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HIGH VOLTAGE CONNECTION DEVICE FOR ELECTRIC CABLES

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Fig. 1.



Fig. 2.

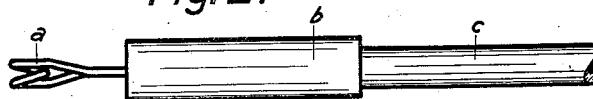


Fig. 3.

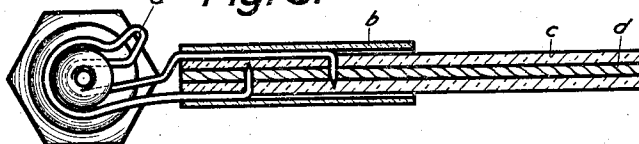
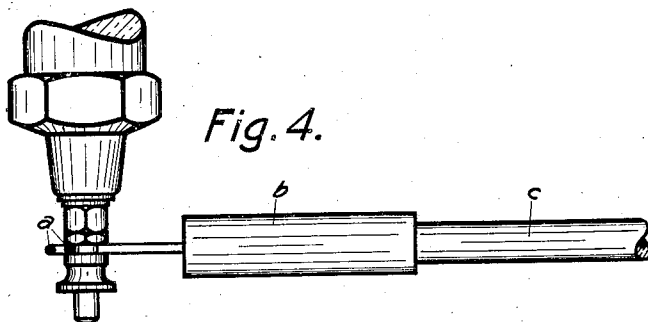


Fig. 4.



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HIGH-VOLTAGE CONNECTION DEVICE FOR ELECTRIC CABLES.

Application filed May 7, 1923, Serial No. 637,351, and in Germany June 16, 1922.

The subject of the present invention is a new form of connection for sparking plug cables. The cable connection consists of two parts, namely a current-conducting member which, in effecting the mechanical connection with the end of the cable, effects at the same time the electrical connection with the core of the cable, and an insulating member which allows only so much of the current-carrying member to be exposed as is necessary for making the electrical connection. It constitutes at the same time a reinforcement at the end of the cable and protects it against injury from the outside.

Two embodiments of this invention are illustrated by way of example in the accompanying drawings, in which:—

Figure 1 is a cross section of the improved terminal connection device having a closed loop.

Figure 2 is an elevation thereof turned through 90°.

Figure 3 is a cross section of the improved terminal connection device when formed with a hook.

Figure 4 is an elevation thereof turned through 90° and showing the wire *a*, constituting the end of the hook, in section.

Corresponding parts are marked with the same reference letters in all the figures.

d is the core, and *c* is the insulating casing of the end of the high-voltage cable; *a* is the current-conducting member of the improved terminal connection device, and *b* is the insulating protective casing thereof.

In the improved terminal connection device illustrated in Figures 1 and 2, the current-carrying member is made of a piece of wire the ends of which have been sharpened after the manner of a needle. This piece of wire is bent into the form of a closed loop. The sharpened pointed ends of the wire are bent at right angles and can be pressed without the aid of any tools laterally into the cable until the core is pierced, whereby the electrical connection and the mechanical connection are effected both at one and the same time.

In order to secure this connection, and cover the bare current-carrying wire a fairly

long sheath *b* composed of a non-brittle insulating material is drawn over the place of connection. By this means the connection is made compact and is secured against being pulled apart. The closed loop may also be made of one or more turns which are formed to serve at the same time as a resilient safety device for preventing the sparking plug nut from becoming loose.

In the constructional form of the improved terminal connection device for cables illustrated in Figures 3 and 4, the current-conducting member is formed as an open hook. This hook is made double, only the inner portion thereof being clamped by the nut, so that resiliency of the cable connection is assisted by the free or outer portion of the hook.

It is to be understood that the wire may be made into other shapes of the improved connection device.

What I claim is:—

1. A high-voltage connection device for cored insulated electric cables, including a current-conducting member for establishing simultaneously mechanical and electrical connection with the core of the cable, and an insulating member which leaves exposed only so much of said current-conducting member as is necessary for establishing the connection whereby the end of said cable is reinforced and protected from damage from outside, the said current-conducting member being formed from a bent wire, both ends of which are sharp-pointed like a needle in order to be able to pierce the insulation and the core of the cable, the said insulating member being slipped over said ends as a sheath in order to retain said ends in their contact-making position in the cable.

2. A high-voltage connection device for cored insulated cables as claimed in claim 1, in which the wire conducting member is bent into the shape of a double hook, the inner hook being clamped in making the connection while the outer hook constitutes a resilient portion of the cable.

In testimony whereof I have signed my name to this specification.

GOTTLIEB STEINER.