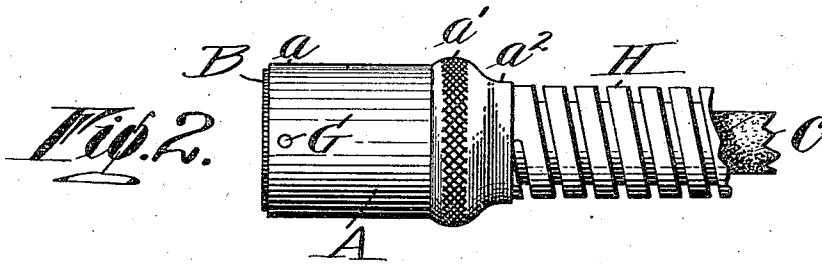
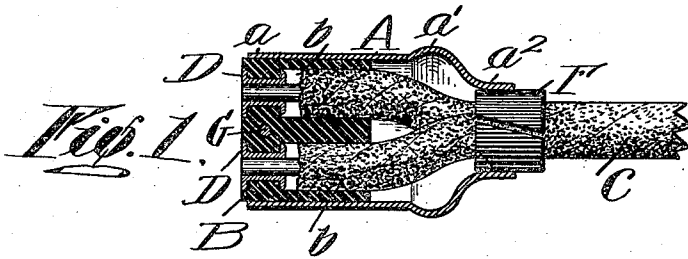


J. C. STEARNS.
METAL ARMOR CIRCUIT CONNECTING ATTACHMENT.
APPLICATION FILED DEC. 16, 1912.

1,144,948.

Patented June 29, 1915.



Witnesses:
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UNITED STATES PATENT OFFICE.

JASON C. STEARNS, OF WORCESTER, MASSACHUSETTS.

METAL-ARMOR CIRCUIT-CONNECTING ATTACHMENT.

1,144,948.

Specification of Letters Patent. Patented June 29, 1915.

Application filed December 16, 1912. Serial No. 736,899.

To all whom it may concern:

Be it known that I, JASON C. STEARNS, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Metal-Armor Circuit-Connecting Attachment, of which the following is a specification.

This invention relates to an electric circuit connecting attachment and the principal objects thereof are to provide a solid, permanent and durable construction arranged so as to eliminate the short circuits, grounds, loose connections, and other troubles that ordinarily arise in connections of this character on account of the excessive vibrations to which they are subjected when applied to the fast moving vehicles; also to provide a construction which can be fixed to the end of an electric cable that has one or more conductors and that can be attached readily to the ordinary "Ediswan" lamp sockets that are in common use at the present time; to provide a construction in which the end of the metallic outer casing or shell itself engages either the electrical conductor or an insulating collar therearound and firmly holds it in position so as to prevent rubbing, attrition and wear at this point; to provide a construction in which the contacting end of the cable is fixedly secured in the insulating material so that it will not be loosened or displaced by vibration and in which the insulation on the cable is also held firmly in a socket provided for it and in which the end of the device is suitably arranged to constitute a handle for manipulating the parts.

The invention is also designed to provide a perfect connector which can be connected and disconnected from the lamp socket or other electrical device in a simple and convenient manner.

Reference is to be had to the accompanying drawing in which—

Figure 1 is a longitudinal central sectional view on enlarged scale of a connecting attachment constructed in accordance with this invention, and Fig. 2 is a view like Fig. 1 showing the invention applied to an armored conductor.

The invention is shown as comprising a metal armored casing A having a straight cylindrical end a for entering the socket of

an "Ediswan" lamp or the like. This is provided with an enlarged portion a' having a knurled surface, preferably, to enable it to be grasped in the fingers and used as a handle for the whole device, and provided with a contracted neck a^2 , the purpose of which will be explained hereinafter. Within the straight end of this attachment is secured an insulating block B formed of any desired kind of insulating material, as hard rubber, vulcanized fiber, condensite or the like, and preferably projecting just beyond the end of the casing A. It is provided with any desired number of longitudinal cylindrical cavities b for ends of the conductors C forming the cable which enter it, these cavities being arranged to receive the insulation on the end of the conductor and to hold it firmly therein, being of substantially the same size as the outside insulation. Beyond these cavities are longitudinal passages extending through to the outer flat surface of the block B. In these passages are eyelets D of metal to which the bare end of the conductor is soldered or otherwise electrically fixed so as to make a permanent electrical connection. These eyelets are flattened over on their outer and inner ends to hold them firmly in position and they are preferably flush with the flat outer surface of the block B. Preferably, also a split insulating sleeve F of hard rubber or other desired material is strung over the cable and forced back into the end a^2 of the metal shell A. Then this edge a^2 is compressed in dies and closed in upon the split insulating sleeve when that is used, and directly upon the insulation of the conductor when the sleeve is not used. In either event the metal is closed in on the outer part of the cable or tubing, rigidly holding the same, so that there can be no motion of the conductor at the end of the metal sleeve and consequently no wear on the insulation. This also prevents the entrance of water and makes the device a permanent fixture.

The insulating block B is held in the metal casing by a cross pin G which projects from it on both sides, preferably, and forms a means for connecting it with the socket of the lamp or the like.

It will be seen from what has been said that the above mentioned objects are accomplished in a very simple and inexpensive

way by the use of this invention and that the parts are all of small size and simple construction; also that after once being assembled they cannot readily become detached or disconnected from each other.

5 In Fig. 2 the invention is illustrated in a similar form but applied to a conductor provided with metallic armor H. In this case the collar F can be dispensed with and the end a^2 is soldered or otherwise mechanically connected directly to the armor H.

10 Although I have illustrated and described only two forms of the invention, I am aware of the fact that the invention can be carried out in other ways without departing from the scope of the invention as expressed in the claim. Therefore, I do not wish to be limited to all the details of construction shown and described, but

What I do claim is:—

20 An electric circuit connecting attachment block supported in and substantially enclosed by said casing and having cylindrical cavities extending longitudinally therein and provided with smaller passages alined therewith, metallic eyelets secured in said smaller passages, and wires permanently secured in the eyelets, the larger cavities receiving the insulation on the wires.

25 30 In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

JASON C. STEARNS.

Witnesses:

ALBERT E. FAY,
C. FORREST WESSON.