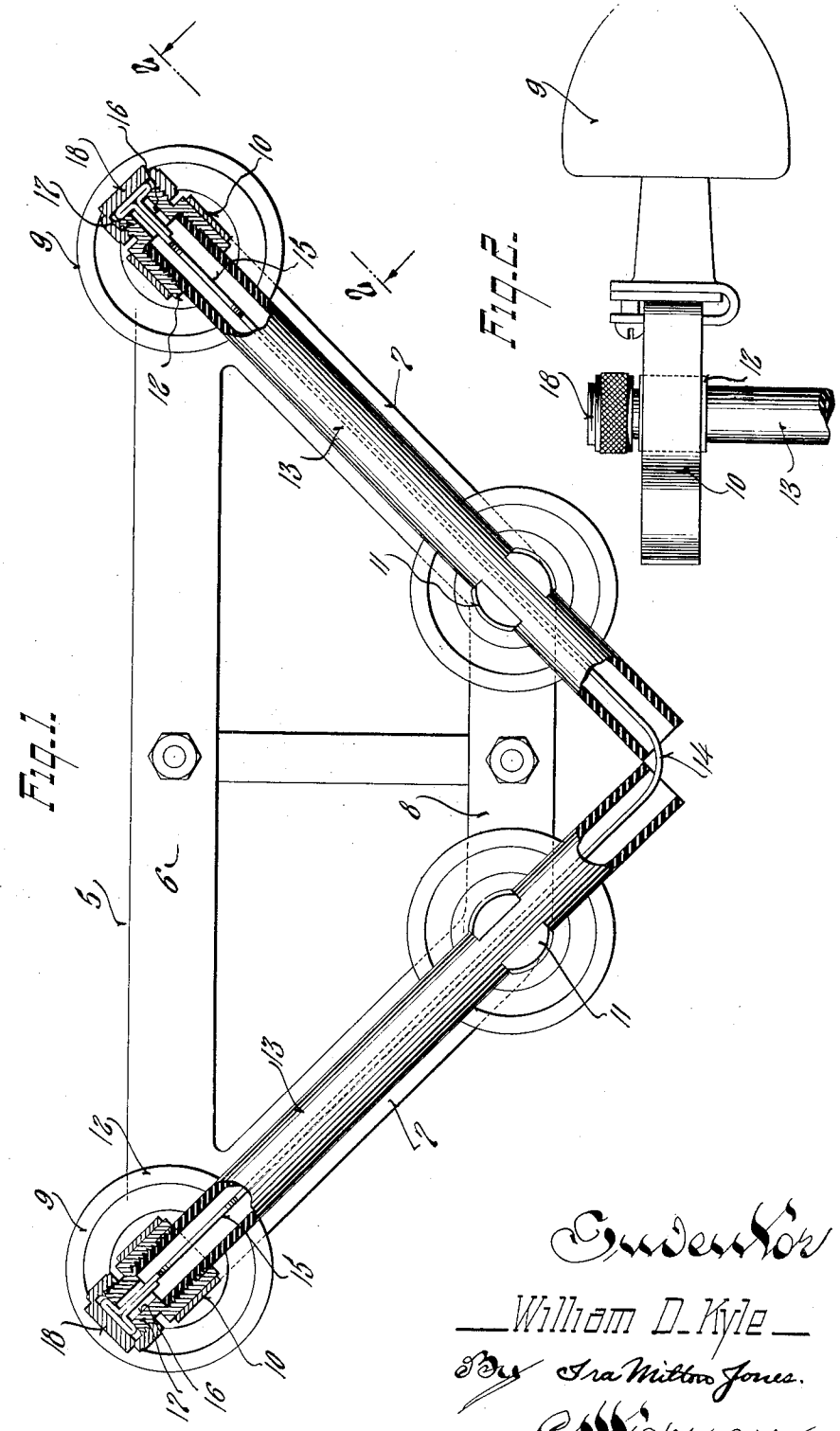
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FUSE

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FUSE

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This invention relates particularly to fuses of the expulsion type and has as an object the provision of means whereby the possibility of an arc holding on is reduced to a minimum.

A more specific object of this invention resides in the provision of a pair of fuse tubes arranged at an angle with respect to each other and having a single fuse element common to both whereby the discharge of gases from one tube passes the open end of the other to draw the gases out of said other tube and vice versa.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the hereindisclosed invention may be made as come within the scope of the claims.

In the accompanying drawing, I have illustrated one complete example of the physical embodiment of my invention constructed according to the best mode I have so far devised for the practical application of the principles thereof, and in which:

Figure 1 is a front elevational view of a fuse embodying my invention with parts broken away and in section, and

Figure 2 is a side elevational view looking at Figure 1 on the plane of the line 2—2.

Referring now more particularly to the accompanying drawing, 5 presents a substantially triangular frame having a horizontal crossbar 6 and a pair of side arms 7 arranged at an angle to each other and connected at their lower portions by a transverse bar 8. Insulators 9 are secured to the frame at the juncture of the sides 7 with the horizontal portions 6 and 8 and provide means for mounting contact clips 10 and holding clips 11.

The contact clips 10 are carried by the upper insulators 9 at the ends of the horizontal bar 6 and are adapted to receive terminal members 12 secured on the outer ends of a pair of fuse tubes 13 formed of suitable insulating material, the terminal members 12 being preferably threaded on the outer ends of the tubes.

The tubes 13 are arranged with their lower open ends adjacent and are maintained in position by the clips 10 engaging the terminal members 12 and the holding clips 11 carried by the lower insulators 9 which engage the adjacent portion of the tubes.

A fuse element 14, having one or more reduced sections 15 adjacent its ends, is positioned in the tubes with its medial portion at the lower open ends of the tubes and its reduced sections 15 located at the outer ends of the tubes adjacent the terminal members 12. The extreme outer ends of the fuse element extend outwardly through apertures 16 in an externally threaded extension 17 formed on each terminal member 12 and are bent to substantially T shape with the heads of the T engaging the outer faces of the extensions 17 against which they are clamped by cap members 18 threaded on the extensions.

As will be readily obvious, conductor wires, not shown, are connected with the contact clips 10 to be bridged by the fuse element so that when an overload occurs in the circuit in which the fuse is incorporated, one or both of the reduced sections 15 will be volatilized and the gases in the tubes discharged. As the open ends of the tubes are positioned adjacent each other with their longitudinal axes intersecting the gases impelled from one tube produce a suction at the open mouth of the other to increase the rapidity of the discharge and prevent the possibility of an arc holding on.

What I claim as my invention is:

1. In a device of the character described, a pair of tubes closed at one end and open at the other arranged at an angle with respect to each other with their open ends directly adjacent, and a fuse element common to both tubes, the element having a reduced section in each tube.

2. A device of the character described, comprising a pair of tubes having their outer ends closed and their inner ends open, means mounting the tubes with their open ends directly adjacent and their axes intersecting near the open ends, and a fuse element common to both tubes with its medial portion bridging the space between the open ends of the tubes, the angle of the tubes with respect to each other being such that upon volatilization of the fuse element the gases expelled from one tube produces a suction at the open end of the other.

3. In a fuse of the character described, a pair of tubes arranged at an angle with respect to each other, with their inner ends open and adjacent, means closing the outer ends of the tubes and a fuse element common to both tubes and having its ends connected with the closing means whereby the gases generated by the volatilization of the element discharged from one tube produces a suction at the open end of the other to increase the rapidity of the discharge.

4. In a device of the character described, a supporting structure, insulators thereon, clips carried by the insulators, two of the clips forming fuse terminals, a pair of fuse tubes readily detachably mounted by the clips with their inner ends open and adjacent each other and their outer ends diverging, terminal members closing the outer ends of the tubes, and a fuse element common to both tubes with its ends electrically connected with the terminal members, said terminal members being received by the clips forming the fuse terminals whereby the fuse element electrically bridges the fuse terminals.

5. A fuse device of the character described, comprising a pair of expulsion fuse tubes having one end closed and the other open and arranged at an angle with respect to each other with their open ends directly adjacent and their axes intersecting, a fuse element common to both tubes with its medial portion bridging the space between the open ends of the tubes, the angle of the tubes with respect to each other being such that upon volatilization of the fuse element the gases expelled from one tube produces a suction at the open end of the other tube, and means for mounting the fuses in said angularly disposed relationship including supports engageable with the tubes near the adjacent open ends.

6. In a device of the character described, a frame having a pair of arms thereon, a support mounted on each of said arms, an expulsion fuse tube mounted between said supports and having an open lower end, a terminal member on the upper end of said tube closing said upper end thereof, a second expulsion fuse tube mounted on said frame at an angle to said first tube, said second tube having an open lower end, a terminal member closing the upper end of said second tube, and a fuse element common to both of said tubes and fastened to said terminal members, the open lower ends of the tubes being closely adjacent so that upon volatilization of the fuse element the expulsion of gases from one tube creates a suction at the open end of the other tube and vice versa.

7. In a device of the character described, a first support, a contact clip mounted on said support, a terminal member retained in said clip, a tube carried by said terminal member and having an open end, a second support, a second contact clip mounted on said support, a second terminal member carried by said second contact clip, a second tube carried by said second terminal member and extending downwardly at an angle to said first tube and terminating adjacent said first tube, and a common fuse element attached to said terminal members and contained in both of said tubes substantially as described.

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