Nov. 29, 1927. 1,651,055

A. W. FISHER

FUSE HOLDER

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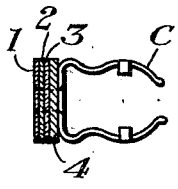


Fig. 3.

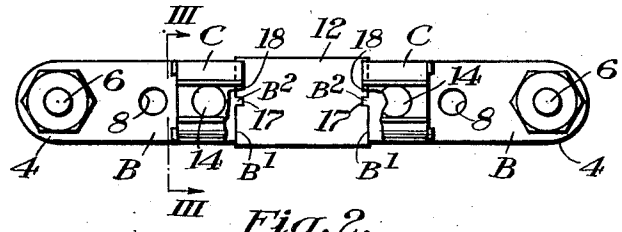


Fig. 2.

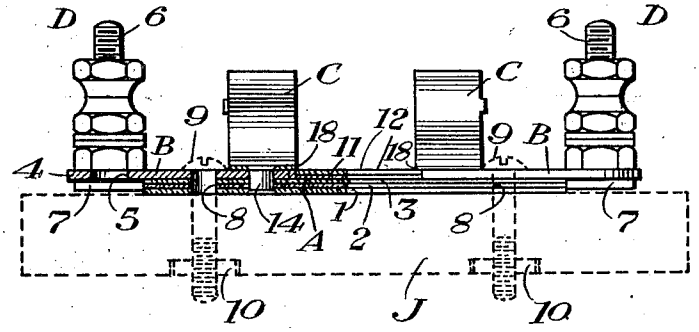


Fig. 1.

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UNITED STATES PATENT OFFICE.

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FUSE HOLDER.

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My invention relates to fuse holders, and particularly to holders of the type adapted to receive standard cartridge fuses and to provide simple and convenient means for connecting such fuses with outside circuits.

I will describe one form of fuse holder embodying my invention, and will then point out the novel features thereof in claims.

In the accompanying drawing Fig. 1 is a view showing, partly in elevation and partly in cross section, one form of fuse holder embodying my invention. Fig. 2 is a top view of the fuse holder illustrated in Fig. 1, with portions of the clips C broken away to show the construction. Fig. 3 is a sectional view along line III—III of Fig. 2.

Similar reference characters refer to similar parts in each of the separate views.

Referring to the drawing the fuse holder comprises a flat base designated in general by the reference character A and made up of a plurality of sheets 1, 2, 3 of insulating material such as fibre or micarta. Attached to the top of this base A by means of rivets 14 are two spaced terminal lugs B of conducting material. The confronting edges B^1 of the lugs B are substantially parallel and each such edge is provided with a small outstanding shoulder B^2, the purpose of which will appear hereinafter.

A fuse clip C, is attached to the top of each terminal lug B by means of the associated rivet 14. These clips are so arranged and proportioned as to receive the two ferrules, respectively, of a standard cartridge fuse.

The tip 4 of each terminal lug B extends over the adjacent end of the base A and this tip is provided with a hole 5 to receive the shank 6 of a binding post designated in general by the reference character D. The head 7 of each binding post D is square and the parts are so proportioned that a flat face of this head 7 abuts against the adjacent end of the base A and prevents the binding post from turning.

As best shown in Fig. 2, the inner edges 18 of the clips C overhang the edges B^1 of the lugs B to form retaining grooves which receive a flat marker 11 of paper or other suitable material. A shield 12 of some transparent material such as celluloid is placed over the marker 11 to prevent the marker from being defaced. Both the marker 11 and the shield 12 are provided with recesses 17 to receive the shoulders B^2 on lugs B. It will therefore be seen that the marker and the shield are held rigidly in place, longitudinal motion of the marker and shield being prevented by the edges B^1 of the lugs B, transverse motion being prevented by the shoulders B^2 in the recesses 17, and vertical motion being prevented by the overhanging edges 18 of the clips C. The marker 11 may carry suitable indicia to identify the fuse holder or the circuit associated therewith, or to convey other information.

The holder is provided with two spaced holes 8 by means of which the holder may be attached to a support such as indicated in dotted lines at J in Fig. 1. As here shown the holder is secured to the support by means of screws 9 passing through the holes 8, and the support J and provided with nuts 10 on the under side of the support. The holes 8 are so spaced as to accommodate the screws of a standard connector such as that known as the Railway Signal Association connector, which may be substituted for support J.

Fuse holders embodying my invention are particularly adapted for, though in no way limited to, installations such as railway traffic controlling apparatus, where a large number of fuse holders are required for a correspondingly large number of circuits. In such installations it is customary either to mount all of the fuse holders on a single panel or fuse board, or to locate them adjacent to other non-fused circuits. In either case the terminal post mountings are spaced apart by very small distances in order to conserve space.

One advantage possessed by fuse holders embodying my invention is that the marker 11 provides a convenient method of conveying pertinent information concerning each holder.

Another advantage is that because of the compact structure of the fuse holder, a large number of the holders may be mounted in a comparatively small space, without danger of short circuits or improper contacts between adjacent fuse holders or with adjacent terminals of non-fused circuits.

Although I have herein shown and described only one form of fuse holder embodying my invention it is understood that

various changes and modifications may be made therein within the scope of the appended claims without departing from the spirit and scope of my invention.

Having thus described my invention what I claim is:

1. A fuse holder for mounting upon a support provided with spaced mounting screws, said holder comprising a base made up solely of thin sheets of insulating material provided with registering holes to receive said screws, two conducting lugs mounted in spaced relation on said base, said lugs being provided with holes to receive said screws and each such lug overhanging the adjacent end of said base, two fuse clips one attached to each said lug and arranged to receive the ferrules of a standard cartridge fuse, and a terminal post secured to and passing through the overhanging portion of each lug.

2. A fuse holder comprising a flat base of insulating material, two flat conducting lugs attached to said base in spaced relation and having substantially parallel confronting edges, two fuse clips one mounted on each said lug and overhanging slightly the confronting edges of said lugs to form retaining grooves, a marker inserted in said grooves, and two terminal posts connected with said two lugs, respectively.

3. A fuse holder comprising a flat base of insulating material, two flat conducting lugs attached to said base in spaced relation and having substantially parallel confronting edges, each provided with a projecting shoulder, two fuse clips one mounted on each said lug and overhanging slightly the confronting edges of said lugs to form retaining grooves, a marker inserted in said grooves and having recesses to receive said shoulders, and two terminal posts connected with said lugs respectively.

4. A fuse holder comprising a flat base of insulating material, two flat conducting lugs attached to said base in spaced relation and having substantially parallel confronting edges, each provided with a projecting shoulder, two fuse clips one mounted on each said lug and overhanging slightly the confronting edges of said lugs to form retaining grooves, a marker inserted in said grooves, and having recesses to receive said shoulders, a transparent shield also inserted in said grooves and provided with recesses for receiving said shoulders, said shield completely covering said marker, and two terminal posts connected with said lugs respectively.

In testimony whereof I affix my signature.

ARTHUR W. FISHER.