March 31, 1925. 1,531,841

E. A. BREITENBACH

SWITCH CONTACT DEVICE

Filed April 16, 1923

FIG. 1

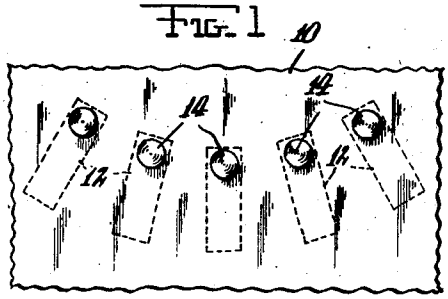


FIG. 2

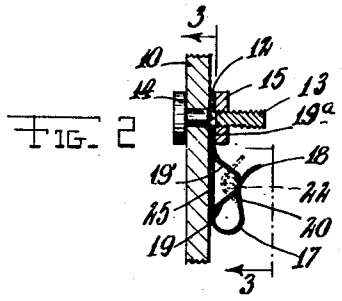
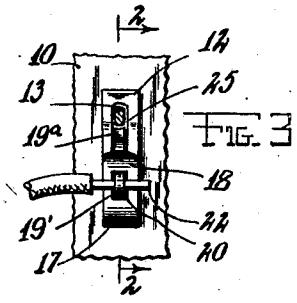


FIG. 3



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UNITED STATES PATENT OFFICE.

EDWARD A. BREITENBACH, OF NEW YORK, N. Y.

SWITCH-CONTACT DEVICE.

Application filed April 16, 1923. Serial No. 632,324.

To all whom it may concern:

Be it known that I, EDWARD A. BREITENBACH, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Switch-Contact Devices, of which the following is a specification.

This invention relates generally to the construction of terminals for switches or the like, the invention having particular reference to a means for more easily securing the lead wires to such terminals, and having for an object the provision of a novel and efficient wire attaching means which will securely hold the wire end in place, and which can be manipulated to attach or remove the wire without screwing or unscrewing nuts, and without the use of any tools.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

Fig. 1 of the drawings is a fragmentary face view of a switch panel board indicating a number of my improved devices in position thereon.

Fig. 2 is a longitudinal sectional view showing one of the devices in position on the panel board, this view being taken on the line 2—2 of Fig. 3.

Fig. 3 is a sectional view at right angles to Fig. 2 and taken on the line 3—3 of the latter figure.

In the drawing the reference numeral 10 indicates a portion of a panel board, which may be the panel board of a radio set, the invention being more particularly intended for application to the inductance tips of home made radio sets, although it is not of necessity limited thereto.

In constructing my improved device I employ a flat strip 12 of a suitable metal which is adapted for securing at one end to the inner end of a screw 13 projecting through the panel board and having a contact head 14 on its outer end, the inner end of this screw being flattened as shown while the strip 12 has a slotted complementary opening through which the screw passes. A nut 15 is threaded on the screw and bears on the strip 12 to hold the latter in place.

This strip 12 is arranged to have the wire end secured thereto and to this purpose the other end of the strip is bent backward in the form of a hook or beak 17 which is separated as shown from the body of the strip and has an out-turned tip 18. Struck out from the body of the strip is a longitudinal tongue 19 which is bent to form an outwardly projected hump between its ends, this hump being adapted to be received, when the wire is in place, in a slot 20 in the hook. In attaching the wire to the strip the tip 18 of the hook is pressed inwardly toward the main body of the strip, bending the hook toward the strip until the hump on the tongue extends through the slot 20, as indicated in dotted lines in Fig. 2. The wire end is then inserted under the hump on the tongue and over the hook and when the hook is released it springs outward and grips the wire between itself and the tongue, the wire end being indicated in position at 22.

As shown in Figs. 2 and 3 I have provided a construction for the tongue which eliminates danger of the same being broken off. As therein shown the root of the tongue is at the end of the device opposite that through which the screw passes, the screw being received in the end of the slot 25 formed by striking out the tongue, an opening of proper size to snugly receive the flattened screw 13 being formed when the end of the tongue is drawn backward from the end of the slot in forming the hump 19′. When the nut is tightened it bears on this end portion 19ª of the tongue and holds it against outward movement.

As will be apparent I have provided a simple and efficient form of contact device which enables the wire lead to be readily attached without soldering and which is not liable to be accidently broken by frequent attaching and removal of the wire.

Having thus described my invention what I claim as new and desire to protect by Letters Patent of the United States is as follows:

1. A device of the class described comprising a screw flattened on opposite sides, a metal strip having at one end a complementary opening to receive the screw, and an integral hook at the other end, a tongue struck out from the body of the screw and having a humped portion intermediate its ends adapted to be projected through a

slot in the said hook by bending the latter to provide an opening between said hook and hump to receive a wire end, said complementary opening being formed by drawing the end of the tongue backward in the slot left in the body of the hook.

2. A device of the class described comprising a screw flattened on opposite sides, a metal strip having at one end a complementary opening to receive the screw, and an integral hook at the other end, a tongue struck out from the body of the screw and having a humped portion intermediate its ends adapted to be projected through a slot in the said hook by bending the latter to provide an opening between said hook and hump to receive a wire end, said complementary opening being formed by drawing the end of the tongue backward in the slot left in the body of the hook, and a nut threaded on the screw and adapted to bear on the end of the strip and on the said tongue.

3. A device of the class described comprising a screw, a metal strip having an opening at one end to receive the screw and a hook at its other end, a tongue struck out from the body of the strip and having a hump coacting with the hook to form wire gripping means, and a binding nut threaded on said screw and bearing against the end of the strip and the free end of the tongue.

In testimony whereof I have affixed my signature.

EDWARD A. BREITENBACH.