

Sept. 1, 1925.

1,552,262

C. F. BETZ
ELECTRIC CONDUCTOR COUPLING

Filed Nov. 8, 1923

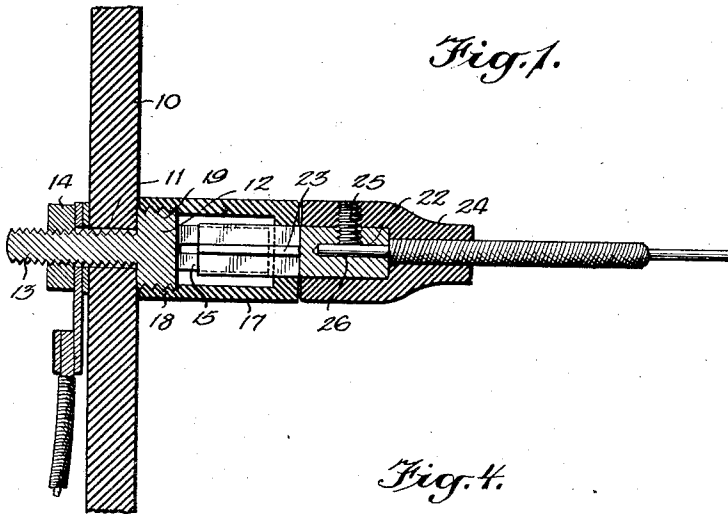


Fig. 4.

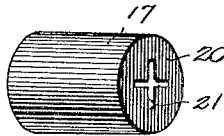


Fig. 2.

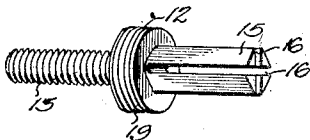


Fig. 3.

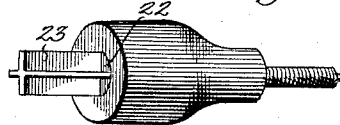


Fig. 7.

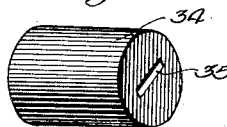


Fig. 5.

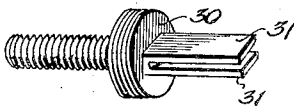


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES FREDERICK BETZ, OF BROOKLYN, NEW YORK.

ELECTRIC-CONDUCTOR COUPLING.

Application filed November 8, 1923. Serial No. 673,580.

To all whom it may concern:

Be it known that I, CHARLES F. BETZ, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Electric-Conductor Coupling, of which the following is a full, clear, and exact description.

10 The present invention relates to new and useful improvements in electric conductor couplings, and it pertains more particularly to a coupling especially adapted for use in connection with radio sets.

15 It is one of the primary objects of the invention to provide a two-part coupling in which neither of the parts can be used with another part except the latter be of special design.

20 It is a further object of the invention to provide a coupling in which the members may be readily connected and disconnected.

It is a further object of the invention to provide a coupling in which a good electric contact will be had.

25 It is a still further object of the invention to provide an electric coupling in which the positive branch of the circuit can be connected only with a positive terminal and the negative branch only with a negative terminal.

With the above and other objects in view, reference is had to the accompanying drawings, in which

35 Figure 1 is a vertical sectional view of a portion of a panel-board showing the coupling in longitudinal section;

Fig. 2 is a perspective view of one member of the coupling;

40 Fig. 3 is a perspective view of the other member of the coupling;

Fig. 4 is a perspective view of a housing adapted to enclose one of the members of the coupling;

45 Fig. 5 is a perspective view of a coupling member of slightly different form from that shown in Fig. 2;

Fig. 6 is a view similar to Fig. 3, showing a coupling of slightly different form, and

50 Fig. 7 is a perspective view of a housing used in connection with the coupling shown in Figs. 5 and 6.

Referring more particularly to the drawings, the reference numeral 10 designates a panel-board, and such panel-board is provided with an opening 11. The reference

numeral 12 designates the body of one of the members of the coupling, and such body is provided with a reduced screw-threaded extension 13 adapted to project through the opening 11 in the panel-board. A nut 14 has engagement with the screw-threaded extension 13 and serves to clamp the panel-board between itself and the body 12.

As more particularly shown in Fig. 2, 65 there are a plurality of spring fingers 15 projecting from the body portion 12, and such fingers are spaced with respect to one another as shown at 16 in said figure. The reference numeral 17 designates a housing 70 having an open end which is screw-threaded as at 18 in order that it may be threaded upon the body portion 12, the exterior surface of the body portion 12 being provided with a thread 19 for this purpose. The 75 outer or closed wall 20 of the housing 17 is provided with an opening 21 of a shape corresponding to the space between the resilient fingers 15.

The reference numeral 22 designates the 80 body portion of the opposite member of the coupling, and such body portion 22 has projecting therefrom a rigid contact member 23 which corresponds in cross sectional shape to the spaces 16 between the resilient fingers 85 15 in order that said rigid contact member 23 may be received in the spaces between the fingers 16. The body portion 22 is surrounded by suitable material 24 and is provided with a passage whereby a screw 25 90 may be passed therebetween for engagement with a conductor 26. It is obvious, however, that the conductor may be attached in any other desired manner. In operation, the rigid member 23 is adapted to be inserted 95 through the opening 21 in the end of the housing and passed into the space between the resilient fingers 15 where it is resiliently held to complete a circuit.

In the form of the invention shown in 100 Fig. 5, the body portion 30 of one terminal is provided with two resilient fingers 31 spaced with respect to each other, and the body portion 32 of the opposite terminal member is provided with a single blade-like 105 member 33 adapted to be received in the space between the resilient fingers 31. In this form, the housing 34 is provided with an opening 35 of a shape corresponding to the shape of the blade-like member 33 and 110 serves as the means through which the blade-like member 33 is inserted between the re-

silient fingers 31 of the body portion 30.

From the foregoing it is apparent that the present invention provides an electric coupling in which when various sizes and shapes are resorted to, only corresponding members can be coupled together, thus eliminating the possibility of making improper connections in electric circuits.

What is claimed is:

10 In a device of the character described, a body portion, a plurality of resilient fingers carried thereby, a housing adapted to enclose said resilient fingers, said housing being

removably secured to the body portion, means for attaching the body portion to a suitable support, and a member adapted for engagement with said body portion and comprising a body portion having a rigid projection of a cross-sectional shape corresponding to the space between the resilient fingers, said rigid member being insertable through the opening in the closed end of the housing and into engagement with the resilient fingers of the other member. 15 20

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