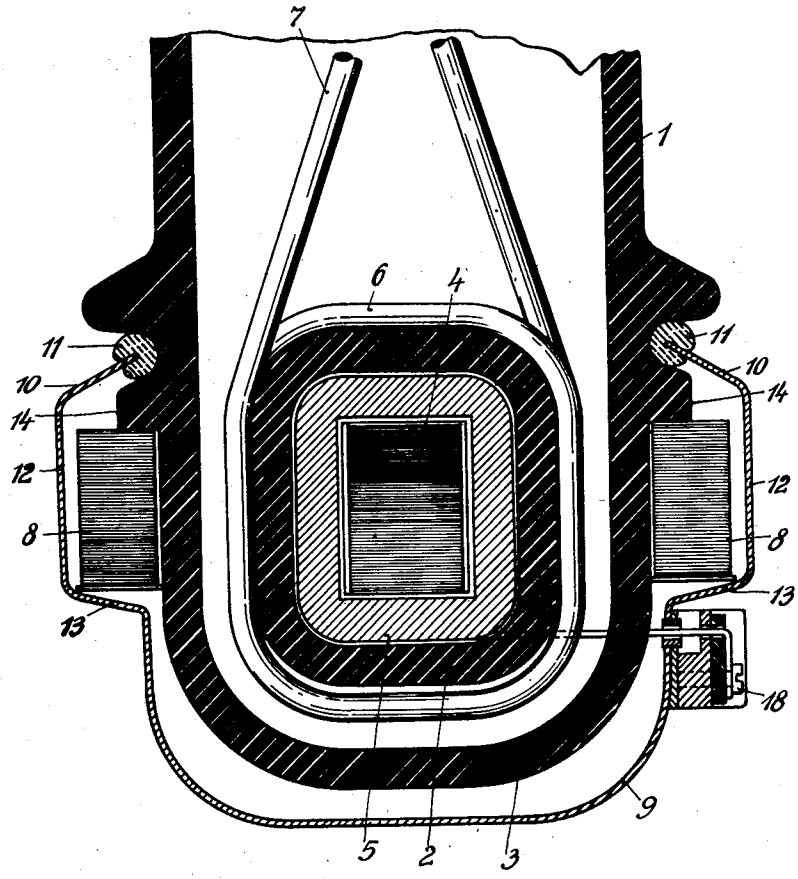
June 24, 1930. F. J. FISCHER 1,765,913

CURRENT TRANSFORMER

Filed June 5, 1928 2 Sheets-Sheet 1

Fig. 1.



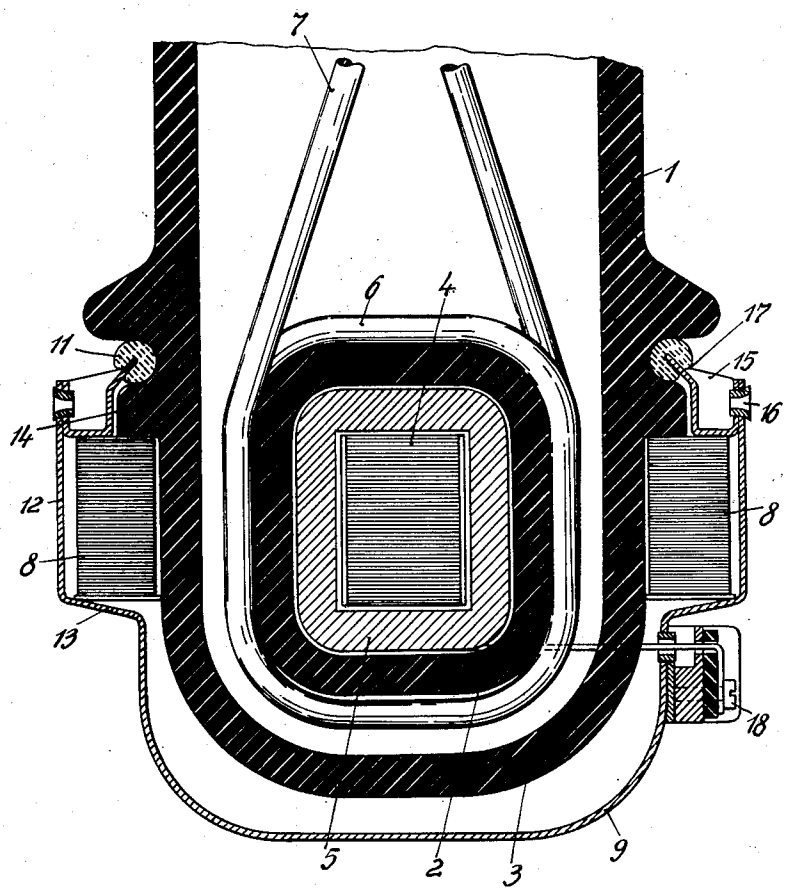
Inventor:
Franz Joseph Fischer
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Atty.

June 24, 1930. F. J. FISCHER 1,765,913

CURRENT TRANSFORMER

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Fig. 2.



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Patented June 24, 1930 1,765,913

UNITED STATES PATENT OFFICE

FRANZ JOSEPH FISCHER, OF DRESDEN, GERMANY, ASSIGNOR TO KOCH & STERZEL, AKTIENGESELLSCHAFT, OF DRESDEN, GERMANY

CURRENT TRANSFORMER

Application filed June 5, 1928, Serial No. 282,921, and in Germany January 23, 1928.

My invention relates to current transformers and more particularly to improvements in the casing surrounding the insulating bushing in such transformers. It is an object of my invention to provide improved means for securing the casing to the insulator and to this end I provide a casing which is provided with a deflected flange at its upper end for engaging the insulator.

Heretofore the casing was provided with a lid at the top and the insulator was inserted in the lid. This method involves the drawback that the casing must be built up from several parts and it is necessary to connect such parts by screws or the like for securing the casing to the insulator so that a considerable amount of material and much labour is required for building up a casing of this type.

These drawbacks are overcome according to my invention by providing a casing which constitutes a single unit and is secured to the insulator as such. For instance, the casing is made of sheet metal in the shape of a box open at the top and the edge of the casing is bent over toward the insulator so that the casing is supported on the insulator. Preferably, a recess is made in the insulator in which a resilient packing may be inserted and the upper edge of the casing is bent inwardly so as to engage the recess.

The casing may be made from a single piece of sheet metal or consist of two parts which are connected by welding, screwing or beading and the joint preferably extends in the longitudinal direction of the insulator.

Notwithstanding its being made in two parts the casing still is a separate and independent unit from the point of view of securing it to the insulator for it is secured to the insulator by bending over its flange exactly as an undivided casing.

In the drawings affixed to this specification and forming part thereof a current transformer embodying my invention is illustrated diagrammatically by way of example in vertical section.

In the drawings

Fig. 1 is a section of a transformer having a casing which is made integral with the edge forming the flange for supporting the insulator, and

Fig. 2 is a section of a transformer in which an annular part is inserted in the casing and the edge is formed on the annular part.

1 is the body of the insulator which is provided with a tunnel or transverse passage 2 and closed by a bottom 3 at the base. 4 is the middle leg of a three-legged iron core 8, the outer legs and the yokes of this core surrounding the insulator 1, thus forming the core of a shell-type transformer, 5 is the secondary on the leg 4, 6 is the primary which is wound on the outside of the tunnel 2, and 7 are the ends of the primary which are taken out of the insulator to suitable binding posts, not shown.

9 is a casing surrounding the bottom of the insulator 1. The casing may be of sheet metal and, as illustrated in Fig. 1, is provided with a bent-over flange 10 at its upper edge which engages a ring 11 of rubber or other resilient material in a recess of the insulator. The casing is extended at 12 so as to form a shoulder 13, and the core 8 is held between the shoulder 13 on the casing and the shoulder 14 on the insulator 1. By the resilient reaction of the flange 10 the core 8 is held between the two shoulders 13 and 14 and does not require other means for supporting it.

As shown in Fig. 2 the upper portion of the casing 9 is straight and an annulus 15 of channel-section is inserted in the casing and secured thereto by tubular rivets 16. A flange 17 corresponding to the flange 10 at the left is formed on the inner edge of the channel-section to engage the ring 11. The web of the channel-section 15 may be arranged at the same level as the shoulder 14. The annulus may be divided.

18 is a binding post on the outside of the casing 9 to which one end of the secondary 5 is taken through the wall of the casing, the other end being secured in a similar manner.

I wish it to be understood that I do not desire to be limited to the exact details of

construction shown and described for obvious modifications will occur to a person skilled in the art.

I claim:—

1. In a current transformer, an insulator having a recess, a casing surrounding part of said insulator, and a flange on said casing adapted to engage said recess.

2. In a current transformer, an insulator having a recess, a casing surrounding part of said insulator, a flange on said casing adapted to engage said recess, and a resilient packing inserted in said recess so as to be engaged by said flange.

3. In a current transformer, an insulator, a shoulder on said insulator, a core abutted against said shoulder and projecting partly from the outside of said insulator, a casing surrounding the bottom part of said insulator and said core, a shoulder on said casing adapted to support said core, and a flange on said casing adapted to engage said insulator.

4. In a current transformer, an insulator having a recess, a casing made in two parts surrounding part of said insulator, and a flange on said casing adapted to engage said recess.

In testimony whereof I affix my signature.

FRANZ JOSEPH FISCHER.