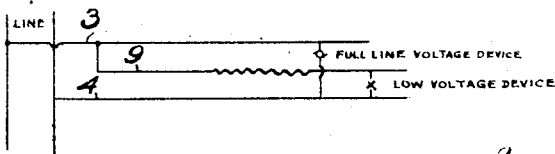
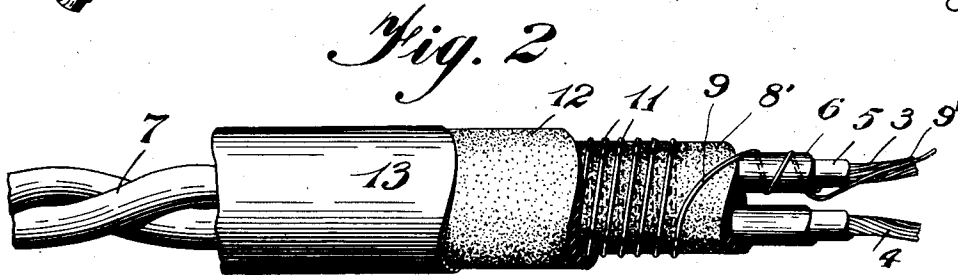
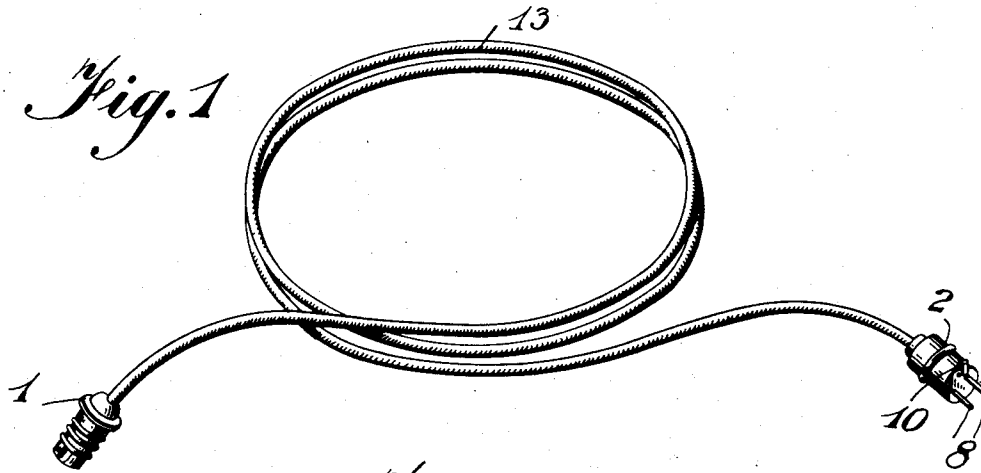


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1,442,648.

C. E. CARTER.
CORD CONDUCTOR.
FILED OCT. 23, 1920.



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UNITED STATES PATENT OFFICE.

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CORD CONDUCTOR.

Application filed October 23, 1920. Serial No. 419,143.

To all whom it may concern:

Be it known that I, CLARK E. CARTER, a subject of the King of Great Britain, residing at Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements in Cord Conductors; and I do hereby declare that the following is 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.

The present invention relates to conductors for supplying electric energy from the main lines or source of supply to electrical domestic appliances and more particularly to flexible cord conductors for supplying electrical current to the motors and lamps of cinematographic machines wherein the voltage required for these electrical appliances varies.

In a number of home moving picture machines, there is required a motor for driving the projecting mechanism and an electric lamp for supplying light, but the motor requires a greater voltage than the lamp. Various resistance coils and rheostats have been herebefore used, but the heat generated from the use of these devices oft times causes the film while passing through the moving picture machine to take fire, and therefore it is the purpose of the present invention to provide a flexible cord conductor which may be used exteriorly of the moving picture machines so as to prevent any possibility of fire and one in which the current of different voltage may pass therethrough.

A further object of the present invention is to provide a combination flexible cord conductor and resistance element whereby a lower voltage may be supplied from the main source of electrical energy to the electric appliances.

With the above and other objects in view, the invention consists of certain novel features of construction, combination, and formation of parts as will be hereinafter more fully described and particularly pointed out in the appended claims.

In the accompanying drawings:

Figure 1 is a perspective view of the cord conductor embodying the present invention;

Figure 2 is an enlarged detail view of the same; and

Figure 3 is a schematic view showing the

circuit arrangement of my improved conductor.

Referring now more particularly to the accompanying drawings wherein like and corresponding parts are designated by similar reference characters throughout the several views,

The conductor embodying the present invention has the appearance of the ordinary flexible cord conductor in that it has connected to one end thereof a socket attaching plug 1 and a contact plug 2 connected to the opposite end thereof. The cord as disclosed in Figures 1 and 2 comprises the two conducting wires 3 and 4 respectively which are covered in the usual manner with suitable rubber insulations and weatherproof braid 5 and 6 respectively. These conducting wires are made of copper in the usual manner and are twisted together as at 7 whereby the current may pass from the socket plug 1 to the contact plug 2 in the usual manner, and the contact plug is provided with the usual contact projections 8 which are electrically connected to the conducting wires 3 and 4. Herebefore such cord conductors have been used for supplying electrical energy from the main lines to the electrical domestic appliances.

To accommodate appliances that require a lower voltage than that supplied by the main lines, I have combined this flexible cord conductor with a resistance conductor. In forming this flexible resistance cord conductor, I first completely enclose the twisted wires with asbestos fibres indicated as at 8' and then coil about the asbestos lining 8' a resistance wire 9 which is preferably made of German silver. This wire 9 has one end electrically connected to the copper conducting wire 3 as at 9' and its opposite end is connected to a third contact member 10 secured to the contact plug 2. This wire 9 is coiled upon the conducting wires preferably by a machine so that the coils 11 will be equally spaced apart and also spaced relatively far apart to prevent overheating at any one point. These coils 11 are then covered completely by an asbestos covering 12 and a suitable weatherproof braid 13 may be employed for covering the asbestos 12 and for giving a neater appearance to the cord. It will, of course, be understood that this German silver resistance wire 9 will be coiled

about the main conductors according to its length, and its length will be governed according to the low voltage required.

From the foregoing, it will be understood 5 that with the use of the improved device, two electrical devices requiring different voltage may be effectually supplied from a single source, the main line voltage of which corresponds to one of said devices, but exceeds the requisites of the second device; the circuit through the first device from the source of supply being effected through the conductors 3 and 4 which will receive full line voltage, while the circuit including the second device will be effected through the conductors 4 and 9, it being borne in mind 15 that the conductor 9 is shunted from the conductor 3 and by reason of its low or poor conducting qualities will afford that resistance necessary to the current towards its reduction to the requisites of the second device. I have found from practical use of a cord conductor, made in accordance with this invention, that electrical current may be supplied from a main line of high voltage to a motor requiring 110 volts or less voltage, and at the same time current may be supplied through the same conductor and from the same main line to a lamp requiring but 6 volts. Also the same conductor will supply current to either the lamp or motor or both at the same time. The resistance coil is completely enclosed by the asbestos lining and the asbestos covering so as to prevent anything inflammable taking fire should it come in contact therewith. 35

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

40 1. A flexible cord conductor comprising two copper conducting wires, a German silver resistance wire coiled about said conducting wires, insulating material separating said wires, a socket plug connected to one end of said conducting wires, a contact plug having three contact points and said wires being connected to said contact points 45

whereby electrical current may be translated at the same time from a main line of high voltage to two separate electrical devices one of which requires a less voltage. 50

2. A flexible cord conductor comprising two conducting wires, a resistance wire coiled about said conducting wires and extending throughout their entire length, one end of said resistance wire being connected to one of said conducting wires, an attaching socket plug connected to said conducting wires and a contact plug connecting to said conducting and resistance wires whereby current may be translated to electrical devices one of which requires a voltage less than that of the other device. 55 60

3. A cable comprising a pair of relatively insulated conductors possessing high conductivity qualities, a heat insulating casing enveloping said conductors, another conductor possessing low conductivity qualities shunted from one of said first conductors and arranged adjacent said heat insulating casing and a second heat insulating casing enveloping said last mentioned conductor. 65 70

4. A cable comprising a pair of relatively insulated conductors possessing high conductivity qualities, a heat insulating casing enveloping said conductors, a conductor possessing low conductivity qualities coiled about said heat insulating casing shunted from one of said first conductors, and a second heat insulating casing enveloping said last mentioned conductor and the first heat insulating casing. 75 80

5. A cable comprising a pair of relatively insulated copper conductors, a heat insulating casing enveloping said conductors, a German silver conductor coiled about said heat insulated casing and shunted from one of said copper conductors, and a second heat insulating casing enveloping said last mentioned conductor and said first heat insulating casing. 85 90

In witness whereof I have hereunto set my hand.

CLARK E. CARTER.