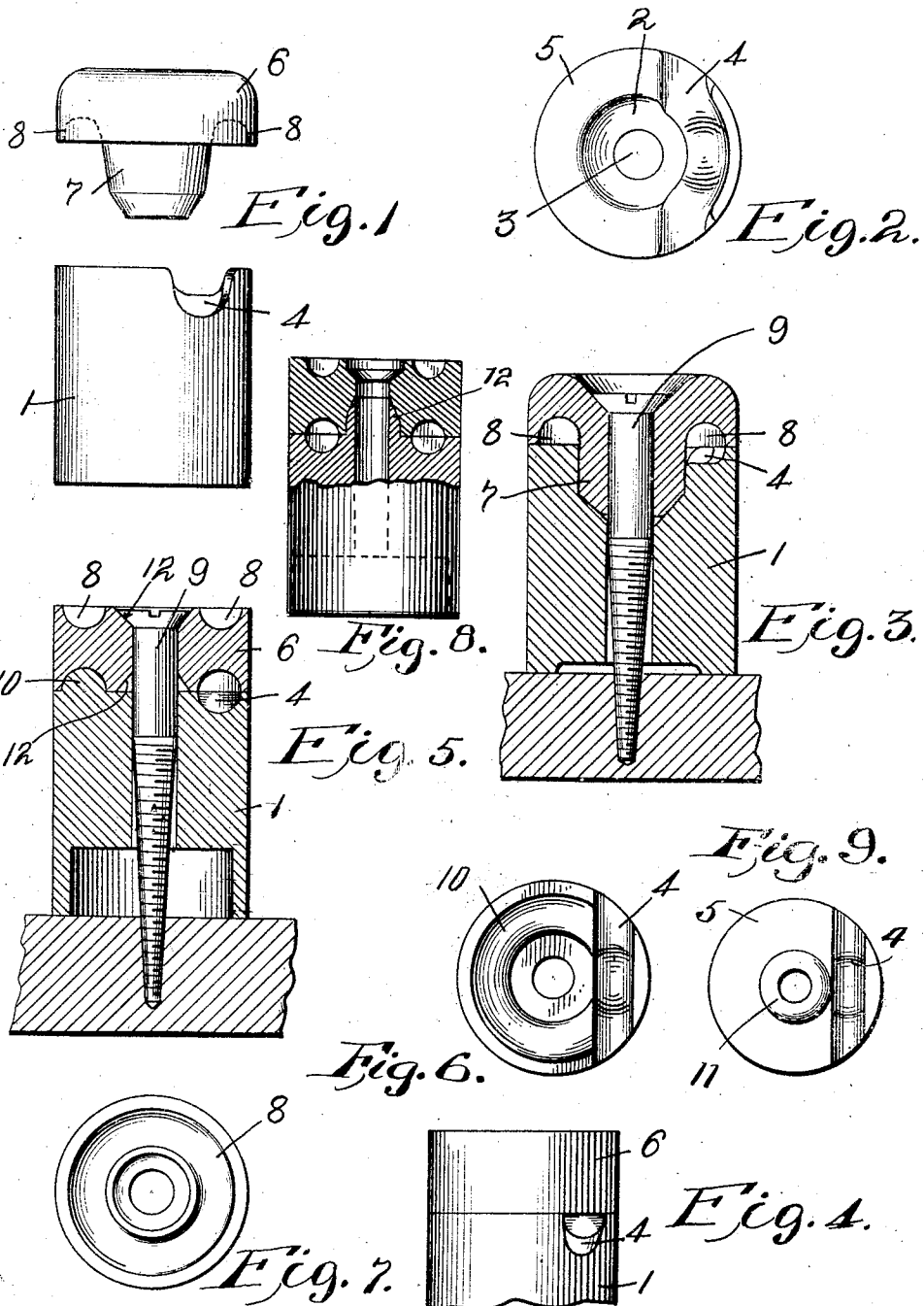


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INSULATOR.
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1,049,405.

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UNITED STATES PATENT OFFICE.

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INSULATOR.

1,049,405.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FERDINAND SCHAUB, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Insulators, of which the following is a full, clear, and exact specification.

My invention relates to certain new and useful improvements in insulators for electrical conductors, and particularly to those consisting of a base and a removable cap, between which two parts the conductors are adapted to be clamped.

It is the object of my invention to improve and simplify the construction of same and to render their assembly and use as simple and efficient as possible.

Another object of my invention is so to form the said parts that they will cooperate with one another without adjustment and without the necessity of carefully fitting them together, and also to render the parts interchangeable.

My invention is also applicable to cross-overs, but I make no specific claim to these in this application, as I am about to file a separate application covering the same. In so far as the present generic invention is concerned, however, it will be found applicable to ordinary insulators, cross-overs or other similar structures.

Several forms of my invention are illustrated in the accompanying drawings, wherein—

Figure 1 illustrates an insulator base and cap in their simplest form, separated for the sake of clearness. Fig. 2 is a top plan view of the base shown in Fig. 1. Fig. 3 is a sectional view, with the parts assembled, of the insulator cap and base shown in Fig. 1. Fig. 4 is a side elevation of a slightly modified form of my insulator. Fig. 5 is a sectional view of the structure shown in Fig. 4. Fig. 6 is a top plan view of an insulator base of the form shown in Fig. 4; and Fig. 7 a plan view of the cap thereof. Fig. 8 is a side elevation, partly in section, of a third modified form; and Fig. 9 is a top plan view of the base of said form.

Like reference numerals indicate corresponding parts in the different drawings.

The insulator parts may be made of porcelain, concrete, hard rubber, or any other suitable substance, and in the first form shown consist of a base or support 1, which

is provided with a central depression 2, a central passage 3, and a conductor-receiving recess 4. The conductor-receiving recess 4 is disposed substantially transversely of the base member. In the present illustration this recess is curved upwardly and outwardly, which upward and outward curves will have the effect upon the wire of giving it a curve and a kink transversely of such curve whereby the wire will be held securely against longitudinal movement. Viewed from the meeting face, this base member will be seen to be provided with a segmental wire seat and outwardly of the wire seat will be disposed a segmental flange. In this form the face 5 of the remainder of the base, is flat. A cooperating cap 6 is provided, and the cap is formed integral with a tapering or expanding plug 7, adapted to fit the recess 2 in the base, and a central perforation or hole, registering with the hole 3 in the base, is provided for the passage of the securing screw or bolt. An annular recess 8 is provided in the under-face of said cap, and a portion of this recess will always register with the conductor-receiving recess 4 in the base, no matter in what position the cap may be placed on the base, and such portion of the recess will form part of the conductor-receiving recess. When the conductor is placed in the recess 4 and the cap placed in position, the expanding plug will force the wire laterally, and upon tightening the bolt or screw 9, the conductor will be firmly held in place. The annular recess 8 which forms a wire seat in the meeting face of one of the members may be regarded as presenting a circular wire seat and an annular flange disposed outwardly of the wire seat. The wire seat and flange upon one member will register with the wire seat and flange of the other member when the members are properly assembled. The segmental wire seat will be in position to register with some portion of the annular wire seat upon the other member irrespective of the angular position in which the members are assembled.

In Figs. 4 to 7 a modified form of my invention is shown, and in this construction the base is provided with an annular rib 10, extending part way around the face thereof and abutting against the conductor-receiving recess 4. The cap is symmetrical upon both sides, having an annular recess 8 upon each face, so that it may be placed

with either side against the face of the base. The coöperation of the annular rib 10 and the recess 8 insures the centering and proper positioning of the parts together, so that the clamping screw will readily pass through the aperture in the base and cap. Usually in this form of insulator the wire is inserted after the cap and base are assembled and the screw or bolt partly tightened, when the conductor is forced between the two slightly separated parts. In this form the ends of the annular rib 10 form an abutting surface to prevent the conductor from being forced too far and to insure its positioning in the proper groove or recess.

In the third form of my invention, as shown in Figs. 8 and 9, the base is provided with a conductor-receiving groove 4, a flat face 5, and a centering plug or projection 11. This centering plug 11 coöperates with the central recess 12 in the cap, and insures the proper registration of the parts.

It is obvious that many modifications and changes may be made in the form of my invention without departing from the spirit thereof, and I do not mean to limit myself to the exact form shown, but

What I claim and desire to secure by Letters Patent is:

1. An insulator comprising two members, a body portion and a cap and means for securing the same together, one of said members having a circular wire seat and an annular flange surrounding the wire seat, and the other member having a wire seat of segmental form and a segmental flange disposed outwardly thereof said seat and flange being located in position to register with the seat and flange respectively of the other member.

2. An insulator comprising two members, a body portion and a cap and means for se-

curing the same together, one of said members having a circular wire seat and an annular flange surrounding the wire seat and disposed transversely in respect thereof, and the other member having a wire seat of segmental form and a segmental flange disposed outwardly of the seat and transversely thereof, said seat and flange being located in position to register with the seat and flange respectively of the other member.

3. An insulator comprising a pair of members constructed and adapted for assemblage one with the other, each of such members having a plane meeting face adjacent its sides and one of such members having an annular recess extending below such plane face and the other member having a transverse recess extending below such plane face, said transverse recess being located in position to register with some portion of the annular recess when these members are assembled.

4. An insulator comprising a pair of members one of said members having in its face an annular recess, the other of said members having a segmental recess, which upon registry with any portion of the annular recess will form a wire seat, and a segmental rib on the member provided with the segmental recess, said rib beings disposed in position to be seated in the portions of the annular recess which are not in wire-seat-forming registry with the segmental recess.

In testimony whereof, I have hereunto set my hand in the presence of two subscribing witnesses.

FERDINAND SCHAUB.

Witnesses:

EMIL SCHUMANN,
CARL G. A. SCHUMANN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."