

L. MARCHAND, JR.
 CONNECTOR FOR FLEXIBLE ARMORED CONDUCTORS.
 APPLICATION FILED JAN. 30, 1915.

1,238,799.

Patented Sept. 4, 1917.

Fig. 1.

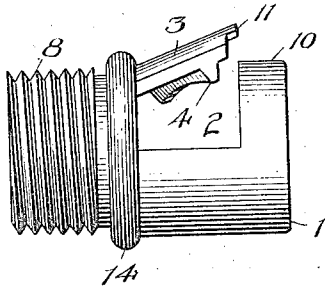


Fig. 2.

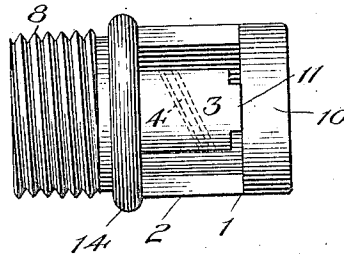


Fig. 3.

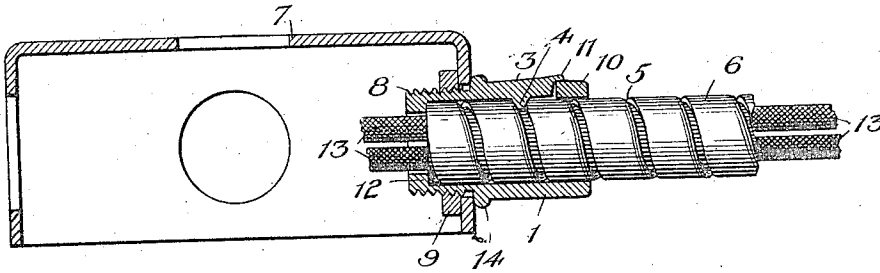
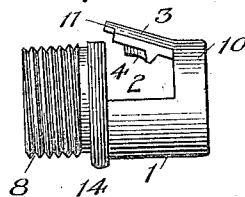


Fig. 4.



Witnesses

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CONNECTOR FOR FLEXIBLE ARMORED CONDUCTORS.

1,238,799.

Specification of Letters Patent.

Patented Sept. 4, 1917.

Application filed January 30, 1915. Serial No. 5,281.

To all whom it may concern:

Be it known that I, LOUIS MARCHAND, JR., a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Connectors for Flexible Armored Conductors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates more particularly to improvements in connectors of the type employed in electric lighting circuits and other like wiring.

Among the objects in view is the provision of a connector and engaging means for a cable adapted to grip the cable for preventing relative longitudinal movement thereof with respect to the connector, while leaving the engaging means substantially free from lateral stresses incident to bending or other lateral movement of the cable.

With this and further objects in view as will in part hereinafter become apparent and in part be stated, the invention comprises certain novel constructions, combinations and arrangements of parts as will subsequently be specified and claimed.

In the accompanying drawing:

Figure 1 is a view in side elevation of a connector embodying the features of the present invention.

Fig. 2 is a plan view thereof.

Fig. 3 is a longitudinal, vertical central section therethrough, a fragment of a junction box being seen in section, a fragment of the cable being seen in elevation, and the connecting finger being indicated as being pressed to its cable engaging position.

Fig. 4 is a view, similar to Fig. 1, of a modified embodiment.

Referring to the drawing by numerals, 1 indicates the sleeve-like body of the connector, which is formed with a radial opening or notch 2. Formed integral with or fixed to the body 1 at one edge of the notch is a finger 3 which extends out into the notch and when first constructed, the finger 3 extends radially outwardly beyond the notch. The finger 3 is formed with an inwardly radially extending tooth or projection 4, adapted in operation to extend within the spiral groove 5 of the usual armor 6 of an armored cable. The radial opening 2 is

of a greater width than the finger or tongue 3 and extends downwardly on both sides thereof so that it may be easily seen whether or not the projection 4 is in alignment with the groove 5 in the armor 6. In those instances where the projection 4 is of any appreciable length, it will, of course, be inclined proportionally to the inclination of the groove 5.

Referring to the cylindrical or sleeve-like body 1 with respect to its relation to a junction box, such as is indicated at 7, the inner end portion of the body is threaded externally as at 8, to receive a locking nut 9, while the outer end portion is merely left cylindrical with an arcuate strip 10 extending along the outer edge of the notch 2. The finger 3 is formed with a preferably off-set axially extended tab or lip 11, in operation disposed to overlap the strip 10 so that a screw-driver or like instrument may be placed beneath the lip for prying up the finger 3 when it is desired to disconnect the connector from a cable.

The inner end portion of the body 1 is formed with an internal annular shoulder or restriction 12, against which the inner end of the metallic casing or armor 6 abuts, the annular shoulder or flange 12 leaving an opening sufficient to accommodate the passage of the contained strands or wires 13, 13, with their usual insulation.

The structure seen in Fig. 4 is identical with that just described except that the finger projects from an edge of the notch other than that shown in Fig. 3, so that the same description will apply, and the same reference numerals have been applied. It is clear that this finger could be extended from any one of the edges of the notch.

In operation when the connector is to be applied to a cable, as much of the containing strands 13 are exposed as may be required for connection within the box 7, and then the cable is introduced axially into the sleeve 1 until the armor 6 strikes shoulder 12. The operator then strikes the free end of the finger a blow with a hammer or other instrument, taking care, however, to see that the projection 4 is alined with the adjacent portion of groove 5. This blow depresses the finger from the position indicated in Fig. 1 to the position seen in Fig. 3, and the connector is thus effectively locked on to the cable. In this position, the strip 10 will take all radial or lateral stresses to

which the cable may be subjected so that said stresses will not be delivered to the finger 3, and the finger will thus have no tendency to loosen. After the connector has been applied to the cable the threaded portion 8 is thrust through an appropriate aperture in the box 7 and the locking nut 9 is applied. An annular shoulder 14 is formed on the body of the connector for providing an appropriate stop at the outer terminus of the threads 8 for enabling the nut 9 to clamp the connector in engagement with the box.

What I claim is:

1. A connector for flexible armored conductors comprising a tubular body portion adapted to surround an armored cable and having a radial opening therein intermediate its ends leaving an arcuate strip extending along the outer edge of the opening, a locking tongue of less width than the

said radial opening integral with said body and extending from the body at one edge of the opening toward another edge thereof and having a projection adapted to enter the groove of the armored cable.

2. A connector for flexible armored conductors, comprising a tubular body adapted to receive a grooved armored cable, said body having a radial opening intermediate its ends, and an integral tongue extending from the body at one edge of the opening toward another edge thereof and having a projection adapted to enter the groove of the armored cable, the tongue having a projection adapted to overlie the material of the body at the last-named edge of the opening.

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Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."