

Oct. 16, 1934.

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1,976,847

ELECTRIC CONDUCTOR

Filed Nov. 27, 1929

FIG. 1

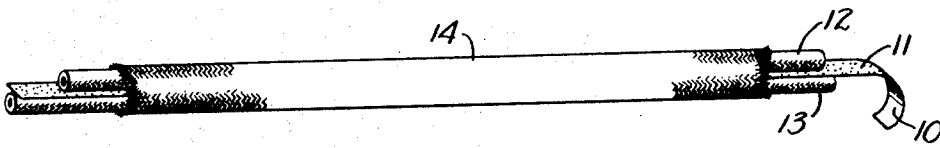
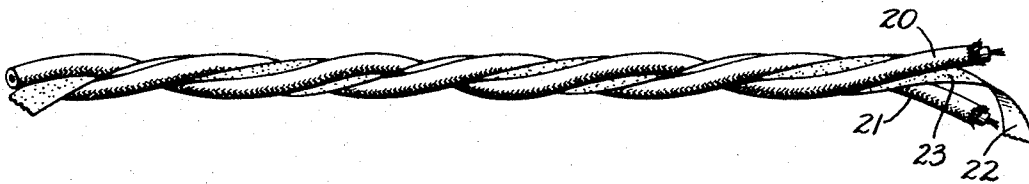


FIG. 2



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ELECTRIC CONDUCTOR

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Application November 27, 1929, Serial No. 410,014

4 Claims. (Cl. 173—264)

This invention relates to electric conductors and more particularly to electric conductors which are associated together in pairs or in groups.

5 In the manufacture of twisted and parallel drop wires it has heretofore been customary to provide some means for identifying the individual conductors as for example by moulding ridges on the rubber insulation of one of the conductors or by
10 braiding a marking thread of distinctive color into the textile covering, such thread being the same size or a slightly larger size than the others, the latter arrangement giving a raised marking thread. With such arrangements however it has
15 frequently been found that due to these ridges or threads the conductors have cut through the insulation causing a short circuit, this cutting action taking place especially where the wire has been under pressure as at ties or where the wire
20 has been kinked and straightened out again.

An object, therefore, of this invention is to produce a flexible cable which is capable of frequent bending and twisting without causing a short circuit between the individual conductors.

25 A further object is to produce such a cable, the individual conductors of which may be readily and accurately identified.

In accordance with the present invention these objects are attained by taking a strip of insulating
30 material, the opposite sides of which are distinguishable from each other, and placing it longitudinally between the individual conductors. This strip serves to increase the insulation resistance between the conductors and also serves
35 to identify the individual conductors as well as the type of conductor.

A clearer understanding of this invention may be had by reference to the accompanying drawing in which Fig. 1 is a view of one embodiment
40 of this invention showing two parallel conductors separated by a strip of insulating material and bound together by an outer serving of textile material; and

Fig. 2 is a view of another embodiment of this
45 invention showing a pair of conductors twisted together and separated by an insulating strip.

Referring to Fig. 1 a strip of insulating material such as paper, the opposite sides 10 and 11 of which are distinguishable from each other, is
50 placed longitudinally between the insulated conductors 12 and 13. An outer serving 14 such as woven textile material serves to bind the conductors together to form a cable and also prevents any displacement of the strip.

55 The insertion of this strip of insulating material increases the insulation resistance between the individual conductors of the cable thereby substantially eliminating the possibility of a short circuit between the individual conductors
60 where the cable has been under pressure as at

ties or where the cable has been kinked and then straightened out again. Also by rendering the opposite sides 10 and 11 distinguishable from each other as, for example, by having the opposite sides differ in color or by having identifying marks or figures printed or stamped on one side of the strip, it is possible to readily identify the individual conductors. Furthermore by standardizing the distinguishing characteristics on the opposite sides of the strip it is possible to identify the class to which the individual conductors belong, that is, whether the conductor is made from copper or from a copper-tin alloy etc.

In another embodiment of this invention as shown by Fig. 2 a pair of conductors 20 and 21
75 between which a similar strip of insulating material is placed, are twisted together to form a cable. This type of construction prevents any displacement of the insulating strip thus eliminating the necessity of an outer serving of textile
80 material. As in the previous embodiment the opposite sides 22 and 23 of the insulating strip are made distinguishable from each other thus providing a ready means for distinguishing the conductors from each other as well as the type
85 conductor.

What is claimed is:

1. A cable comprising a plurality of insulated conductors, and a strip of paper running longitudinally between two of said conductors, each
90 of the opposite sides of said strip being adjacent a different conductor, said opposite sides of said strip being of different color.

2. A cable comprising a plurality of insulated conductors, a strip of insulating material, the
95 opposite sides of which are dissimilar running longitudinally between two of said conductors and having its opposite sides adjacent different conductors, and means for preventing the displacement of said strip.

3. A cable comprising a plurality of insulated conductors twisted together and means comprising a strip of insulating material, the opposite
100 sides of which are rendered dissimilar to permit ready identification, extending longitudinally between and separating two of said conductors, said strip being so positioned that its opposite sides are always facing the same conductors respectively for identifying the individual conductors.
110

4. A cable comprising a pair of insulated conductors twisted together, and means for identifying each conductor, said means comprising a strip of paper extending longitudinally between and separating two of said conductors, each of the
115 opposite sides of said strip being of different color, and positioned to face different conductors, respectively.

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