Aug. 23, 1949. F. HERBERT 2,479,834

MASTER STARTER CABLE

Filed Aug. 31, 1948

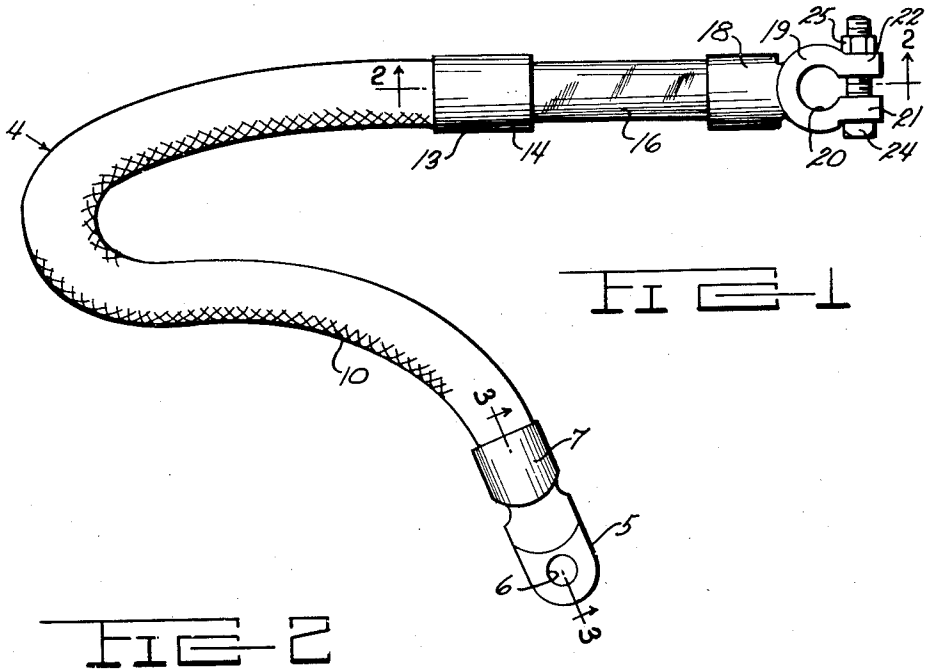


FIG-1

FIG-2

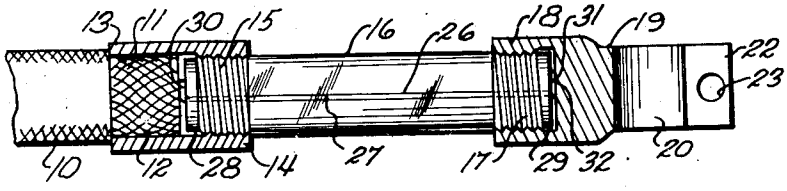
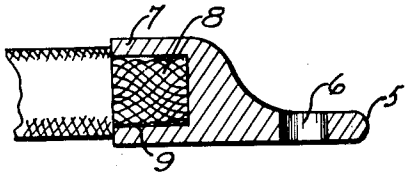


FIG-3



INVENTOR.
FREDERICK HERBERT
BY
McMorrow, Berman + Davidson
ATTORNEYS

Patented Aug. 23, 1949

2,479,834

UNITED STATES PATENT OFFICE

2,479,834

MASTER STARTER CABLE

Frederick Herbert, New Orleans, La.

Application August 31, 1948, Serial No. 46,998

1 Claim. (Cl. 200—115.5)

1

This invention relates to electric cables, and more particularly to an insulated master starter cable combined with a renewable fuse.

The main object of my invention is to provide a special master starter cable including intermediate the terminals thereof a fuse casing containing a fuse in the form of a renewable strip.

Another object is to have a detachable fuse casing which is preferably of transparent insulating material to visually indicate the condition of the fuse within.

A further object is to provide a master starter cable of the indicated character with a fuse casing in which it is possible to renew the fuse and thereby restore the cable to pristine condition when the fuse has blown.

It is also an object to produce a combined master cable and fuse of simple, durable and effective construction.

Other objects and advantages of the invention will appear in further detail as the specification proceeds.

In order to facilitate ready comprehension of this invention for a proper appreciation of the salient features thereof, the invention is illustrated on the accompanying drawing forming a part hereof, and in which:

Figure 1 is an elevation of a master cable and a fuse made according to the invention and embodying the same in a practical form;

Figure 2 is a longitudinal section taken on line 2—2 in Figure 1;

Figure 3 is a partial section taken on line 3—3 in Figure 1.

In the views the same reference numerals indicate the same parts.

In electrical installations on power switchboards and the like, cables are frequently used for various connections, and particularly in connection with controls for large motors, master starter cables are employed. It has been usual to install fuses in connection with starter and switch boxes and the like, but this does not always serve conveniently, for the common cartridge fuses may or may not be of such type as to indicate when they are blown, and occasionally the location of the fuses is not convenient for instant renewal thereof. On the other hand, it is desirable, when possible, not only to shorten leads and save space to reduce resistance, but also to locate fuses as close to electrical apparatus as possible in the conducting lines supplying the electric current thereto. After considering this problem, it has occurred to me that a master cable leading to the electrical apparatus to be supplied with current can well

2

be combined with a renewable fuse, as will now be particularly described.

Hence, in the practice of my invention, and referring again to the drawing, the master cable, generally indicated at 4, has an eye terminal 5 with an aperture 6 through which a connecting pin or bolt may be threaded, while at the other end this terminal has a socket 7 into which the bare end 8 of a conductor cable is fitted, and preferably soldered, in place at 9. The cable is preferably insulated, as indicated at 10, and at the other end 11 the metal wires of the cable are again exposed and soldered in place at 12 within the rear end of a connecting sleeve 13. The forward end 14 of this sleeve is internally threaded and into this threaded end 14 is screwed one threaded end 15 of a heavy glass or other insulating tube 16. The other end 17 of tube 16 is likewise threaded and screwed into a threaded socket 18 of a clamp terminal 19 having a terminal aperture 20 for engaging about a binding post or similar connection, the cable terminal 19 having two clamping portions 21, 22 provided with transverse apertures 23 (one shown in Figure 2), through which a clamping bolt 24 extends having a nut 25 screwed thereon for tightening the clamping members 21 and 22 and thereby gripping the binding post or other connection in the aperture 20 with which the terminal may be connected.

The glass or other insulating tube 16 has a narrow hole 26 extending axially through the tube from end to end and loosely mounted within this aperture or hole is a metal strip of fuse 27 extending beyond the ends 28 and 29 of tube 16 and bent at 30, 31 to form strip terminals clamped between the ends 28 and 29 of the tube and the end 11 of the cable within socket 13 at one end and end wall 32 of terminal 19 within threaded socket 18. The result is that the strip 27 by its ends 30, 31 connects the cable end 11 with terminal 19 through the end wall 32 thereof. Obviously, the fuse is readily seen through the glass wall of tube 16 so that its condition may be inspected at any time, and when it has blown, it is a simple matter to unscrew the tube 16 from the sockets 14 and 18 to insert a new strip and bend the same similarly to strip 27 with the ends 30, 31 thereof forming end contact lugs outside the ends 28 and 29 of the tube, after which the latter with its inserted strip 27 is again replaced by screwing the ends 15 and 17 thereof into sockets 14 and 18, when the cable is again ready for use.

Manifestly, variations may be resorted to and parts and features may be modified or used with-

out others within the scope of the appended claim.

Having now fully described my invention, I claim:

In a fuse for an internally threaded metal socket terminating internally in an end wall and forming a cable terminal, an internally threaded connecting sleeve mounted upon one end of an electric cable in electrical contact with the same and having the internally threaded end of the connecting sleeve extending beyond the cable, and a removable fuse strip for interconnecting the cable and the metal socket, the improvement which includes a tube of insulating material having an axial bore of very small caliber with respect to the cross-section of the tube and being externally threaded upon both ends with one threaded end fitting into the internally threaded socket and one end of the fuse strip bent transversely of the bore upon said one threaded end and confined between the latter and the end wall in said socket, and the other threaded end of said tube fitting into the projecting internally threaded end of the connecting sleeve with the other end of said fuse strip also bent transversely of said bore beyond the other end of said tube and confined between the latter end and the end of said cable extending into said connecting sleeve.

FREDERICK HERBERT.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
857,735	Hatzel et al.	June 25, 1907
1,227,726	Woodhead	May 29, 1917
1,337,949	Petrovics	Apr. 20, 1920
1,341,662	Muller	June 1, 1920
1,663,252	Herbrick	Mar. 20, 1928
1,922,643	Sundt et al.	Aug. 15, 1933
2,247,452	Sells	July 1, 1941
2,414,865	Center	Jan. 28, 1947
2,419,152	Mosebach	Apr. 15, 1947