformer in the tank and to clamp it in position so that injury to the transformer windings may be avoided.

According to my present invention, I form corrugated strips or toothed sections in casting the bottom plate of the tank and provide corrugated surfaces on the bottom end frames of the transformer core member which cooperate with the toothed sections on the tank to hold the transformer against lateral displacement independently of its size which may vary over quite wide limits.

Figure 1 of the accompanying drawings is a partially sectional elevation of a transformer and its inclosing casing constructed in accordance with my invention, Fig. 2 is a plan view of the base plate of the tank shown in Fig. 1, and Fig. 3 is an elevation at right angles to that of Fig. 1.

Referring to the drawings, a transformer comprising a magnetizable core member 1, coils 2 and end frames 3 and 4 having laterally projecting flanges 3^a and 4^a is disposed within a tank or casing comprising a base plate 5, a crown casting 6 and corrugated sheet metal side walls 7. The base plate 5

is provided with two sets 8 and 9 of upwardly projecting teeth to be engaged by teeth 10 and 11 with which the bottom face of the flange 4^a is provided. The sets 8 and 9 of teeth are so located that core members of different dimensions may be mounted in tanks or casings of the same size without danger of disarrangement or displacement, it being only necessary to lower the transformer into the casing, in a substantially central position, and then clamp it by means of the usual holding-in devices (not shown) against lateral displacement at either end.

Since structural modifications may be effected within the scope of my invention, I desire that only such limitations shall be imposed as are indicated in the appended claims.

I claim as my invention:

1. In electrical apparatus, the combination with a tank or casing having a base provided with upwardly projecting teeth, of a magnetizable core member the end plates of which are provided with flanges having teeth which engage the teeth on the base of the tank.

2. In a transformer, the combination with a tank or casing having a base plate provided with groups of teeth, of a magnetizable core member the end plates of which have foot flanges provided with teeth to register with the groups of base plate teeth.

3. In a transformer, the combination with a tank or casing and a transformer core having end plates provided with foot projections, of means for preventing the lateral adjustment of the foot projections after the core is placed in the tank or casing, said means being independent of the size of the transformer, within predetermined limits, for a single tank or casing.

In testimony whereof, I have hereunto subscribed my name this 28th day of June, 1909.

CHRISTIAN AALBORG.

Witnesses:

R. J. DEARBORN,
B. B. HINES.