

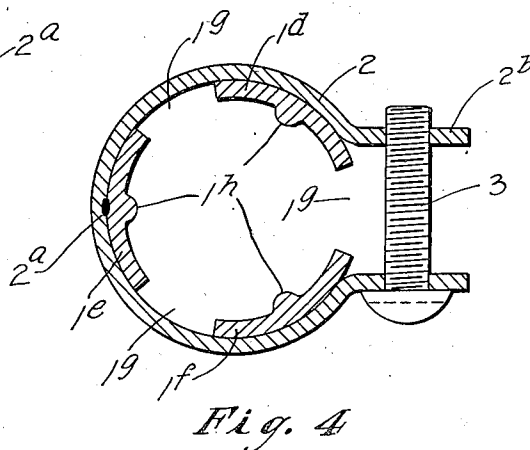
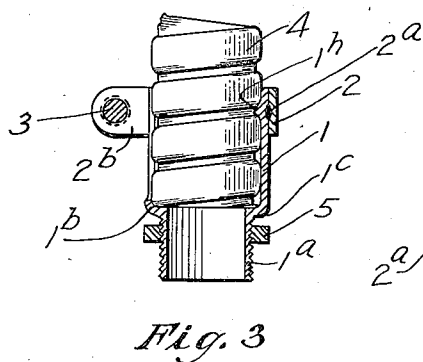
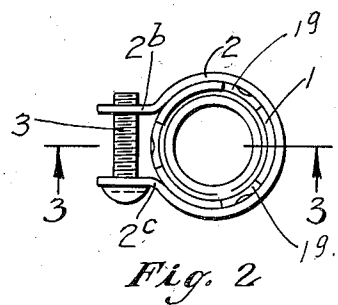
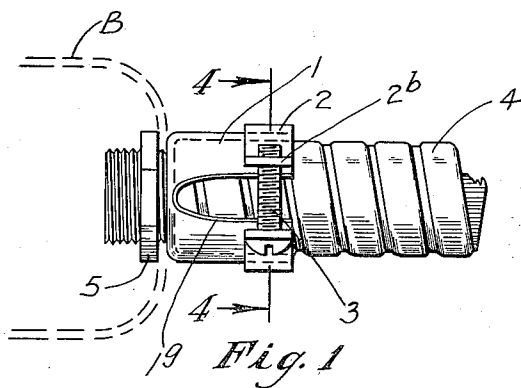
March 24, 1942.

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2,277,384

ELECTRIC CABLE CONNECTOR MEANS

Filed June 27, 1939



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2,277,384

ELECTRIC CABLE CONNECTOR MEANS

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Application June 27, 1939, Serial No. 281,394

3 Claims. (Cl. 285—6.5)

My invention relates to electric cable connector means, more particularly adapted for use in connection with outlet boxes, junction boxes or like electrical connection boxes and the objects of my invention are:

First, to provide an electric cable connector means of this class in which the connector is rigidly secured to a flexible tubing conduit so that the connector will not loosen therefrom;

Second, to provide a connector means of this class in which the flexible tubing receiving member is provided with openings extending to the bottom of said receiving member so that one assembling the same may readily determine whether or not the tube is inserted to the bottom of the receiver;

Third, to provide an electric cable connector means of this class in which said receiving member is made yieldable and is provided with a tube engaging means for efficiently securing the receiver to the tube;

Fourth, to provide a connector means of this class in which the clamp is definitely supported in its proper relation with the tube receiving member for providing efficient clamping means;

Fifth, to provide an electric connector means of this class which is readily and easily connected to the outlet box, construction box or other connection member; and

Sixth, to provide an electric cable connecting means of this class which is very simple and economical of construction, easy to install, positive in its action, and which will not readily deteriorate or get out of order.

With these and other objects in view as will appear hereinafter, my invention consists of certain novel features of construction, combination and arrangement of parts and portions as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawing and to the characters of reference thereon which form a part of this application in which:

Figure 1 is a side elevational view of my electric cable connector means showing by dash line a fragmentary portion of an outlet box in connection therewith and showing a flexible tube fragmentarily; Fig. 2 is an end view thereof omitting the box; Fig. 3 is a longitudinal sectional view from the line 3—3 of Fig. 2 and showing the flexible tube in elevation; and Fig. 4 is an enlarged transverse sectional view taken from the line 4—4 of Fig. 1 and showing some of the parts in elevation to facilitate the illustration.

Similar characters of reference refer to similar parts and portions throughout the several views of the drawing:

The tube receiving member 1, clamp member 2, clamp screw 3, flexible tube 4, and supporting nuts 5 constitute the principal parts and portions of my electric cable connector means.

The tube receiving member 1 is provided with a threaded end 1a which is in the form of a sleeve and screw threaded thereon is the supporting nut 5. Secured to one end of this sleeve and extending outwardly therefrom is a flange portion 1b which forms a shoulder 1c against which one side of the box wall rests, while the nut 5 is secured against the opposite side of the wall, as shown best in Fig. 1 of the drawing. The outer edge of this flange portion 1b is provided with three extended portions 1d, 1e and 1f leaving spaces 1g. These portions 1d, 1e and 1f are extended substantially at right angles to the flange and substantially parallel with the axis of the sleeve portion 1a. These members 1d, 1e and 1f are each provided with an inwardly extending lug portion 1h which is adapted to engage the tube 4 when said members 1d, 1e and 1f are pressed inwardly as shown in Figs. 1, 2 and 3 of the drawing. These lug members 1h, it will be noted, are near the extended ends of said members 1d, 1e and 1f and mounted around these members 1d, 1e and 1f at their ends is the clamp member 2 which is secured to one of the members 1d, 1e or 1f by spot welding 2a or the like. This clamp member 2 is provided with an extended lug portion 2b and 2c. In the lug portion 2b is screw threaded the screw 3 which is revolutely mounted in the lug 2c. These lugs, it will be noted are on the opposite side of the clamp from the spot weld portion 2a.

It will be here noted that these extended portions 1d, 1e and 1f are curved in cross section adapted to fit the outer surface of the tube 4.

The operation of my electric cable connector means is substantially as follows: The tube 4 with the electric wiring inserted therein is positioned in the receiver 1 between the extended portions 1d, 1e and 1f and the wires extended through the sleeve portion 1a into the box B shown by dash lines in Fig. 1. It will be noted that it can be readily determined whether this tube is inserted to the bottom by looking through the spaces 1g between the members 1d, 1e and 1f. Then the screw 3 is rigidly tightened in position, the members 1h engaging the outer surfaces of the tube and binding it tightly in position and fully inserted in the tube receiving member 1 as

shown best in Figs. 1 and 3 of the drawing. The sleeve 1a is inserted at any time into the box B through a conventional opening in the side thereof until the shoulder 1c engages the outside and the nut 5 is secured tightly against the inside wall.

Though I have shown and described a particular construction, combination and arrangement of parts and portions I do not wish to be limited to this particular construction, combination and arrangement, but desire to include in the scope of my invention the construction, combination and arrangement substantially as set forth in the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In an electric cable connector means of the class described, the combination of a tube receiving member including a threaded fixed flange portion integral therewith at one end and forming a shoulder forming a stop for said tube and a plurality of curved in cross section readily yieldable members extending at right angles thereto parallel with the axis of said sleeve member integral therewith and in widely spaced relation with each other from said shoulder to the extended end providing a plurality of wide spaces from the ends of said curved in cross section members to said shoulder whereby the position of the end of said tube in said cross section members may be readily determined.

2. In an electric cable connector means of the class described, the combination of a tube receiving member including a threaded fixed flange portion integral therewith at one end and forming a shoulder forming a stop for said tube and a plurality of curved in cross section readily yieldable members extending at right angles

thereto parallel with the axis of said sleeve member integral therewith and in widely spaced relation with each other from said shoulder to the extended end providing a plurality of wide spaces from the ends of said curved in cross section members to said shoulder whereby the position of the end of said tube in said cross section members may be readily determined, and a clamp member rigidly secured to one only of said curved in cross section members at its central portion near its outer end in considerably spaced relation with said shoulder and adapted to fit around and engage the other curved in cross section members.

3. In an electric cable connector means of the class described, the combination of a tube receiving member including a threaded fixed flange portion integral therewith at one end and forming a shoulder forming a stop for said tube and a plurality of curved in cross section readily yieldable members extending at right angles thereto parallel with the axis of said sleeve member integral therewith and in widely spaced relation with each other from said shoulder to the extended end providing a plurality of wide spaces from the ends of said curved in cross section members to said shoulder whereby the position of the end of said tube in said cross section members may be readily determined, and a clamp member rigidly secured to one only of said curved in cross section members at its central portion near its outer end in considerably spaced relation with said shoulder and adapted to fit around and engage the other curved in cross section members, each of said curved in cross section readily yieldable members provided with an inwardly extending lug member for engagement with the groove of a flexible tube.

CLAUDE E. BOWERS.