L. W. HEATH.

CONNECTOR FOR CIRCUIT WIRES.

APPLICATION FILED AUG. 2, 1915.

1,225,127. Patented May 8, 1917.

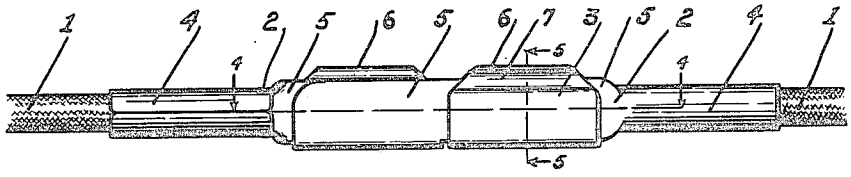


FIG. I.

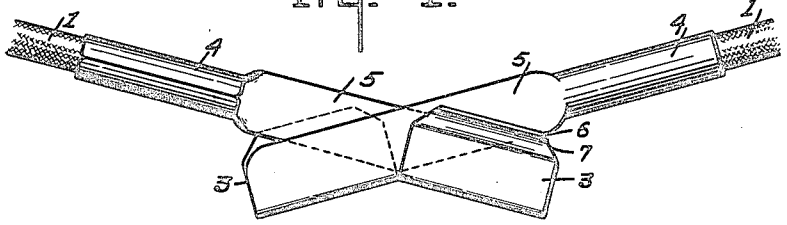


FIG. II.

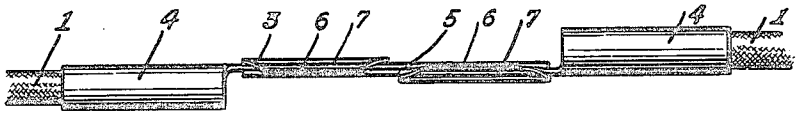


FIG. III.

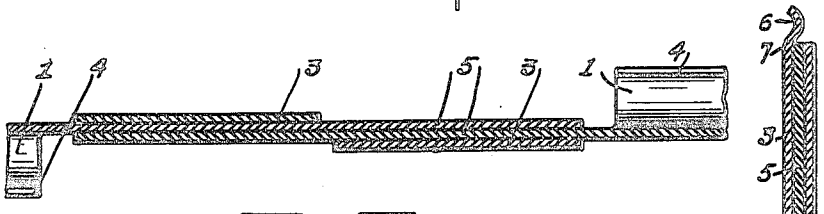


FIG. IV.

FIG. V.

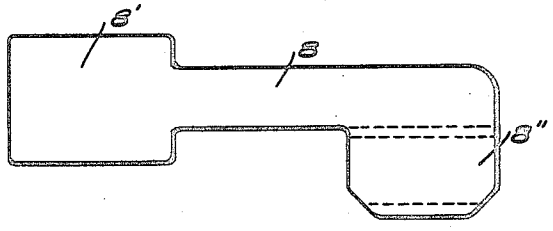


FIG. VI.

Witnesses

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CONNECTOR FOR CIRCUIT-WIRES.

1,225,127. Specification of Letters Patent. Patented May 8, 1917.

Application filed August 2, 1915. Serial No. 43,174.

To all whom it may concern:

Be it known that I, LEWIS W. HEATH, a citizen of the United States, residing at Hastings, Michigan, have invented certain new and useful Improvements in Connectors for Circuit-Wires, of which the following is a specification.

This invention relates to improvements in connectors for circuit wires.

The main object of this invention is to provide an improved connector for circuit wires by means of which the circuit wires may be quickly and effectively connected and as readily disconnected and one which is very secure and not likely to become accidentally disconnected and one in which there is a good electrical contact between the members of the connectors.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification. The invention is clearly defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is clearly illustrated in the accompanying drawing forming a part of this specification, in which:

Figure I is a side view of my improved connector with the members joined.

Fig. II is a side view illustrating the manner of engaging and disengaging the connector members.

Fig. III is a top view with the parts in the position shown in Fig. I.

Fig. IV is a detail longitudinal section on a line corresponding to line 4—4 of Fig. I.

Fig. V is a transverse section on a line corresponding to line 5—5 of Fig. I.

Fig. VI is a plan view of one of the connector member blanks.

In the drawing similar reference characters refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Referring to the drawing, 1 represents the circuit wires to be connected. Each connector comprises a pair of members 2. Each connector member is formed of a sheet metal blank as shown in Fig. VI, and consists of a hook-like clasp 3 at its outer end, a wire attaching clip 4 at its inner end and a shank 5 between. The clasp of one member is adapted to receive the shank of the other when it is presented laterally thereto. The width of the shank is substantially the depth of the clasp, see Fig. VI. The clasps are adapted to engage the shanks with spring tension or friction so that the parts engage each other with a wiping action and are held firmly together to insure a perfect electrical contact. The bills of the clasps are provided with bead-like keepers 6 which assist in retaining the parts in engagement but do not interfere with their ready engagement. The ends of the bills of the clasps are beveled at 7 to facilitate engagement and disengagement of the members.

In Fig. VI, I show a blank 8 from which the connectors are formed, the same being a sheet metal stamping.

The clip 4 is formed by rolling the portion 8′ into a cylinder which is clamped upon the end of the wire and may be further secured by soldering if desired. The portion 8″ of the blank is folded upon itself to form the clasp 3. The shanks of the members are preferably substantially the length of the clasps so that longitudinal movement of the members upon each other is prevented. The members are quickly engaged and disengaged by presenting the shank of one member to the clasp of the other with the inner ends of the clasp portions resting against each other and straightening or bringing the members into alinement.

A perfect electrical contact between the members is provided and this in addition to the ease with which the connector members can be engaged and disengaged renders the connector particularly desirable for use where it is necessary to frequently connect and disconnect circuit wires. The connectors are very economical to produce as they are simple sheet metal stampings and any member will coact with any other.

I have illustrated and described my improved connectors in detail in the form in which I have embodied the same. I have not attempted to illustrate or describe the various modifications in form and detail which I contemplate might be desirable under certain conditions as I believe the disclosure made will enable those skilled in the art to which this invention relates to embody or adapt the same as conditions may require.

Having thus described my invention, what

I claim as new and desire to secure by Letters Patent, is:

1. A device of the class described, comprising a pair of sheet metal members each having a shank portion provided with a laterally extending flange turned back parallel to and spaced from said shank to form a hook-like clamp, the clasp of one member being adapted to receive the shank of the other when it is presented laterally thereto, the bills of the clasps being provided with keepers and beveled at their ends to facilitate the engaging and disengaging of the members.

2. A device of the class described, comprising a pair of members each having a flat shank member with oppositely extending curved flanges extending from one end thereof and forming a wire clip, and a third flange extending from one side of the opposite end of said shank member bent at right angles thereto and then parallel therewith to form a clasp for receiving the shank of the complementary member, the outer end of said last named flange being beveled at its ends to facilitate the engaging and disengaging of the members and being provided with a bead-like keeper.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

LEWIS W. HEATH. [L. S.]

Witnesses:
G. M. BROWER,
B. VAN HOUTEN.